

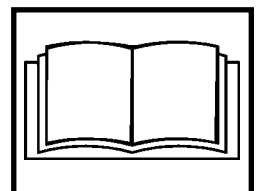


Operators and Safety Manual

Model
1532E2
1932E2
2032E2
2632E2
2646E2
3246E2

3120736
November 21, 2003

ANSI



**CALIFORNIA PROPOSITION 65
BATTERY WARNING**

**Battery posts,
terminals and related
accessories contain
lead and lead compounds,
chemicals known to the
State of California
to cause cancer and
reproductive harm.**

**WASH HANDS
AFTER HANDLING !**

FOREWORD

The purpose of this manual is to provide users with the operating procedures essential for the promotion of proper machine operation for its intended purpose. It is important to over-stress proper machine usage. All information in this manual should be READ and UNDERSTOOD before any attempt is made to operate the machine. **YOUR OPERATING MANUAL IS YOUR MOST IMPORTANT TOOL** - Keep it with the machine. **REMEMBER ANY EQUIPMENT IS ONLY AS SAFE AS THE OPERATOR.**

BECAUSE THE MANUFACTURER HAS NO DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION, PROPER SAFETY PRACTICES ARE THE RESPONSIBILITY OF THE USER AND HIS OPERATING PERSONNEL.

ALL INSTRUCTIONS IN THIS MANUAL ARE BASED ON THE USE OF THE MACHINE UNDER PROPER OPERATING CONDITIONS, WITH NO DEVIATIONS FROM THE ORIGINAL DESIGN. ALTERATION AND/OR MODIFICATION OF THE MACHINE IS STRICTLY FORBIDDEN, WITHOUT WRITTEN APPROVAL FROM JLG INDUSTRIES, PER OSHA REGULATIONS.



THIS SAFETY ALERT SYMBOL IS USED TO CALL ATTENTION TO POTENTIAL HAZARDS WHICH MAY LEAD TO SERIOUS INJURY OR DEATH IF IGNORED.

Safety of personnel and proper use of the machine are of primary concern, DANGER, WARNING, CAUTION, IMPORTANT, INSTRUCTIONS and NOTE are inserted throughout this manual to emphasize these areas. They are defined as follows:

! DANGER

DANGER INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED WILL RESULT IN SERIOUS INJURY OR DEATH.

! WARNING

WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED COULD RESULT IN SERIOUS INJURY OR DEATH.

! CAUTION

CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY. IT MAY ALSO BE USED TO ALERT AGAINST UNSAFE PRACTICES

IMPORTANT

IMPORTANT OR INSTRUCTIONS INDICATES A PROCEDURES ESSENTIAL FOR SAFE OPERATION AND WHICH, IF NOT FOLLOWED, MAY RESULT IN A MALFUNCTION OR DAMAGE TO THE MACHINE.

IMPORTANT

JLG INDUSTRIES MAY HAVE ISSUED SAFETY RELATED BULLETINS FOR YOUR JLG PRODUCT. CONTACT JLG INDUSTRIES INC. OR THE LOCAL AUTHORIZED JLG DISTRIBUTOR FOR INFORMATION CONCERNING SAFETY RELATED BULLETINS WHICH MAY HAVE BEEN ISSUED FOR YOUR JLG PRODUCT. ALL ITEMS REQUIRED BY THE SAFETY RELATED BULLETINS MUST BE COMPLETED ON THE AFFECTED JLG PRODUCT. CALL 1 - 877 - JLG - SAFE.

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.

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All procedures herein are based on the use of the machine under proper operating conditions, with no deviations from original design intent... as per OSHA regulations.

READ & HEED!

The ownership, use, service, and/or maintenance of this machine is subject to various governmental and local laws and regulations. It is the responsibility of the owner/user/operator/lessor/lessee to be knowledgeable of these laws and regulations and to comply with them. Owner/user/operator/lessor/lessee must also be familiar with Sections 6,7,8,9, and 10 of ANSI A92.6-1999. These sections contain the responsibilities of the owner, users, operators, lessors, and lessees concerning safety, training, inspection, maintenance, application and operation. The most prevalent regulations of this type in the United States are the Federal OSHA Safety Regulations*. Listed below, in abbreviated form are some of the requirements of Federal OSHA regulations in effect as of the date of publication of this handbook.

The listing of these requirements shall not relieve the owner/user of the responsibility and obligation to determine all applicable laws and regulations and their exact wording and requirements, and to comply with the requirements. Nor shall the listing of these requirements constitute an assumption of responsibility of liability on the part of JLG Industries, Inc.

1. Only trained and authorized operators shall be permitted to operate the aerial lift.
2. A malfunctioning lift shall be shut down until repaired.
3. The controls shall be plainly marked as to their function.
4. The controls shall be tested each day prior to use to determine that they are in safe operating condition.
5. All personnel in the platform shall, at all times, wear approved fall protection devices and other safety gear as required.
6. Load limits specified by the manufacturer shall not be exceeded.
7. Instruction and warning placards must be legible.
8. Aerial lifts may be field modified for uses other than those intended by the manufacturer only if certified in writing by the manufacturer to be in conformity

to JLG requirements and to be at least as safe as it was prior to modification.

9. Aerial lifts shall not be used near electric power lines unless the lines have been de energized or adequate clearance is maintained (See OSHA 29 CFR 1910.67 and 1926.453).
10. Employees using aerial lifts shall be instructed on how to recognize and avoid unsafe conditions and hazards.
11. Ground controls shall not be operated unless permission has been obtained from personnel in the platform, except in case of an emergency.
12. Regular inspection of the job site and aerial lift shall be performed by competent persons.
13. Personnel shall always stand on the floor of the platform, not on boxes, planks, railing or other devices, for a work position.

*Applicable Federal OSHA regulations for the United States, as of the date of publication of this manual, include, but are not limited to, 29 CFR 1910.67, 29 CFR 1926.20, 29 CFR 1926.21, 29 CFR 1926.28, and 29 CFR 1926.453.

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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. In order to promote proper machine usage, it is mandatory that a daily routine is established based on the content of this manual. A maintenance program, using the information provided in this manual and the Service and Maintenance Manual, must also be established by a qualified person and must be followed to ensure that the machine is safe to operate.

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

The owner/user/operator/lessor/lessee must be familiar with Sections 6, 7, 8, 9, 10 of ANSI A92.6-1999. These sections contain 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").

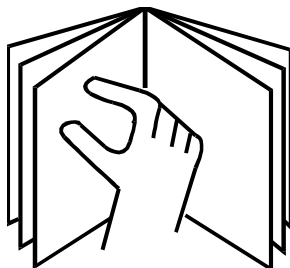
⚠ WARNING

FAILURE TO COMPLY WITH THE SAFETY PRECAUTIONS LISTED IN THIS MANUAL COULD RESULT IN MACHINE DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. SUB-SECTION

1.2 PRE-OPERATION

Operator Training and Knowledge

The Operators and Safety Manual must be read in its entirety before operating the machine. For clarification, questions, or additional information regarding any portions of this manual, contact JLG Industries, Inc.



An operator must not accept operating responsibilities until adequate training has been given by competent and authorized persons.

Allow only those authorized and qualified personnel to operate the machine who have demonstrated that they understand the safe and proper operation and maintenance of the unit.

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 be familiar with the emergency controls and emergency operation of the machine as specified in this manual.

Read, understand, and obey all applicable employer, local, and governmental regulations as they pertain to your utilization and application of the machine.

Workplace Inspection

Precautions to avoid all hazards in the work area must be taken by the user before 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 floor 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 operate the machine when wind conditions exceed 28 mph (12.5 m/s).

This machine can be operated in nominal ambient temperatures of 0° F to 104° F (-20° C to 40° C). Consult JLG to optimize operation outside of this temperature range.

Machine Inspection

Do not operate this machine until the inspections and functional checks have been performed as specified in Section 2 of this manual.

SECTION 1 - SAFETY PRECAUTIONS

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 and Maintenance Manual.

Ensure all safety devices are operating properly. Modification of these devices is a safety violation.

⚠ WARNING

MODIFICATION OR ALTERATION OF AN AERIAL WORK PLATFORM SHALL BE MADE ONLY WITH PRIOR WRITTEN PERMISSION FROM THE MANUFACTURER

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 deck. Keep mud, oil, grease, and other slippery substances from footwear and platform deck.

1.3 OPERATION

General

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.

Hydraulic cylinders should never be left at end of travel (fully extended or fully retracted) before shutdown or for long periods of time. Always "bump" control in opposite direction slightly when function reaches end of travel. This applies both to machines in operation or in the stowed position.

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.

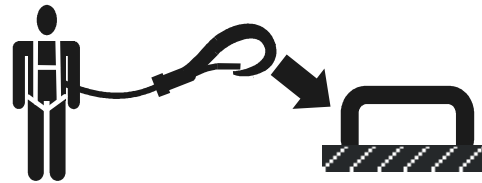
Always ensure that power tools are properly stowed and never left hanging by their cord from the platform work area.

Do not assist a stuck or disabled machine by pushing or pulling except by pulling at the chassis tie-down lugs.

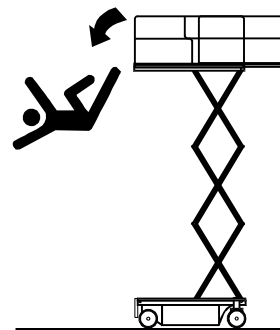
Stow scissor arm assembly and shut off all power before leaving machine.

Trip and Fall Hazards

JLG Industries, Inc. recommends that all persons in the platform wear a full body harness with a lanyard attached to an authorized lanyard anchorage point while operating this machine. For further information regarding fall protection requirements on JLG products, contact JLG Industries, Inc.



Prior to operation, ensure all gates are fastened and secured in their proper position. Identify the designated lanyard anchorage point(s) at the platform and securely attach the lanyard. Attach only one (1) lanyard per lanyard anchorage point.



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.

Never use the scissor arm assembly to gain access to or leave the platform.

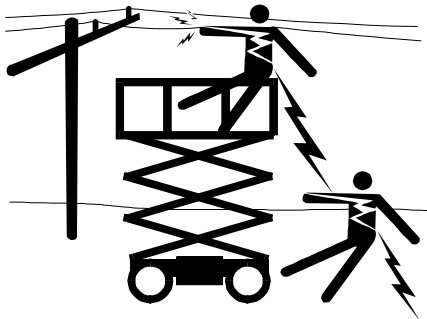
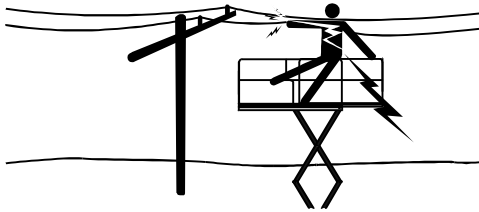
Use extreme caution when entering or leaving platform. Ensure that the scissor arm assembly is fully lowered. Face the machine when entering or leaving the platform. Always maintain "three point contact" with the machine, using two hands and one foot or two feet and one hand at all times during entry and exit.

Platform-to-structure transfers at elevated positions are discouraged. Where transfer is necessary, enter/exit through the gate only with the platform within 1 foot (0.3m) of a safe and secure structure. 100% tie-off is also required in this situation utilizing two lanyards. One lanyard must be attached to the platform with the second lanyard attached to the structure. The lanyard connected to the platform must not be disconnected until such time the transfer to the structure is safe and complete.

Keep oil, mud, and slippery substances cleaned from footwear and the platform floor.

Electrocution Hazards

This machine is not insulated and does not provide protection from contact with an electrically charged conductor.



Maintain safe clearance from electrical lines, apparatus, or any energized (exposed or insulated) parts in accordance with the Minimum Safe Approach Distance (MSAD) as specified in Table 1-1. Allow for machine movement and electrical line swaying.

Table 1-1. Minimum Safe Approach Distances (M.S.A.D.)

Voltage Range (Phase to Phase)	MINIMUM SAFE APPROACH DISTANCE in Feet (Meters)
0 to 300V	AVOID CONTACT
Over 300V to 50 KV	10 (3)
Over 50KV to 200 KV	15 (5)
Over 200 KV to 350 KV	20 (6)
Over 350 KV to 500 KV	25 (8)
Over 500 KV to 750 KV	35 (11)
Over 750 KV to 1000 KV	45 (14)

DANGER: DO NOT maneuver machine or personnel inside PROHIBITED ZONE. ASSUME all electrical parts and wiring are ENERGIZED unless known otherwise. This requirement shall apply except where employer, local or governmental regulations are more stringent.

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.

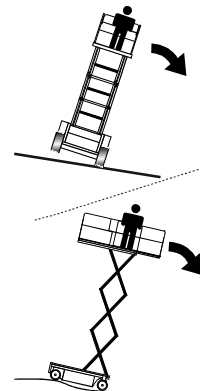
⚠ DANGER

DO NOT MANEUVER MACHINE OR PERSONNEL INSIDE PROHIBITED ZONE (MSAD). ASSUME ALL ELECTRICAL PARTS AND WIRING ARE ENERGIZED UNLESS KNOWN OTHERWISE.

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 should be familiar with the driving surface before driving. Do not exceed the allowable sideslope and grade while driving.



SECTION 1 - SAFETY PRECAUTIONS

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 firm, level and uniformly supported surface 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 work load as specified on the platform. Distribute loads evenly on platform floor. 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.

Never attempt to use the machine as a crane. Do not tie-off machine to any adjacent structure. Never attach wire, cable, or any similar items to platform.

Do not operate the machine when wind conditions exceed 30 mph (12.5 m/s).

Do not cover the platform sides or carry large surface-area items in the platform when operating outdoors. The addition of such items increases the exposed wind area of the machine.

Do not increase the platform size with unauthorized deck extensions or attachments.

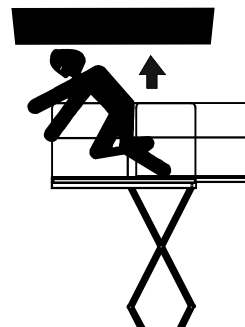
If scissor arm assembly or platform is caught so that one or more wheels are off the ground, all persons must be removed before attempting to free the machine. Use cranes, forklift trucks, or other appropriate equipment to stabilize machine and remove personnel.

Crushing and Collision Hazards

Approved head gear must be worn by all operating and ground personnel.

Keep hands and limbs out of the scissor arm assembly during operation.

Watch for obstructions around machine and overhead when driving. Check clearances above, on sides, and bottom of platform when lifting or lowering platform.



During operation, keep all body parts inside platform railing.

Always post a lookout when driving in areas where vision is obstructed.

Keep non-operating personnel at least 6 ft. (1.8m) away from machine during all driving operations.

Under all travel conditions, the operator must limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors causing hazards of collision or injury to personnel.

Be aware of stopping distances in all drive speeds. When driving in high speed, switch to low 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 aerial work platform's presence. Disconnect power to overhead cranes. Barricade floor area if necessary.

Avoid operating over ground personnel. Warn personnel not to work, stand, or walk under a raised platform. Position barricades on floor as 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 Section 6 for emergency towing procedures.

Ensure platform is fully retracted and completely empty of tools prior to towing, lifting or hauling.

When lifting machine with a forklift, position forks only at designated areas of the machine. Lift with a forklift of adequate capacity.

Refer to Section 4 for lifting information.

1.5 MAINTENANCE

General

This 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.

Maintenance Hazards

Shut off power to all controls and ensure that all operating systems are secured from inadvertent motion prior to performing any adjustments or repairs.

Never work under an elevated platform until it has been fully lowered to the full down position, if possible, or otherwise supported and restrained from movement with appropriate safety props, blocking, or overhead supports.

Always relieve hydraulic pressure from all hydraulic circuits before loosening or removing hydraulic components.

Always disconnect batteries when servicing electrical components or when performing welding on the machine.

Shut down the engine (if equipped) while fuel tanks are being filled.

Ensure replacement parts or components are 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

Remove all rings, watches, and jewelry when performing any maintenance. Do not wear loose fitting clothing or long hair unrestrained which may become caught or entangled in equipment.

Use only clean approved non-flammable cleaning solvents.

Never alter, remove, or substitute any items such as counterweights, tires, batteries, platforms or other items that may reduce or affect the overall weight or stability of the

machine. Reference the Service and Maintenance Manual for the weights of critical stability items.

WARNING

MODIFICATION OR ALTERATION OF AN AERIAL WORK PLATFORM SHALL BE MADE ONLY WITH PRIOR WRITTEN PERMISSION FROM THE MANUFACTURER

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.

WARNING

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.

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SECTION 2. PREPARATION AND INSPECTION

2.1 GENERAL

This section provides the necessary information needed by those personnel that are responsible to place the machine in operation readiness, and lists checks that are performed prior to use of the machine. It is important that the information contained in this section be read and understood before any attempt is made to operate the machine. Ensure that all the necessary inspections have been completed successfully before placing the machine into service. These procedures will aid in obtaining maximum service life and safe operation.

IMPORTANT

SINCE THE MACHINE MANUFACTURER HAS NO DIRECT CONTROL OVER THE FIELD INSPECTION AND MAINTENANCE, SAFETY IS THE RESPONSIBILITY OF THE OWNER/OPERATOR.

2.2 PREPARATION FOR USE

Before a new machine is put into operation it must be carefully inspected for any evidence of damage resulting from shipment and inspected periodically thereafter, as outlined in paragraph 2-3, Delivery and Periodic Inspection. The unit should be thoroughly checked for hydraulic leaks during initial start-up and run. A check of all components should be made to assure their security.

All preparations necessary to place the machine in operation readiness status are the responsibility of management personnel. Preparation requires good common sense, (i.e. lift works smoothly and brakes operate properly) coupled with a series of visual inspections. The mandatory requirements are given in paragraph 2-4, Walk Around Inspection.

It should be assured that the items appearing in the Delivery and Periodic Inspection and Functional Check are complied with prior to putting the machine into service.

2.3 DELIVERY AND PERIODIC INSPECTION

NOTE: *This machine requires periodic safety and maintenance inspections by a JLG distributor, or certified JLG mechanic. A decal located on the frame provides a place to record (stamp) inspection dates. Check decal and notify dealer if inspection is overdue.*

An annual inspection shall be performed on the aerial platform no later than thirteen (13) months from the date of the prior annual inspection. The inspection shall be performed by person(s) qualified as a mechanic on the specific make and model of the aerial platform.

The following checklist provides a systematic inspection to assist in detecting defective, damaged, or improperly installed parts. The checklist denotes the items to be inspected and conditions to examine. Periodic inspection shall be performed monthly or more often when required by environment, severity, and frequency of usage.

Handrail Assemblies

Properly installed; no loose or missing parts; no visible damage.

Platform Assembly

No visible damage; free of dirt and debris.

Sizzor Arms

No visible damage, abrasions and/or distortions.

Electrical Cable

No visible damage; properly secured.

Pivot Pins

No loose or missing retaining hardware; no visible damage; no evidence of pin or bushing wear.

Lift Cylinders

No rust, nicks, scratches or foreign material on piston rod; no leakage.

Frame

No visible damage; loose or missing hardware (top and underside).

Tire and Wheel Assemblies

No loose or missing lug nuts; no visible damage.

Pothole Protection System

No loose or missing parts; no visible damage; no debris.

Sliding Wear Pad Blocks

No excessive wear; no visible damage.

Hydraulic Oil Supply

On all machines built before serial number 0200082630, operate lift function through one complete cycle before checking oil level. Oil level should read at full mark, or within 1/2" below full mark, on side of hydraulic tank (all systems shut down, machine in stowed position); no visible oil leakage on the ground.

SECTION 2 - PREPARATION AND INSPECTION

Steer Cylinder

No rust, nicks, scratches or foreign material on piston rod; no leakage.

Steer Linkage

No loose or missing parts; no visible damage.

Front Spindle Assemblies

No excessive wear; no damage.

Control Boxes (Platform and Ground)

Switches operable; no visible damage; placards secure and legible; controller operable; no visible damage.

Batteries

Proper electrolyte level; cable connections tight; no visible damage; no corrosion at battery cable connections. Ensure batteries are fully charged.

Motor/Pump Unit and Valves

No leakage; units secure.

Platform Placards

No visible damage; placards secure and legible.

Placards

Keep all information and operating placards clean and unobstructed. Cover when spray painting or shot blasting to protect legibility.

Operators and Safety Manual

Ensure a copy of this manual is enclosed in the manual storage box.

Machine Log

Ensure a machine operating record or log is kept. Check to see that it is current and that no entries have been left uncleared, leaving machine in an unsafe condition for operation.

Lubrication

For those items pointed out in the Walk-Around Inspection requiring daily lubrication, refer to Table 2-2, Lubrication Chart, for specific requirements.

Functional Check

Perform functional checks in accordance with paragraph 2-5, Functional Check, before attempting to operate the machine.

WARNING

TO AVOID INJURY DO NOT OPERATE A MACHINE UNTIL ALL MALFUNCTIONS HAVE BEEN CORRECTED. USE OF A MALFUNCTIONING MACHINE IS A SAFETY VIOLATION.

2.4 WALK-AROUND INSPECTION

It is the user's responsibility to inspect the machine before the start of each workday. It is recommended that each user inspect the machine before operation, even if the machine has already been put into service under another user. This Walk-Around Inspections, Figures 2-1 and 2-2, are the preferred method of inspection.

In addition to the Walk-Around Inspection, be sure to include the following as part of the daily inspection:

Overall Cleanliness

Check all standing surfaces for oil, fuel and hydraulic oil spillage and foreign objects. Ensure overall cleanliness.

2.5 FUNCTIONAL CHECK

⚠ WARNING

TO AVOID INJURY DO NOT OPERATE A MACHINE UNTIL ALL MALFUNCTIONS HAVE BEEN CORRECTED. USE OF A MALFUNCTIONING MACHINE IS A SAFETY VIOLATION.

A functional check of all systems should be performed, under no load, once the walk-around inspection is complete, in an area free of overhead and ground level obstructions. Perform pre-load functional check in accordance with the following procedure:

1. Ensure batteries are fully charged.
2. From ground control, raise and lower platform several times. Check for smooth elevation and lowering. From the platform control station, check for High Drive cut-out as platform begins to raise. Check that pothole protection system is lowered when platform is raised. Attempt to drive machine with platform raised to the heights listed, per model, in Table 2-1, High Drive Cut-Out and pothole protection system blocked from lowering on one side then repeat for the other side. Machine should not drive with platform elevated unless pothole protection system is fully lowered and locked. When pothole protection system is fully lowered there should be approximately 3/4 in. of ground clearance.

Table 2-1. High Drive Cut-Out

Model	Cut-Out Height (in)	Cut-Out Height (m)
1532E2	84	2.1
1932E2	104	2.6
2032E2	84	2.1
2632E2/2646E2	102	2.6
3246E2	63	1.6

3. Drive forward and reverse, check for proper operation.
4. Check that drive brake holds when machine is driven up a hill, not to exceed 25% grade, and stopped.
5. Steer left and right. Check for proper operation.
6. Check fluid level on hydraulic oil reservoir. Refer to Figure 2-3., Lubrication Diagram.
7. Check to be sure that drive cannot be activated while lifting.

2.6 TORQUE REQUIREMENTS

The Torque Chart, Figure 2-3., Torque Chart, consists of standard torque values based on bolt diameter and grade, also specifying dry and wet torque values in accordance with recommended shop practices. This chart is provided as an aid to the operator in the event he/she notices a condition that requires prompt attention during the walk-around inspection or during operation until the proper service personnel can be notified. The Service and Maintenance Manual provides specific torque values and periodic maintenance procedures with a listing of individual components. Utilizing this Torque Chart in conjunction with the preventive maintenance procedures in the Service and Maintenance Manual will enhance safety, reliability and performance of the machine.

2.7 BATTERY CHARGING

At the end of the work day, the batteries should be charged for the next day's work. Position the Emergency Stop switch to OFF. Prior to charging, be sure electrolyte level is above battery plates. Connect the battery charger to a properly grounded 110 Volt receptacle using a suitable extension cord. After charging, check the electrolyte level of the batteries and adjust accordingly. Add distilled water only to batteries. A fully charged battery will have a specific gravity above 1.260 on a hydrometer.

⚠ CAUTION

WHEN ADDING DISTILLED WATER TO THE BATTERIES, A NON-METALLIC CONTAINER AND/OR FUNNEL MUST BE USED. ADD WATER ONLY TO LEVEL INDICATOR OR 3/8 INCH (0.95 CM) ABOVE SEPARATORS.

⚠ CAUTION

NO OPEN FLAMES OR SMOKING WHEN CHARGING BATTERIES.

⚠ CAUTION

CHARGE BATTERIES ONLY IN A WELL VENTILATED AREA.

⚠ CAUTION

ENSURE THAT BATTERY ACID DOES NOT COME INTO CONTACT WITH SKIN OR CLOTHING.

NOTE: *Be sure to disconnect and store any extension cords after charging batteries and before putting machine into service.*

To avoid electrolyte overflow, add distilled water to batteries after charging.

SECTION 2 - PREPARATION AND INSPECTION

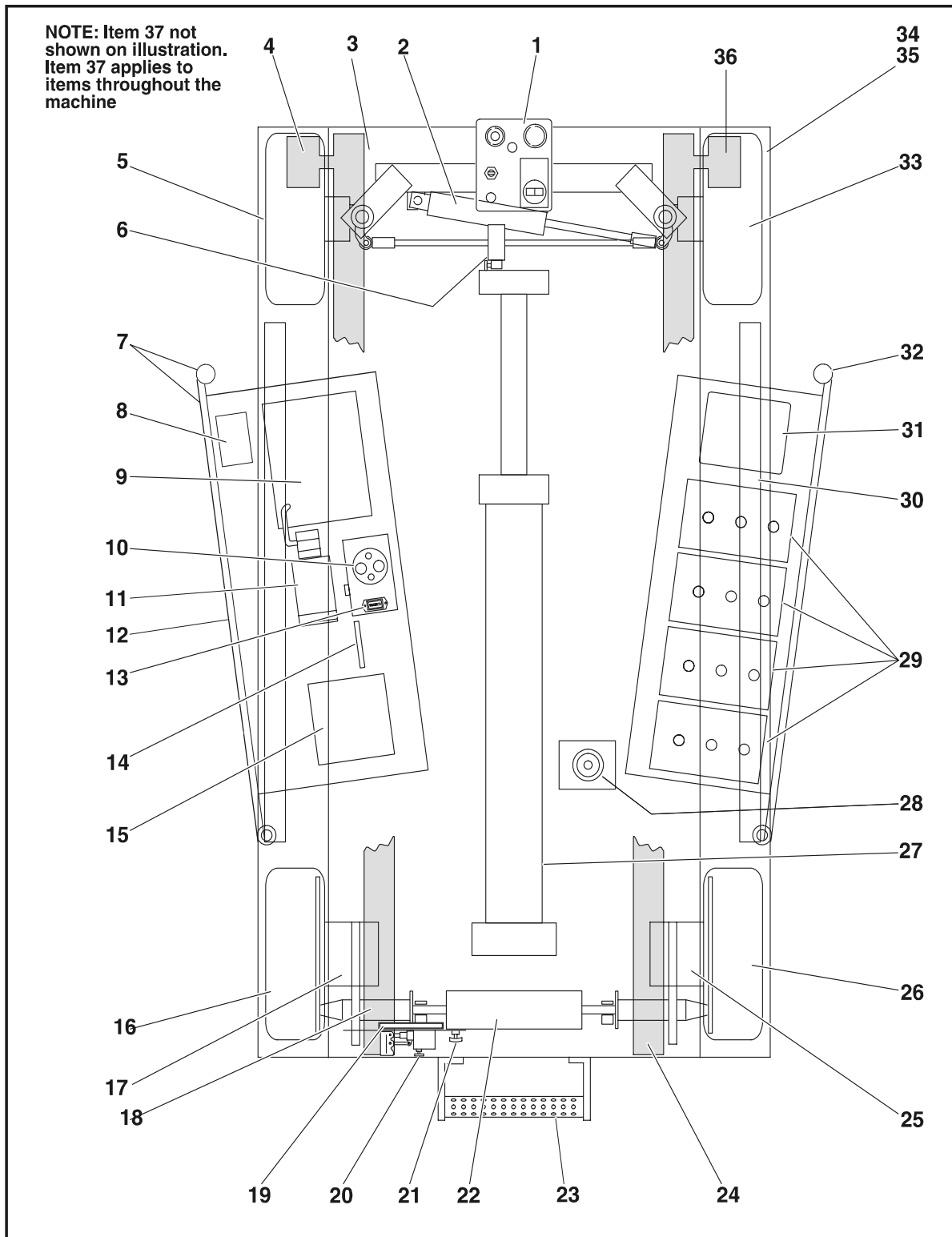


Figure 2-1. Daily Walk-Around Inspection - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 3).

GENERAL

Begin the "Walk-Around Inspection" at Item 1, as noted on the diagram. Continue to the right (counterclockwise viewed from top) checking each item in sequence for the conditions listed in the "Walk-Around Inspection Checklist."

⚠ WARNING

TO AVOID INJURY DO NOT OPERATE MACHINE UNTIL ALL MALFUNCTIONS HAVE BEEN CORRECTED. USE OF A MALFUNCTIONING MACHINE IS A SAFETY VIOLATION.

⚠ WARNING

TO AVOID POSSIBLE INJURY, BE SURE MACHINE POWER IS "OFF" DURING "WALK-AROUND INSPECTION."

NOTE: *Do not overlook visual inspection of chassis underside. Checking this area often results in discovery of conditions which could cause extensive machine damage.*

1. Platform Controls - Properly secured; no loose or missing parts; no visible damage to control box or controller (joystick). Placards secure and legible; control markings legible; operators and safety manual in manual storage box.
2. Steer Cylinder and Linkage - Properly secured; no loose or missing parts; no visible damage; no evidence of steer cylinder leakage.
3. Safety Prop - Properly secured; no visible damage; no loose or missing parts.
4. Scissor Arms and Sliding Wear Pads - Properly secured; no loose or missing parts; no visible damage.
5. Wheel and Tire Assembly, Left Front - Properly secured; no loose or missing lug nuts; no visible damage.
6. Drive Cutout Switch - Properly secured; no visible damage; no loose or missing parts.
7. Compartment Cover and Latches - Cover and latches in working condition; properly secured; no loose or missing parts.
8. Ground Controls - No visible damage; switches operable; placards secure and legible.
9. Hydraulic Reservoir - No visible damage; no loose or missing parts; no evidence of leakage. Recommended hydraulic fluid level on side of tank. Breather cap secure and working.
10. Hydraulic Filter - No visible damage; properly secured; no evidence of leakage.
11. Motor/Pump Unit - Properly secured; no visible damage; no evidence of hydraulic leakage.
12. Pothole Protection System - Support broilers, limit switches and links properly secured; no visible damage; no loose or missing parts.
13. Hourmeter - No visible damage.
14. Wire Installation - No visible damage; no loose or broken wires.
15. Control Valve Installation - No loose or missing parts; no evidence of leakage; No unsupported wires or hoses; no damaged or broken wires.
16. Wheel and Tire Assembly, Left Rear - Properly secured; no loose or missing lug nuts; no visible damage.
17. Drive Motor, Left Rear - Properly secured; no visible damage; no evidence of leakage.
18. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
19. Handle for Manual Descent Pump (2632/2646E2/3246E2) - No visible damage.
20. Manual Descent Pump (2632/2646E2/3246E2) - Properly secured; no visible damage; no evidence of leakage;
21. Manual Descent Cable and Pull Handle (2032) - No visible damage; Properly secured; no loose or missing parts.
22. Brake Cylinder - Properly secured; no visible damage; no evidence of leakage.
23. Ladder - Properly secured; no visible damage; no loose or missing hardware.
24. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
25. Drive Motor, Right Rear - Properly secured; no visible damage; no evidence of leakage.
26. Wheel and Tire Assembly, Right Rear - Properly secured; no loose or missing lug nuts; no visible damage.
27. Lift Cylinder - Properly secured; no visible damage; no loose or missing parts; no evidence of leakage.
28. Tilt Switch - Properly secured; no loose or missing parts; no visible damage; no loose or broken wiring.

Figure 2-1. Daily Walk-Around Inspection - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 3).

SECTION 2 - PREPARATION AND INSPECTION

29. Battery Installation - Proper electrolyte level; cables secure; no damage or corrosion.	34. Handrail Installation - All railings securely attached; no visible damage; no missing parts; chain in proper working order.
30. Pothole Protection System - Support bar, rollers, limit switches and links properly secured; no visible damage; no loose or missing parts.	35. Platform Assembly - No loose or missing parts; no visible damage; platform deck extension operates properly.
31. Battery Charger - No visible damage; properly secured.	36. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
32. Compartment Cover and Latches - Cover and latches in working condition; properly secured; no visible damage; no loose or missing parts.	37. (Not Shown on Illustration) Valves, Valve Fittings, Hosing and Tubing - Properly secured; no loose or missing parts; no visible damage; no evidence of leakage.
33. Wheel and Tire Assembly, Right Front - Properly secured; no loose or missing lug nuts; no visible damage.	

Figure 2-1. Daily Walk-Around Inspection - 2032E2/2632E2/2646E2/3246E2 (Sheet 3 of 3)

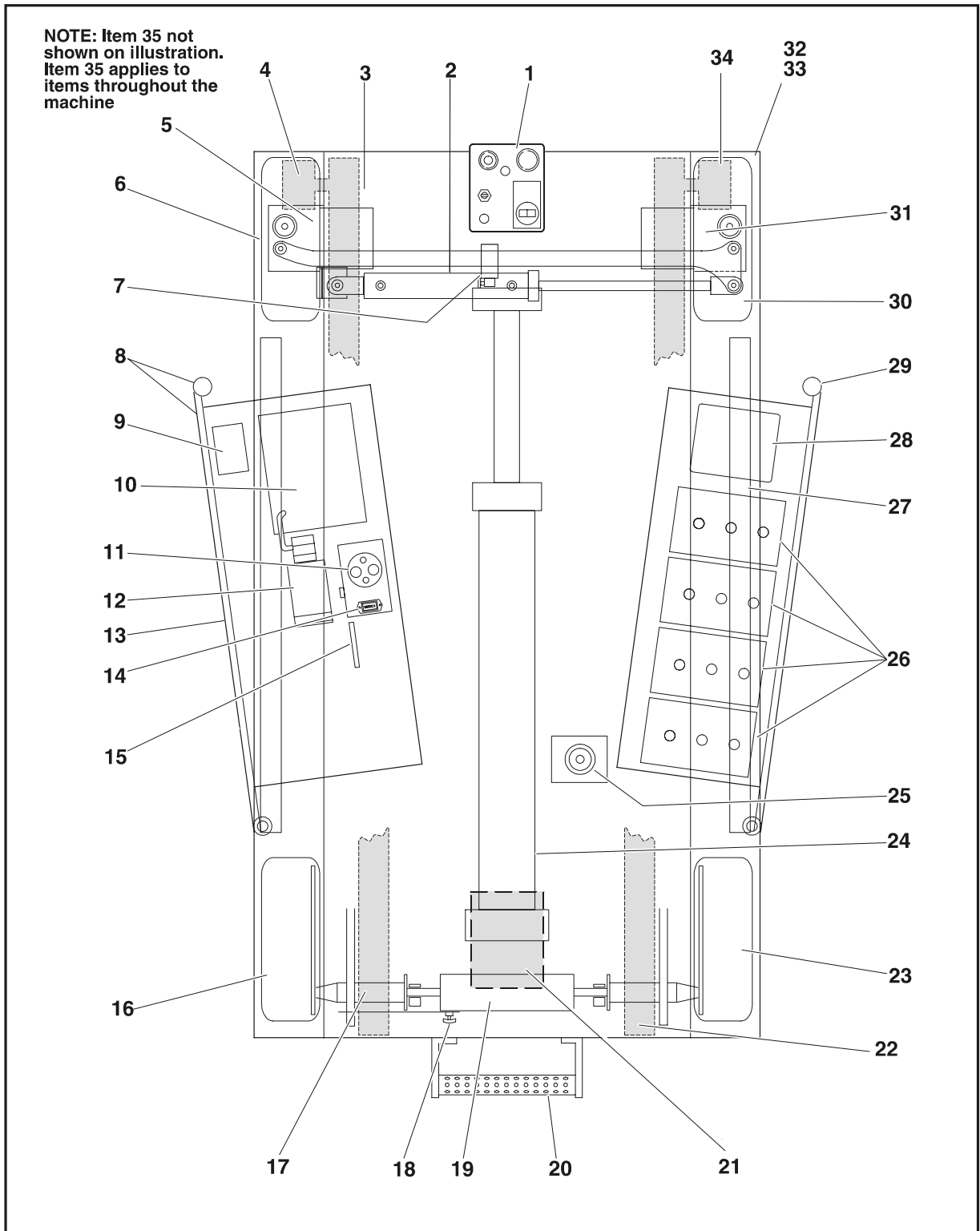


Figure 2-2. Daily Walk-Around Inspection - 1532E2/1932E2 (Sheet 1 of 3).

SECTION 2 - PREPARATION AND INSPECTION

GENERAL

Begin the "Walk-Around Inspection" at Item 1, as noted on the diagram. Continue to the right (counterclockwise viewed from top) checking each item in sequence for the conditions listed in the "Walk-Around Inspection Checklist."

⚠ WARNING

TO AVOID INJURY DO NOT OPERATE MACHINE UNTIL ALL MALFUNCTIONS HAVE BEEN CORRECTED. USE OF A MALFUNCTIONING MACHINE IS A SAFETY VIOLATION.

⚠ WARNING

TO AVOID POSSIBLE INJURY, BE SURE MACHINE POWER IS "OFF" DURING "WALK-AROUND INSPECTION."

NOTE: Do not overlook visual inspection of chassis underside. Checking this area often results in discovery of conditions which could cause extensive machine damage.

1. Platform Controls - Properly secured; no loose or missing parts; no visible damage to control box or controller (joystick). Placards secure and legible; control markings legible; operators and safety manual in manual storage box.
2. Steer Cylinder and Linkage - Properly secured; no loose or missing parts; no visible damage; no evidence of steer cylinder leakage.
3. Safety Prop - Properly secured; no visible damage; no loose or missing parts.
4. Scissor Arms and Sliding Wear Pads - Properly secured; no loose or missing parts; no visible damage.
5. Drive Motor, Left Front - Properly secured; no visible damage; no evidence of leakage.
6. Wheel and Tire Assembly, Left Front - Properly secured; no loose or missing lug nuts; no visible damage.
7. Drive Cutout Switch - Properly secured; no visible damage; no loose or missing parts.
8. Compartment Cover and Latches - Cover and latches in working condition; properly secured; no loose or missing parts.
9. Ground Controls - No visible damage; switches operable; placards secure and legible.
10. Hydraulic Reservoir - No visible damage; no loose or missing parts; no evidence of leakage. Recommended hydraulic fluid level on side of tank. Breather cap secure and working.
11. Hydraulic Filter - No visible damage; properly secured; no evidence of leakage.
12. Motor/Pump Unit - Properly secured; no visible damage; no evidence of hydraulic leakage.
13. Pothole Protection System - Support bar, rollers, limit switches and links properly secured; no visible damage; no loose or missing parts.
14. Hourmeter - No visible damage.
15. Wire Installation - No visible damage; no loose or broken wires.
16. Wheel and Tire Assembly, Left Rear - Properly secured; no loose or missing lug nuts; no visible damage.
17. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
18. Manual Descent Cable and Pull Handle - No visible damage; Properly secured; no loose or missing parts.
19. Brake Cylinder - Properly secured; no visible damage; no evidence of leakage.
20. Ladder - Properly secured; no visible damage; no loose or missing hardware.
21. Control Valve Installation - No loose or missing parts; no evidence of leakage; No unsupported wires or hose; no damaged or broken wires.
22. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
23. Wheel and Tire Assembly, Right Rear - Properly secured; no loose or missing lug nuts; no visible damage.
24. Lift Cylinder - Properly secured; no visible damage; no loose or missing parts; no evidence of leakage.
25. Tilt Switch - Properly secured; no loose or missing parts; no visible damage; no loose or broken wiring.
26. Battery Installation - Proper electrolyte level; cables secure; no damage or corrosion.
27. Pothole Protection System - Support bar, rollers, limit switches and links properly secured; no visible

Figure 2-2. Daily Walk-Around Inspection - 1532E2/1932E2 (Sheet 2 of 3).

28. Battery Charger - No visible damage; properly secured.	33. Platform Assembly - No loose or missing parts; no visible damage; platform deck extension operates properly.
29. Compartment Cover and Latches - Cover and latches in working condition; properly secured; no visible damage; no loose or missing parts.	34. Scissor Arms and Sliding Wear Pads - Properly secured; no visible damage; no loose or missing parts.
30. Wheel and Tire Assembly, Right Front - Properly secured; no loose or missing lug nuts; no visible damage.	35. (Not Shown on Illustration) Valves, Valve Fittings, Hosing and Tubing - Properly secured; no loose or missing parts; no visible damage; no evidence of leakage.
31. Drive Motor, Right Front - Properly secured; no visible damage; no evidence of leakage.	
32. Handrail Installation - All railings securely attached; no visible damage; no missing parts; chain in proper working order.	

Figure 2-2. Daily Walk-Around Inspection - 1532E2/1932E2 (Sheet 3 of 3).

SECTION 2 - PREPARATION AND INSPECTION

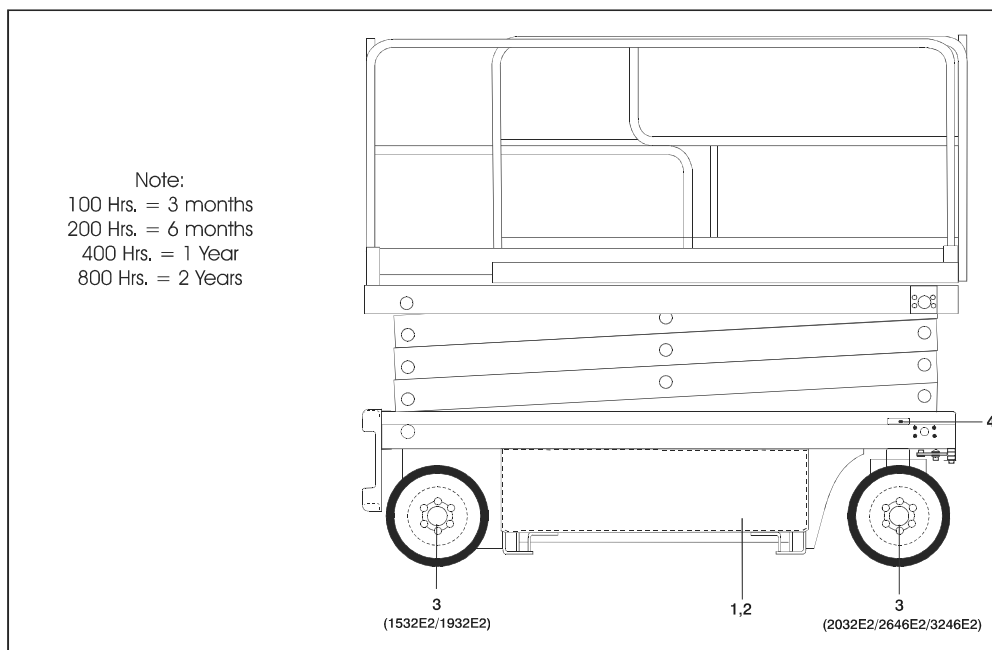


Figure 2-3. Lubrication Diagram

Table 2-2. Lubrication Chart

INDEX NUMBER	COMPONENT	NO/TYPE LUBE TYPE	LUBE METHOD	INTERVAL-HOURS	COMMENTS
1	Hydraulic Oil	Fill Cap/Drain Plug	HO - Check HO Level HO - Change HO	8/800	Check oil level every 8 hours. Change oil every 800 hours
2	Hydraulic Filter Element	N/A	N/A	50/400	Change filter after first 50 hours of operation, then every 400 hours thereafter (1 year).
3	Wheel Bearings	Front or Rear Wheels	MPG - Repack	800	2 years
4	Kingpin Housing	Grease Fittings	MPG - Pressure Gun	100	3 months

Key To Lubricants:

MPG - Multi Purpose Grease

HO - Hydraulic Oil - Mobilfluid 424

⚠ WARNING

TO AVOID PERSONAL INJURY, USE SAFETY PROP FOR ALL MAINTENANCE REQUIRING PLATFORM TO BE ELEVATED.

NOTE: Be sure to lubricate like items on each side of the machine.

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

NOTE: On all machines built before serial number 0200082630, operate lift function through one complete cycle before checking oil level. Oil level should be at the full mark or within 1/2" below the full mark. On machines built after, and including, serial number 0200082630 check oil level to insure proper level.

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SECTION 3. USER RESPONSIBILITIES AND MACHINE CONTROL

3.1 GENERAL

IMPORTANT

SINCE THE MANUFACTURER HAS NO DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION, CONFORMANCE WITH GOOD SAFETY PRACTICES IN THESE AREAS IS THE RESPONSIBILITY OF THE USER AND HIS OPERATING PERSONNEL.

This section provides the necessary information needed to understand control functions. Included in this section are the operating characteristics and limitations, and functions and purposes of controls and indicators. It is important that the user read and understand the proper procedures before operating the machine. These procedures will aid in obtaining optimum service life and safe operation.

3.2 PERSONNEL TRAINING

The scissor lift is a personnel handling device; therefore, it is essential that it be operated and maintained only by authorized and qualified personnel who have demonstrated that they understand the proper use and maintenance of the machine. It is important that all personnel who are assigned to and responsible for the operation and maintenance of the machine undergo a thorough training program and check out period in order to become familiar with the characteristics prior to operating the machine.

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

Operator Training

Operator training must include instruction in the following:

1. Use and limitations of the platform controls, ground controls, emergency controls and safety systems.
2. Knowledge and understanding of this manual and of the control markings, instructions and warnings on the machine itself.
3. Knowledge and understanding of all safety work rules of the employer and of Federal, State and Local Statutes, including training in the recognition and avoidance of potential hazards in the work place; with particular attention to the work to be performed.
4. Proper use of all required personnel safety equipment.

5. Sufficient knowledge of the mechanical operation of the machine to recognize a malfunction or potential malfunction.
6. The safest means to operate near overhead obstructions, other moving equipment, obstacles, depressions, holes, dropoffs, etc. on the supporting surface.
7. Means to avoid the hazards of unprotected electrical conductors.
8. Any other requirements of a specific job or machine application.

Training Supervision

Training must be done under the supervision of a qualified operator or supervisor in an open area free of obstructions until the trainee has developed the ability to safely control a scissor lift in congested work locations.

Operator Responsibility

The operator must be instructed that he has 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 and to request further information from his supervisor or JLG Distributor before proceeding.

NOTE: *Manufacturer or Distributor will provide qualified persons for training assistance with first unit(s) delivered and thereafter as requested by user or his personnel.*

3.3 OPERATING CHARACTERISTICS AND LIMITATIONS

General

A thorough knowledge of the operating characteristics and limitations of the machine is always the first requirement for any user, regardless of user's experience with similar types of equipment.

Placards

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

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

Capacities

Raising platform with or without any load in platform, is based on the following criteria:

1. Machine is positioned on a smooth, firm and level surface.
2. Load is within manufacturer's rated capacity.
3. All machine systems are functioning properly.

Stability

This machine, as originally manufactured by JLG and operated within its rated capacity on a smooth, firm and level supporting surface, provides a stable aerial platform for all platform positions.

- b. The following will occur if the batteries being charged are full:

The charger will read 80% and remain there for approximately 70 minutes during the DV/Dt section of the charge, after which the charger will go to 100% and shut off as described below.

6. If there is a problem with the battery or if the charge cycle is interrupted the charger could shut down and the abnormal light will come on.

Ground Control Station

WARNING

DO NOT OPERATE FROM GROUND CONTROL STATION WITH PERSONNEL IN THE PLATFORM EXCEPT IN AN EMERGENCY.

WARNING

PERFORM AS MANY PRE-OPERATIONAL CHECKS AND INSPECTIONS FROM THE GROUND CONTROL STATION AS POSSIBLE. REFER TO SECTION 2 FOR PRE-OPERATIONAL CHECKS AND INSPECTIONS.

3.4 CONTROLS AND INDICATORS FOR NON PROPORTIONAL CONTROL

The machine is equipped with control panels that use symbols instead of words to indicate control functions.

Battery Charger

NOTE: *If batteries are run down to under 6 volts, the supplied battery charger will not pick up the charge.*

The battery charger is located in the right side battery door. The charger is a 20 Amp, SCR-style charger equipped with a manual switch that allows the operator to select 110-125 Volt input or 220-250 Volt input. A rocker switch circuit breaker is included to reset the charger in the event of a loss of power. LED's on the front panel of the charger indicate the status of charger operation (Charge Complete, 80% Charge, Incomplete Charge, Charger On, Abnormal Cycle).

Under normal operation the battery charger should work as follows:

NOTE: *Make sure the DC is connected and then plug the charger into the AC outlet.*

1. All 5 lights will flash 3 times.
2. Each light will flash once from top to bottom.
3. All 5 lights will flash 3 more times.
4. The charger 25% light will come on (Solid if in wet mode, and flashing if in sealed mode).
5. 5 seconds later the charger on light will come on the the charger will start recharging the battery.
 - a. If the battery is depleted, the 25% light will stay on until the batteries reach their 80% level, where the 80% light come on and the 25% light will go out.

1. Power Selector Switch
A three position, key-operated power selector switch supplies operating power to the platform or ground controls, as selected. When positioned to platform, the switch provides power to the emergency stop switch at the platform controls. When positioned to ground, the switch provides power to the emergency stop switch at the ground controls. With the power selector switch in the center off position, power is shut off to both platform and ground controls.

NOTE: *With the power selector switch in the off position, the key can be removed in order to avoid unauthorized use of the machine.*

Low speed is the default speed for all functions when the platform is fully lowered. When the platform is elevated, all functions operate in creep speed only.

2. Emergency Stop Switch
A two-position, red, mushroom-shaped emergency stop switch, when positioned to on (pulled out) with the power selector switch positioned to ground, furnishes operating power to the ground control station. In addition, the switch can be used to turn off power to the function controls in the event of an emergency. Power is turned on by pulling the switch out (on), and is turned off by pushing the switch in (off).

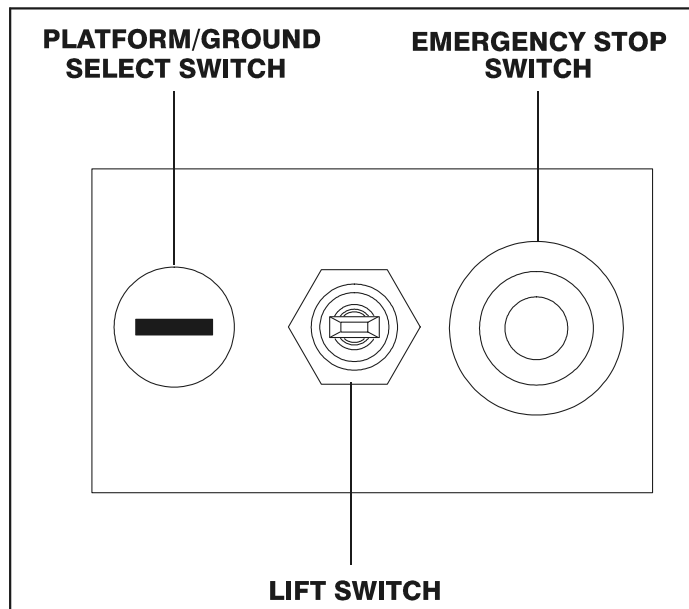


Figure 3-1. Ground Control Station

3. Lift Switch
A three-position, momentary-contact switch provides raising and lowering of the platform when positioned to up or down.
4. Circuit Breaker
A push button reset 15 Amp circuit breaker, located behind the pump/motor in the left side door, returns interrupted power to the machine functions when depressed.
5. Hourmeter
The machine may be equipped with an hourmeter to indicate the number of hours the machine has been operated. The hourmeter operates when a machine function is operating or when key switch and emergency stop switch are on.

Platform Control Station

1. Emergency Stop Switch
A two-position, red, mushroom-shaped emergency stop switch functions to provide power to the platform control station and also to turn off power to the platform function controls in the event of an emergency. With the power selector switch positioned to platform, power is turned on by pulling the switch out (on), and is turned off by pushing the switch in (off).
2. Enable Switch
The enable switch is located on the left side of the platform control box. This switch must be depressed and held before and during actuation of the lift function and for the duration of lift. The enable switch works in conjunction with the lift switch.

3. Drive
The joystick is used to drive the machine forward and reverse. To drive, the red trigger on the front of the joystick must be depressed and held. Then the joystick must be pushed forward for forward travel or pulled backward for reverse travel. The adjustment between low and high speed is determined by the joystick travel. When motor is first activated you are in low speed, high speed is achieved by moving the joystick approx. 1/4 of the way in either direction from the off position.

NOTE: When the machine is raised, and a door is opened, the machine will not drive.

The drive system may make an occasional cavitating noise when driving with steer wheels turned all the way in one direction or while going down hill. This noise is a byproduct of the drive system.

4. Lift
The lift switch, when used in conjunction with the enable switch, will raise or lower the machine. Lift is activated by pressing and holding the enable and moving the lift switch forward (lift up) or backward (lift down).

⚠ CAUTION

DO NOT "LIFT DOWN" WITHOUT COMPLETELY RETRACTING THE PLATFORM EXTENSION.

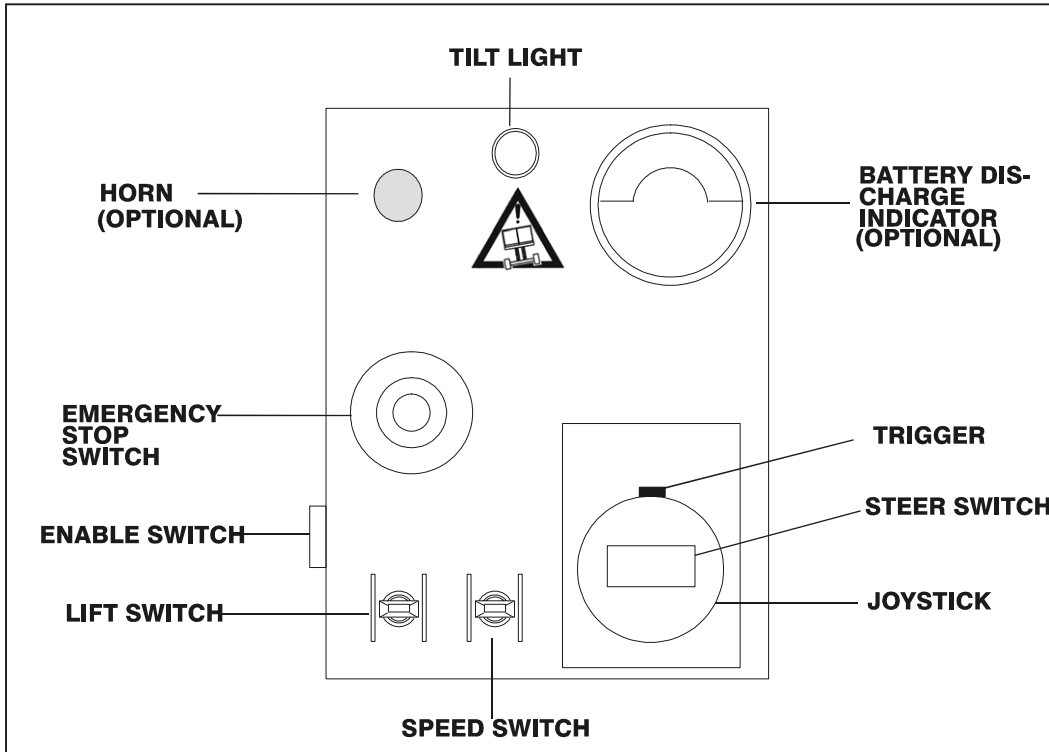


Figure 3-2. Platform Control Station

5. Steer Switch
The thumb-operated steer switch, located on top of the joystick controller, activates the steer wheels in the direction the switch is moved (left or right).

CAUTION

DO NOT USE HIGH DRIVE SPEED WHEN DRIVING IN CLOSE QUARTERS OR WHEN DRIVING IN REVERSE.

6. Drive Speed Select Switch
The speed select switch is a toggle switch which allows you to select high or low speed.

NOTE: The High Drive Speed switch will cut-out when the platform is raised above the stowed position, returning drive speed to low until the platform is lowered completely

CAUTION

DO NOT OPERATE MACHINE IF HIGH DRIVE SPEED OPERATES WHEN PLATFORM IS RAISED ABOVE THE STOWED POSITION.

NOTE: The machine is equipped with a Pothole Protection System which lowers automatically when the platform is raised. The Pothole Protection System will also lower when either of the doors are opened, but only on the side of the opened door and this will not provide tip over protection. If the Pothole Protection System does not fully lower, the DRIVE function is cut out until the platform is completely lowered.

1. Tilt Alarm Warning Horn
The Tilt Alarm Warning is activated by the Tilt Alarm Switch when the chassis is on a severe slope and lifted above stowed position.

1532E2/1932E2/2032E2 - 1.5°

2632E2/2646E2/3246E2 - 2°

All Japanese Models - 5°

WARNING

IF TILT ALARM IS ON WHEN PLATFORM IS RAISED, LOWER PLATFORM COMPLETELY, THEN REPOSITION MACHINE SO THAT IT IS LEVEL BEFORE RAISING PLATFORM.

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

8. Tilt Alarm Warning Light
A red warning light on the control box panel will illuminate when the chassis is on a severe slope.
1532E2/1932E2/2032E2 - 1.5°
2632E2/2646E2/3246E2 - 2°
All Japanese Models - 5°
9. Horn (If Equipped)
This push button switch, when activated, permits the operator to warn jobsite personnel when the machine is operating in the area.
10. Battery Discharge Indicator
The battery discharge indicator is a gauge that provides a visual indication of the condition of the batteries.

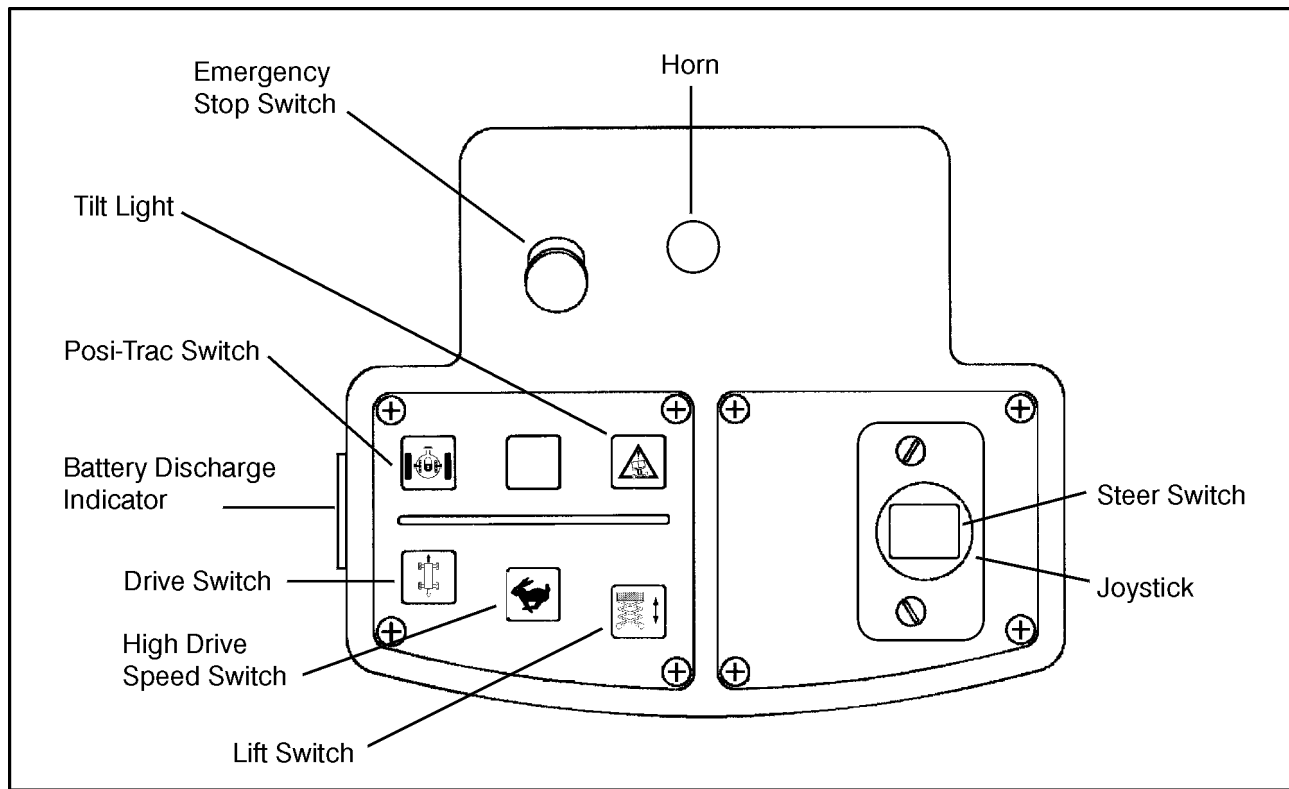


Figure 3-3. Platform Control Station - Proportional Control

3.5 CONTROLS AND INDICATORS FOR PROPORTIONAL CONTROL

The machine is equipped with control panels that use symbols instead of words to indicate control functions. Refer to Symbols figure for these symbols and their corresponding functions.

JLG SMART™ System

The machine is controlled by the JLG SMART™ System, a 24 volt, multiplex motor controller which works in conjunction with a joystick and several switches to operate all machine functions.

Special operating characteristics of the JLG SMART™ System are noted where applicable. Special attention should be paid to these operating characteristics, as they may be somewhat different from those on previous JLG machines.

IMPORTANT

IT IS A GOOD PRACTICE TO AVOID PRESSURE-WASHING ELECTRICAL/ELECTRONIC COMPONENTS. SHOULD PRESSURE-WASHING BE UTILIZED TO WASH AREAS CONTAINING ELECTRICAL/ELECTRONIC COMPONENTS, JLG INDUSTRIES, INC. RECOMMENDS A MAXIMUM PRESSURE OF 750 PSI (52 BAR) AT A

MINIMUM DISTANCE OF 12 INCHES (30.5 CM) AWAY FROM THESE COMPONENTS. IF ELECTRICAL/ELECTRONIC COMPONENTS ARE SPRAYED, SPRAYING MUST NOT BE DIRECT AND BE FOR BRIEF TIME PERIODS TO AVOID HEAVY SATURATION.

Ground Control Station

NOTE: Refer to the Ground Control Station for Non Proportional Control machines.

Platform Control Station

1. **Emergency Stop Switch**
A two-position, red, mushroom-shaped emergency stop switch functions to provide power to the platform control station and also to turn off power to the platform function controls in the event of an emergency. With the power selector switch positioned to platform, power is turned on by pulling the switch out (on), and is turned off by pushing the switch in (off). Turning the emergency stop switch off and then on again will reset the smart system if a system fault has occurred and the machine has shut down.

2. **Footswitch (Japanese Specification Only)**

For machines built to Japanese specifications, a footswitch is provided as part of the operating system. The footswitch must be depressed in conjunction with the red trigger switch on the joystick to operate any function
3. **Membrane Switch Panel**

The function switches at the platform control station are an integral part of a membrane switch panel, which contains switches for drive, high drive, lift, powered deck extension (if equipped), and posi-trac, plus a red tilt indicator light (if equipped). The drive, lift and powered deck extension function switches have a small green light indicator beside them which is illuminated when that function is active. The function switch light indicators will flash once or twice, then go out, when the platform emergency stop switch is turned on. If the light indicators fail to flash or if they fail to stop flashing, re-cycle the emergency stop switch. To activate the drive, lift, and powered deck functions, press the applicable function switch, then activate the joystick within three seconds to operate the function. If the joystick is not activated within three seconds, power is turned off to the function switch and the switch must be pressed again. The posi-trac and high drive functions are used in conjunction with the drive function. Do not try to operate the drive, lift, and powered deck extension functions simultaneously. If the drive, lift, and powered deck extension functions are selected simultaneously, no function will operate. If this occurs, pause, then press only one of the function switches to activate the function. Refer to the following paragraphs for more information about the function switches.
4. **Controller (Joystick)**

The joystick controls three functions: speed, direction, and powered deck extension (if equipped). The joystick is used in conjunction with the trigger switch and controls the drive, high drive, lift, and powered deck extension switches to control speed and direction for the selected function. The drive, high drive and posi-trac functions may be operated simultaneously, but the drive, lift, and powered deck extension functions must be operated independently of each other. If the drive, lift, and powered deck extension functions are selected simultaneously, no function will operate. If this occurs, pause, then press only one of the function switches to activate the function. To operate the joystick, squeeze the red trigger switch, then position the joystick to forward or reverse, as desired
5. **Steer Switch**

The thumb-operated steer switch, located on top of the joystick, works in conjunction with the trigger switch and activates the steer wheels in the direction the switch is moved (left or right).
6. **Drive Switch**

The drive switch, when used in conjunction with the joystick, provides for driving the machine in forward or reverse. Drive is activated by pressing the drive switch, in conjunction with the trigger switch, and moving the joystick forward (forward) or backward (reverse). Drive speed is determined by the distance the joystick is moved forward or backward. Increased drive speed is possible when the high drive speed switch is pressed either simultaneously with the drive switch or while operating the drive function. The drive switch is part of the enable circuit, which provides power to the joystick and the drive function for 3 seconds when the drive switch is pressed. If the joystick is not activated within 3 seconds, the drive switch must be pressed again before activating the joystick. When the joystick is returned to the center off position, the operator has 3 seconds to re-activate the joystick or select another function before power is removed by the enable circuit. In addition, the posi-trac switch can be engaged while operating the drive function to give a more evenly distributed oil flow to each drive motor. Do not try to operate the drive, lift, and powered deck extension functions simultaneously. If the drive, lift, and powered deck extension functions are selected simultaneously, no function will operate. If this occurs, pause, then press only one of the function switches to activate the function

NOTE: *The machine is equipped with a Pothole Protection System which lowers automatically when the platform is raised. If the Pothole Protection System does not fully lower, the DRIVE function is cut out until the platform is completely lowered.*

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

7. High Drive Speed Switch

The high drive speed switch, when used in conjunction with the joystick being operated in the drive mode, provides additional oil flow to the drive circuit for increased travel speed. To operate high drive, depress the high drive speed switch either simultaneously with the drive switch or while operating the drive function.

CAUTION

DO NOT USE HIGH DRIVE SPEED WHEN DRIVING IN CLOSE QUARTERS OR WHEN DRIVING IN REVERSE.

CAUTION

IF HIGH DRIVE IS SELECTED WHEN OIL TEMPERATURE IS VERY COLD BELOW 40° F (4°C.) HIGH DRIVE WILL NOT ENGAGE IMMEDIATELY. AS OIL WARMS ABOVE 40° F (4°C). IF HIGH DRIVE IS SELECTED, IT WILL ENGAGE AUTOMATICALLY WHILE DRIVING.

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

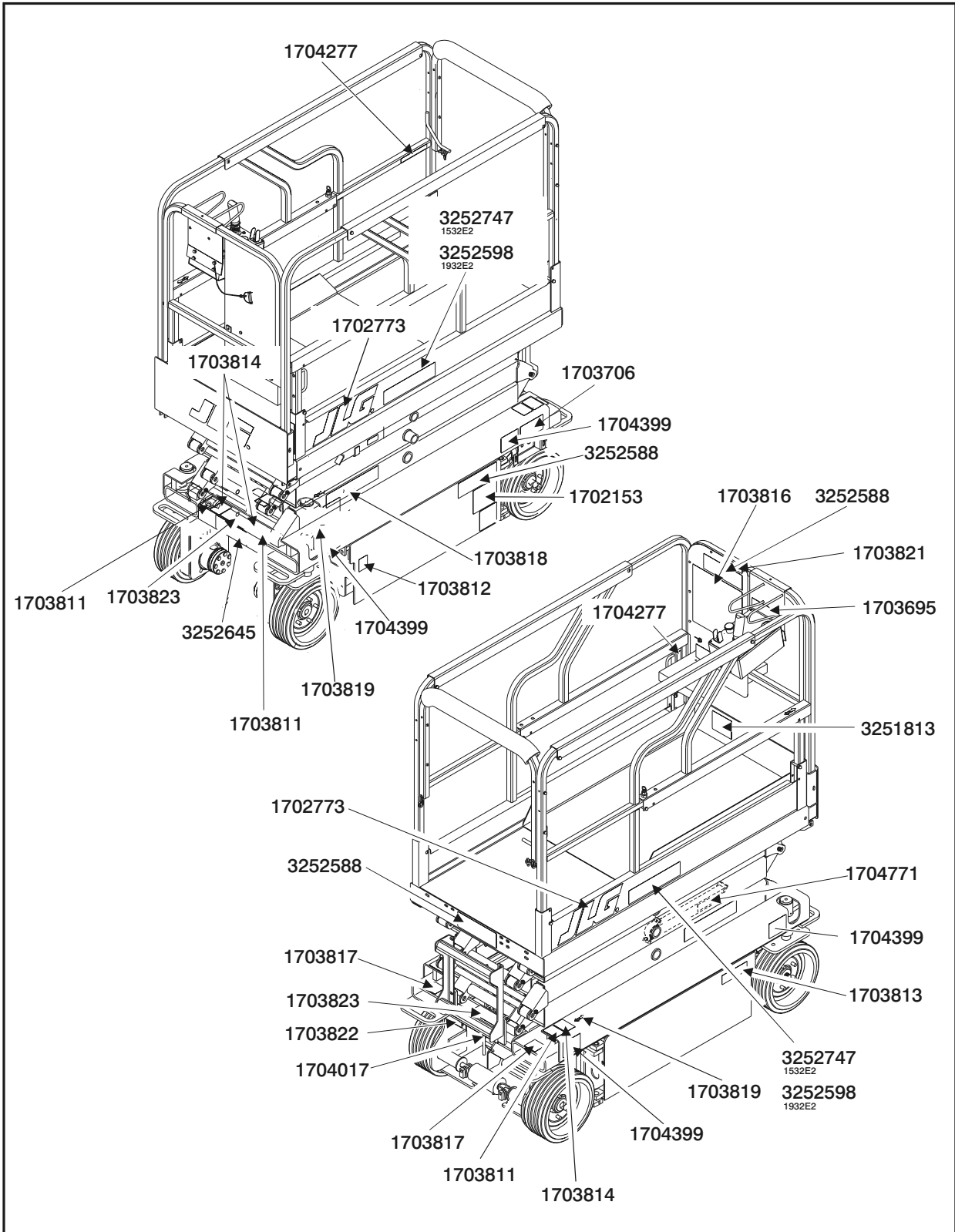


Figure 3-4. Decal Installation - English - 1532E2 & 1932E2

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

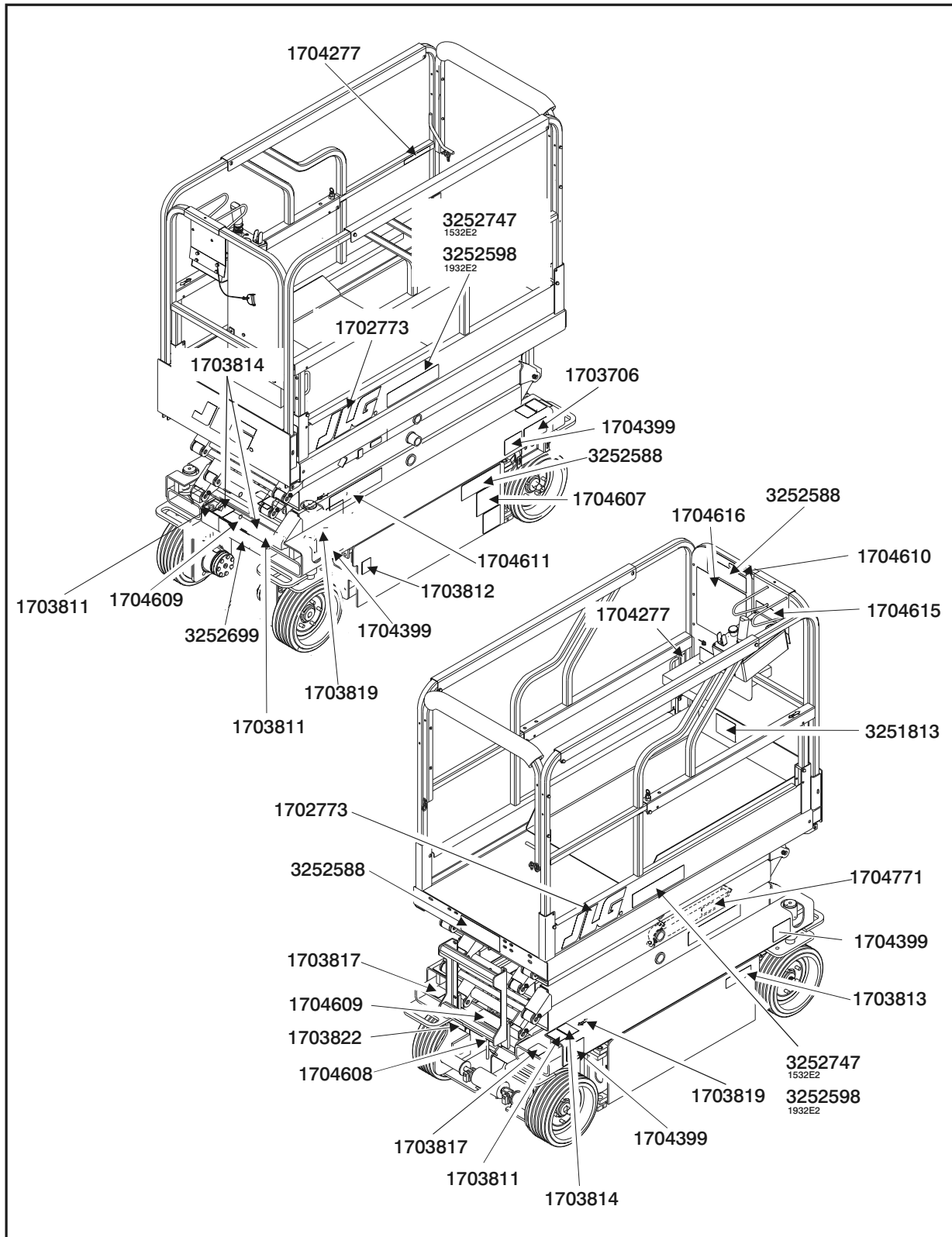


Figure 3-5. Decal Installation - Chinese- 1532E2 & 1932E2

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

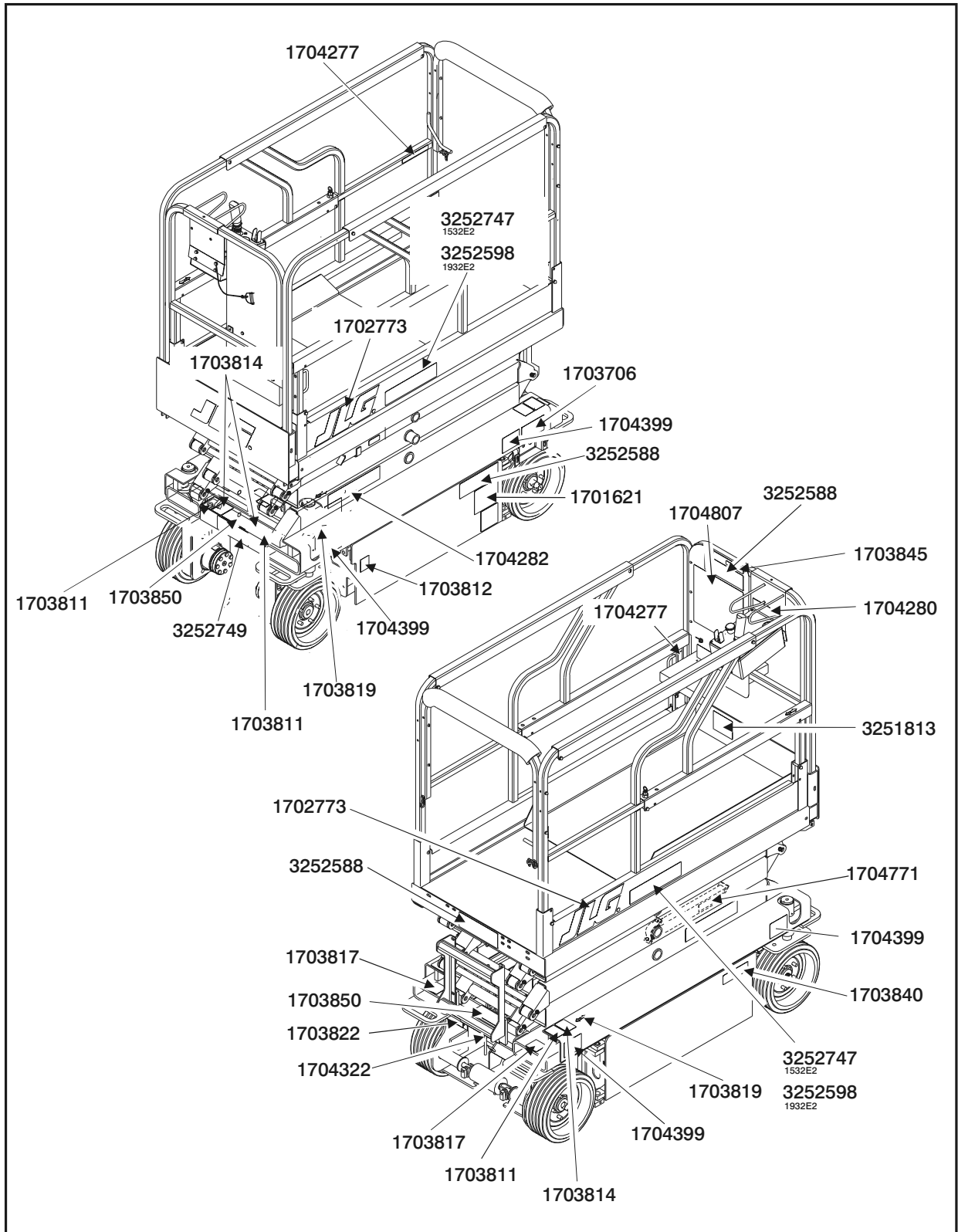


Figure 3-6. Decal Installation - Japanese - 1532E2 & 1932E2

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

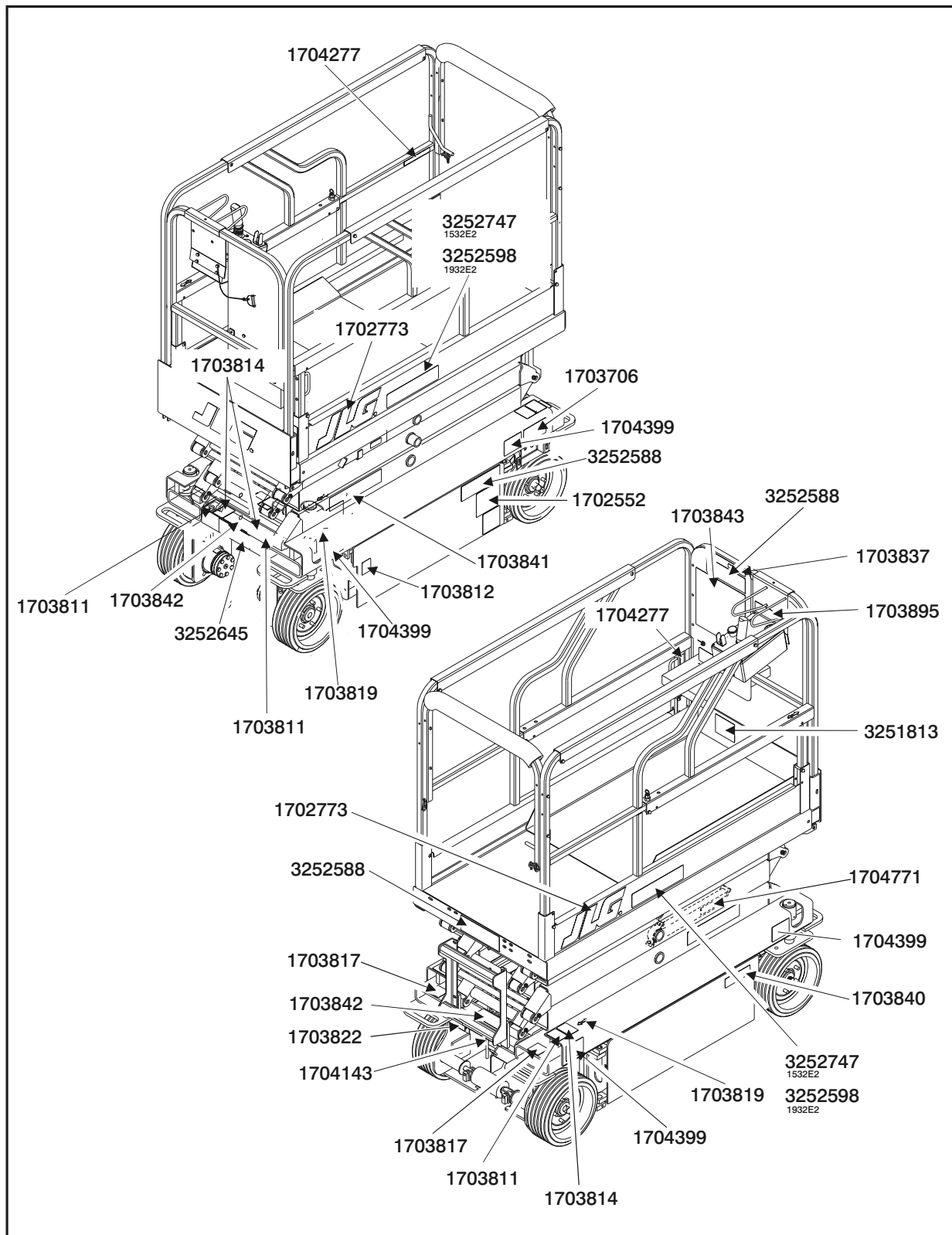


Figure 3-7. Decal Installation - Latin - 1532E2 & 1932E2

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

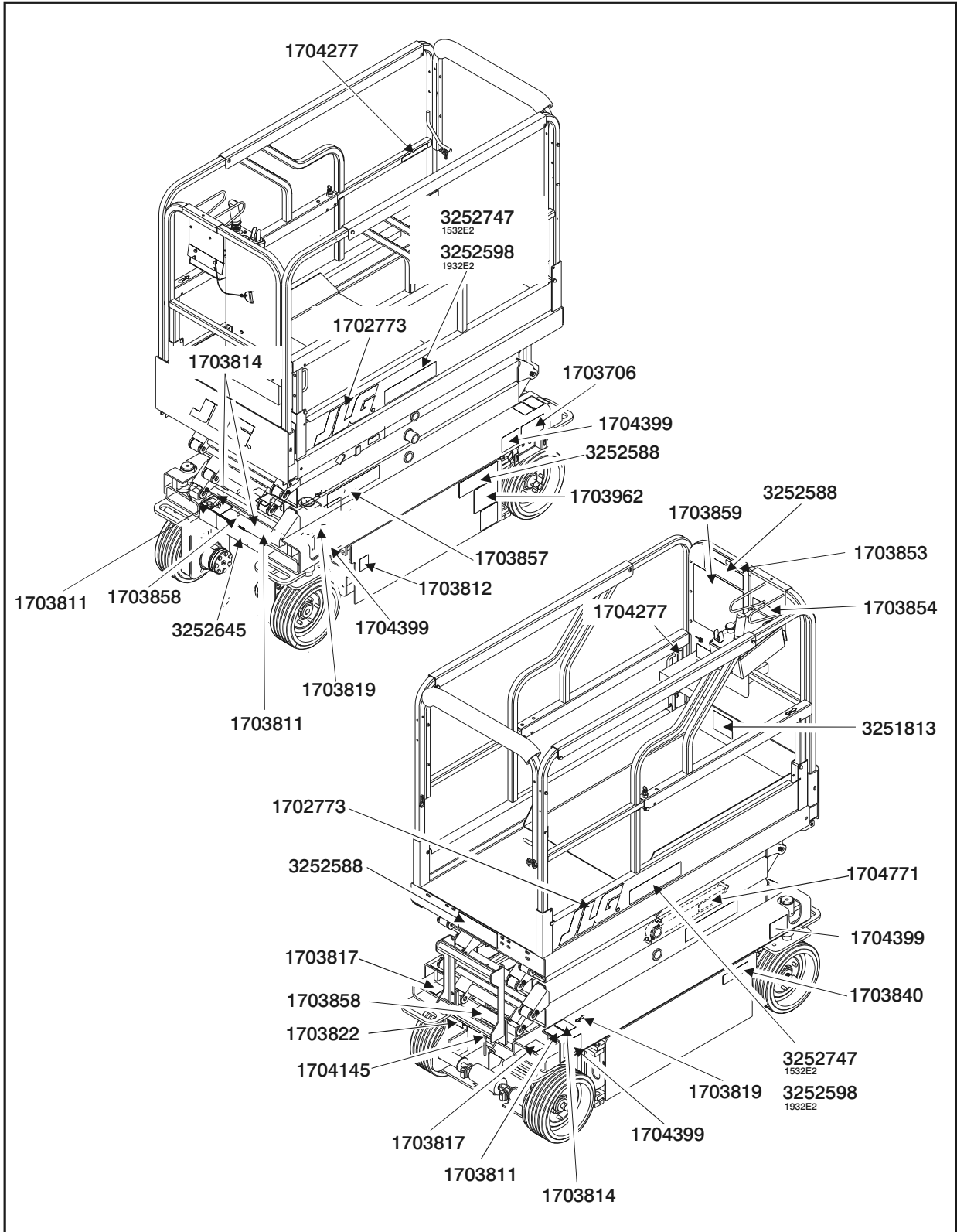


Figure 3-8. Decal Installation - Korean - 1532E2 & 1932E2

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

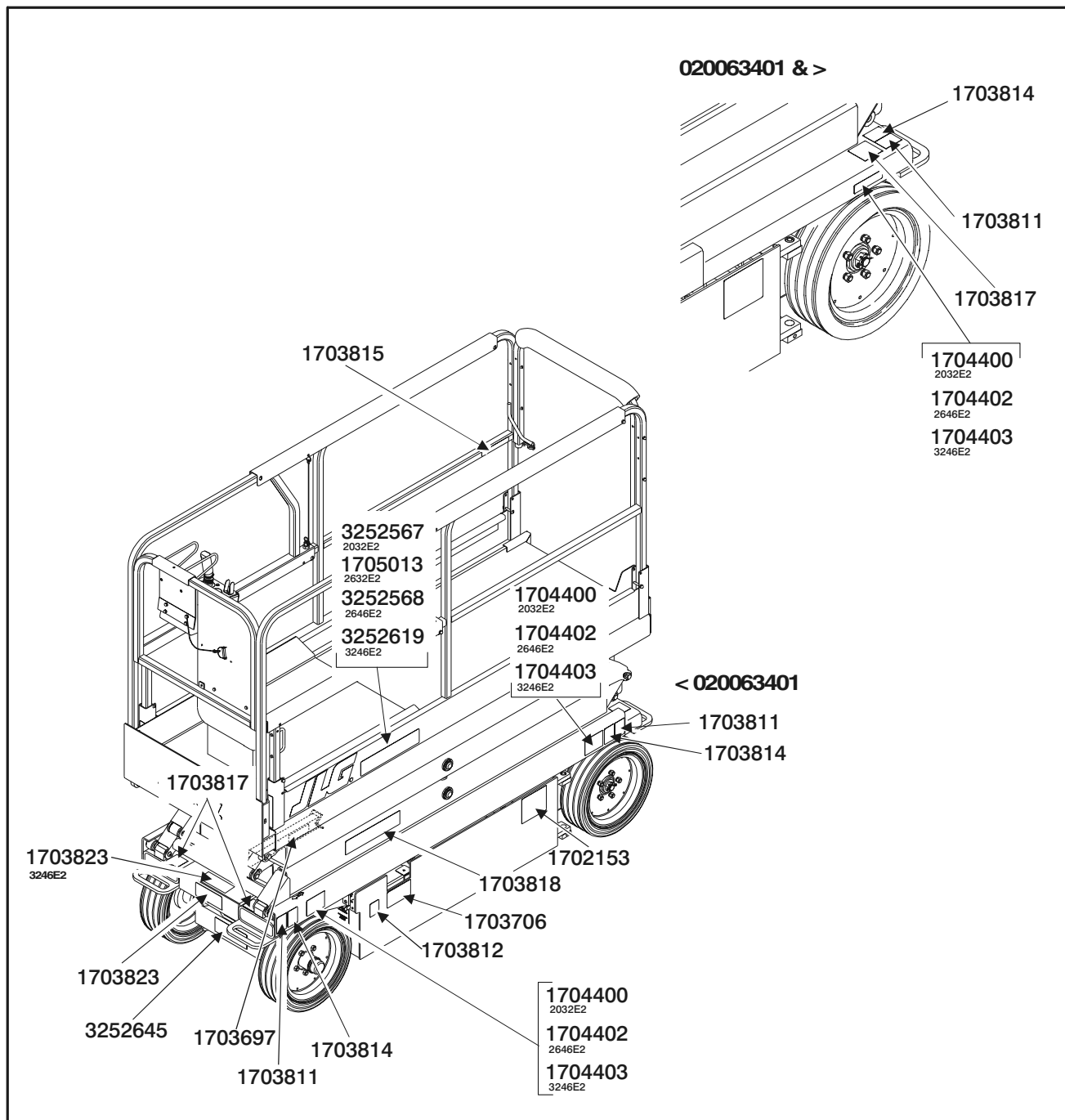


Figure 3-9. Decal Installation - English - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

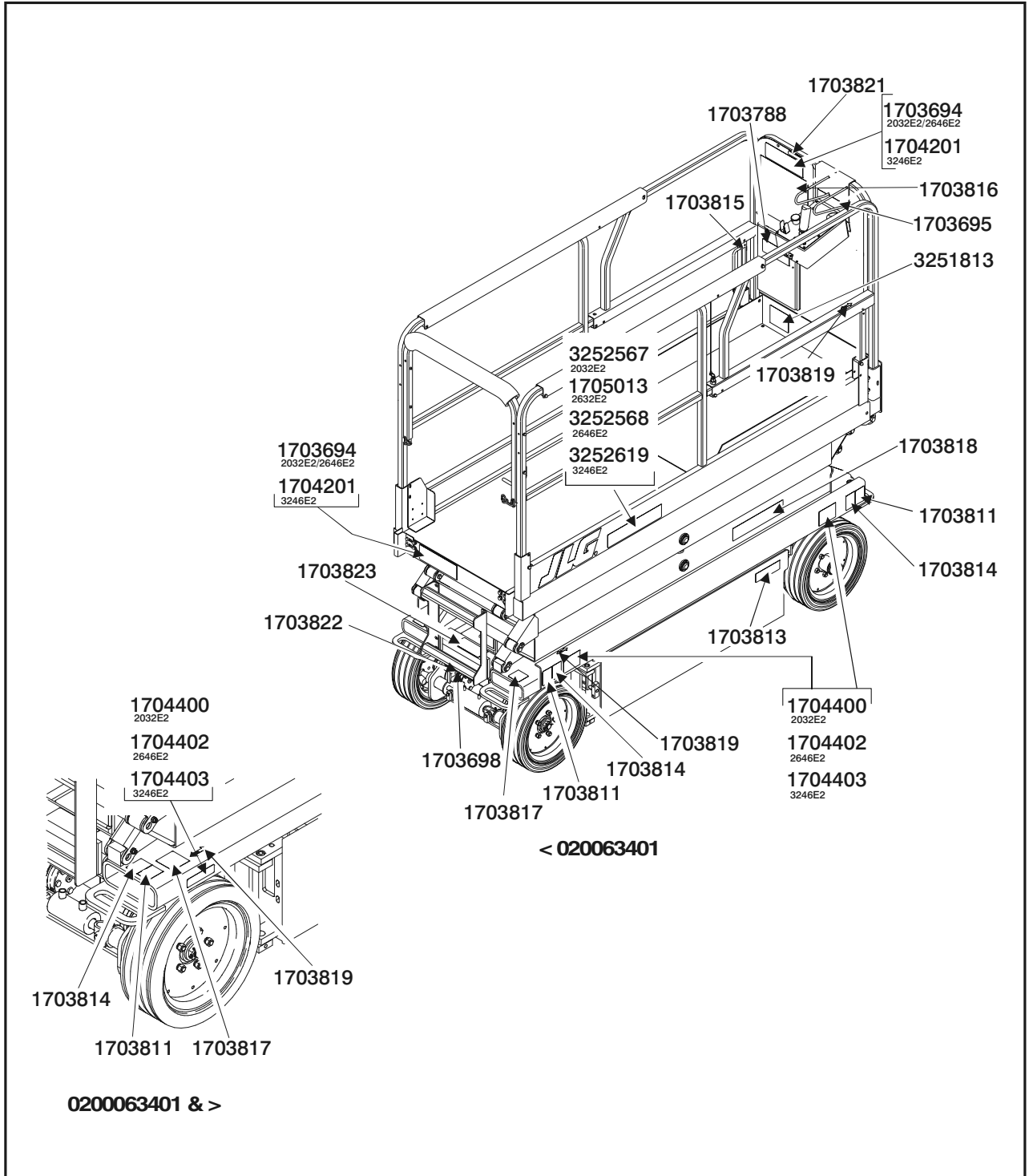


Figure 3-10. Decal Installation - English - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

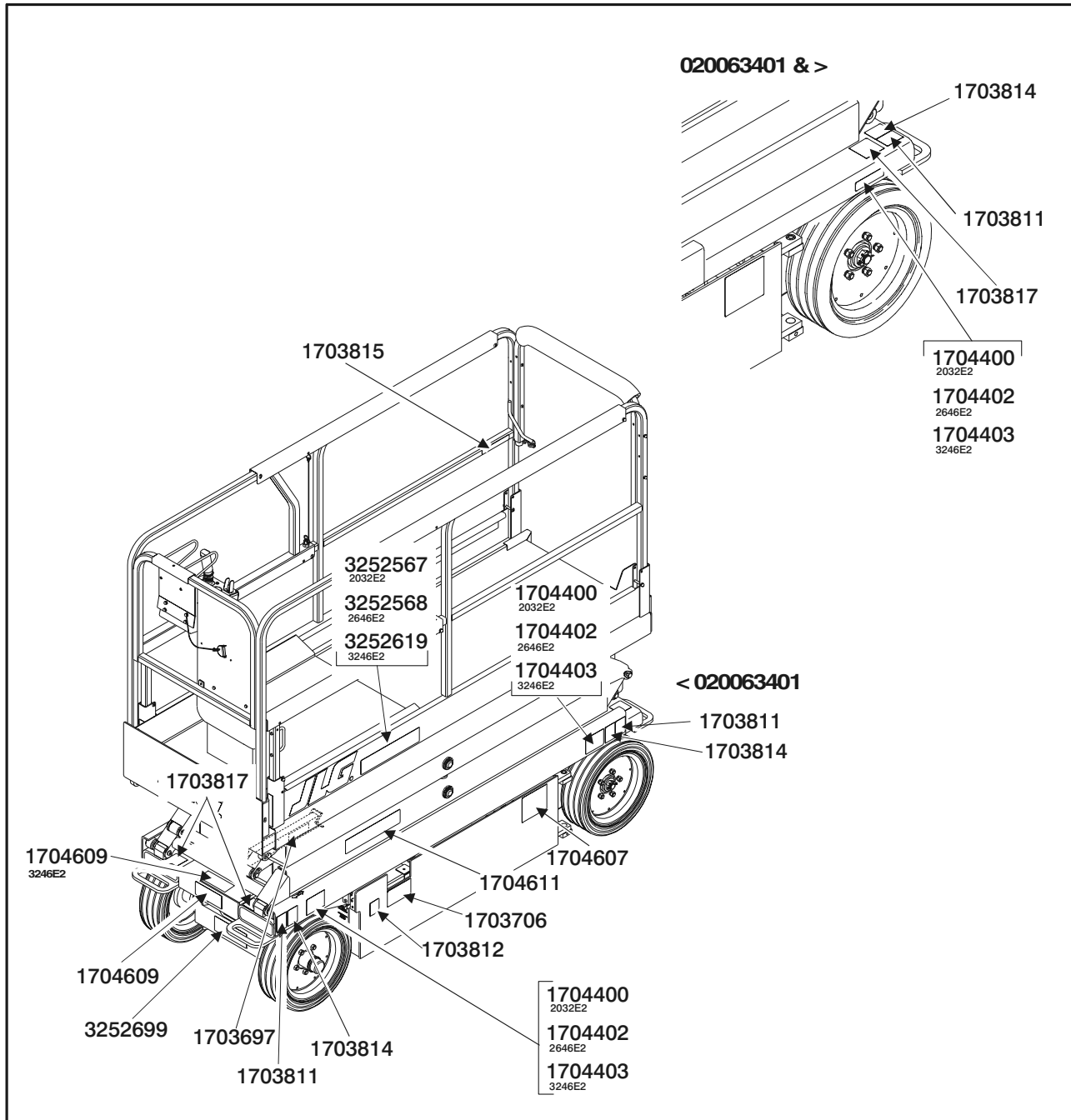


Figure 3-11. Decal Installation - Chinese - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

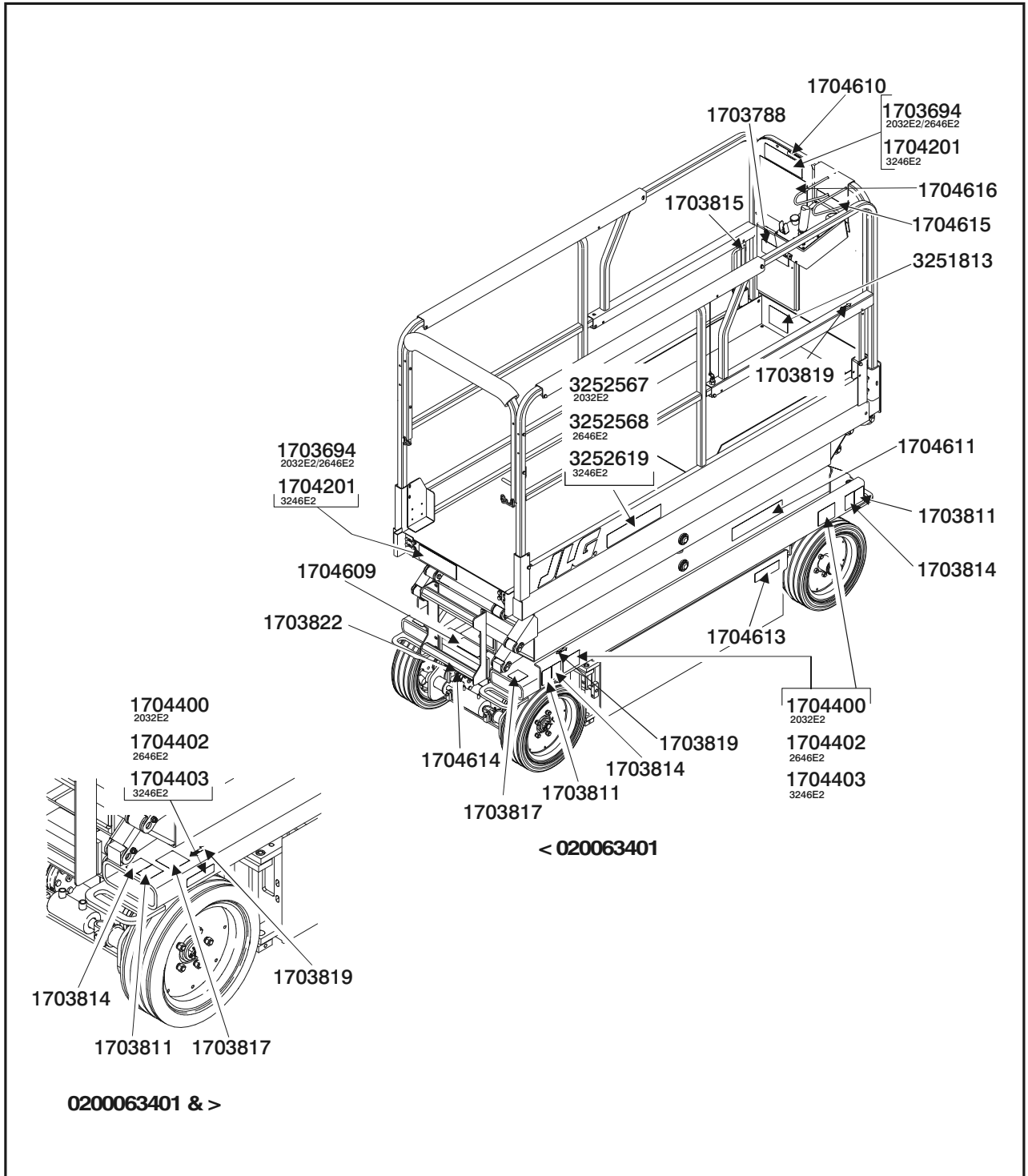


Figure 3-12. Decal Installation - Chinese - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

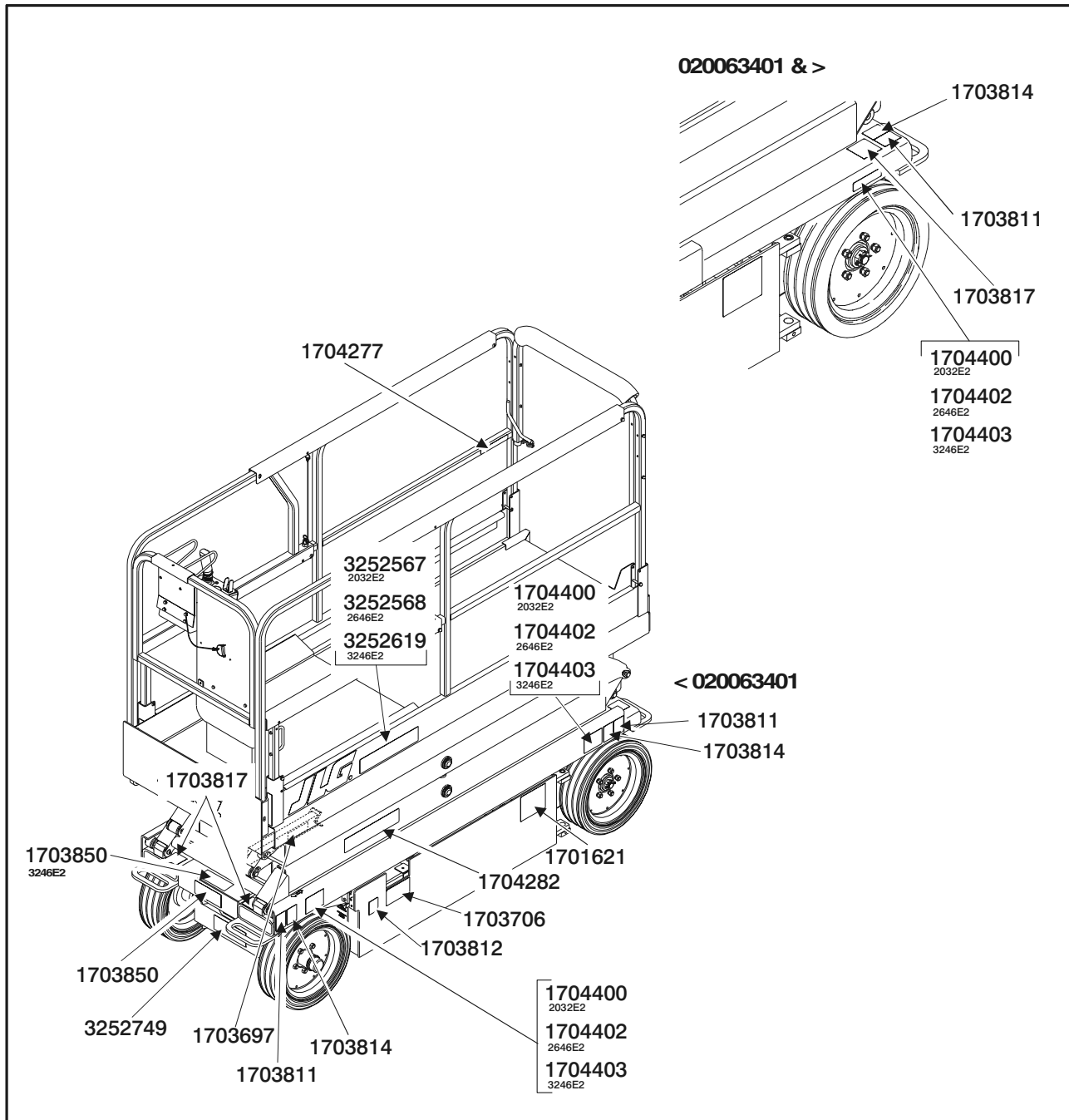


Figure 3-13. Decal Installation - Japanese - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

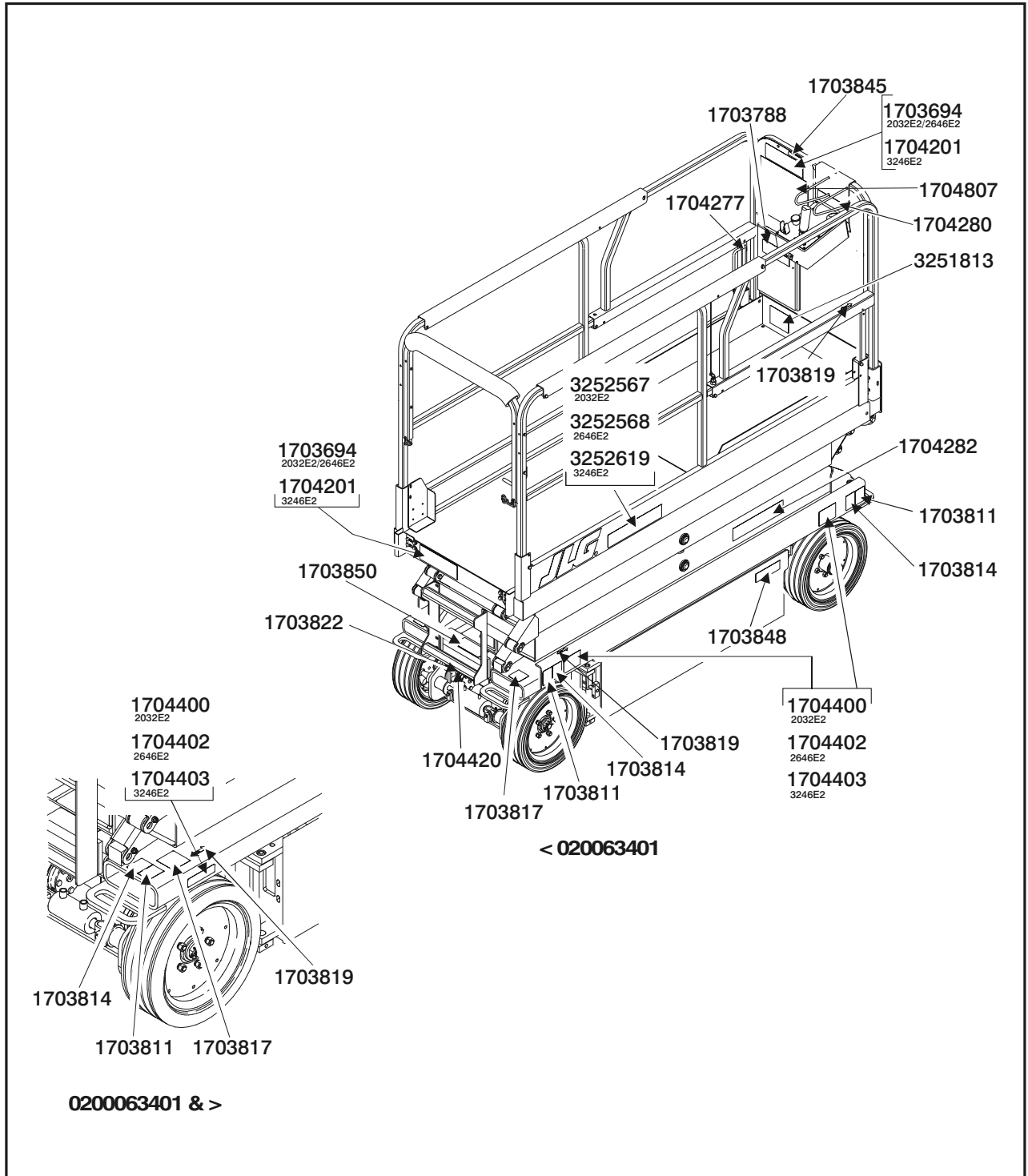


Figure 3-14. Decal Installation - Japanese - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

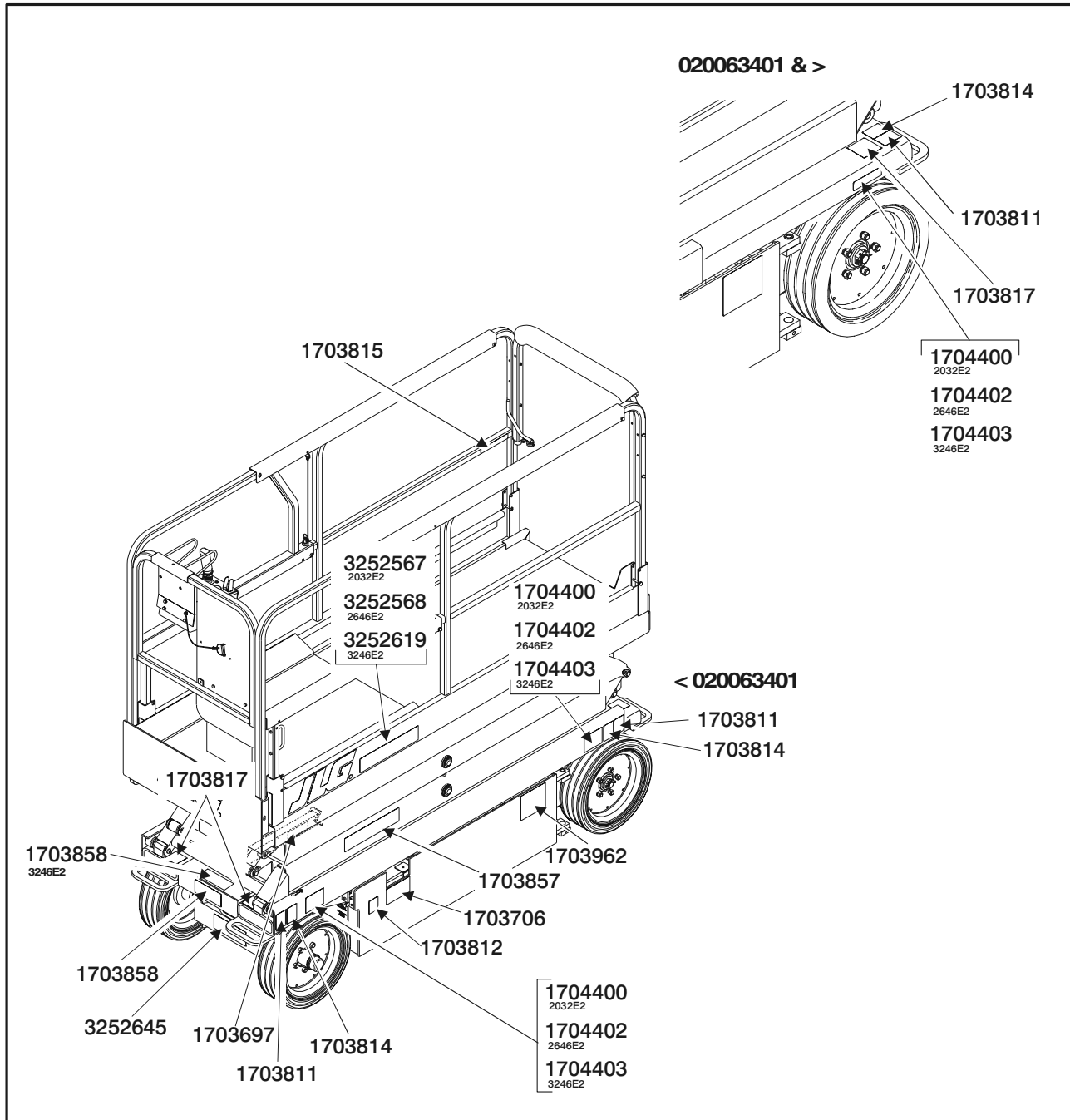


Figure 3-15. Decal Installation - Korean - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

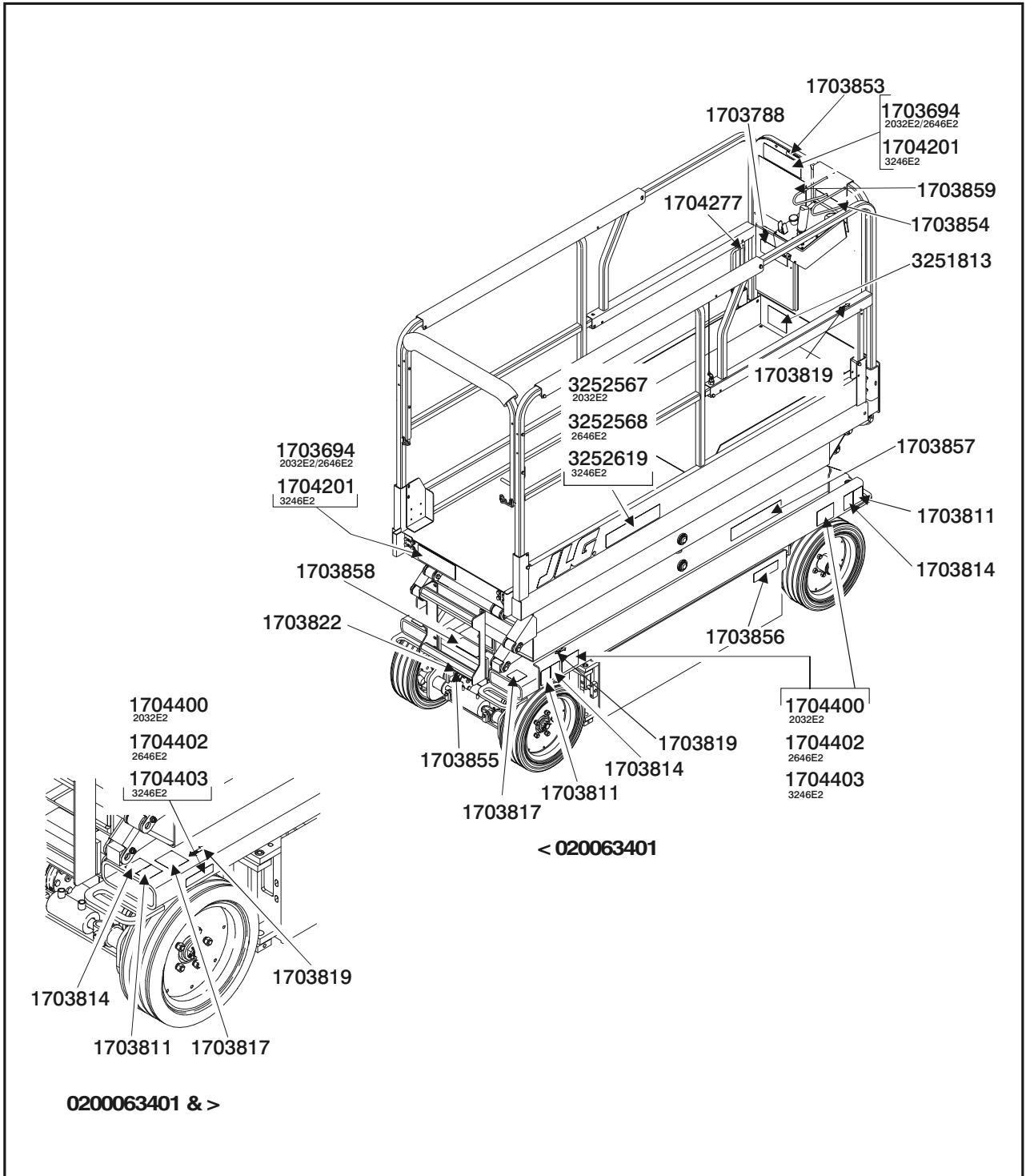


Figure 3-16. Decal Installation - Korean - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 2)

SECTION 3 - USER RESPONSIBILITIES AND MACHINE CONTROL

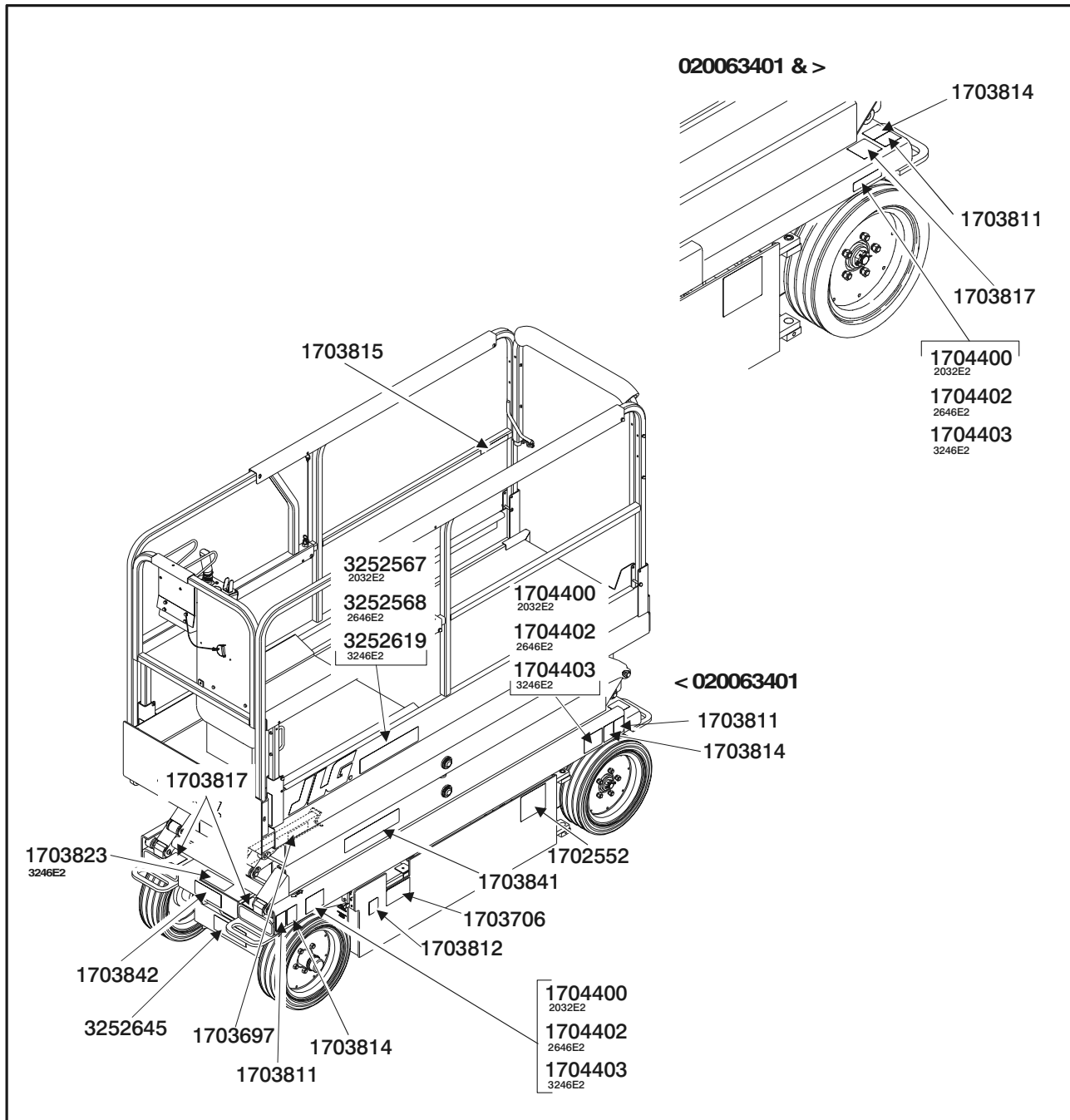


Figure 3-17. Decal Installation - Spanish - 2032E2/2632E2/2646E2/3246E2 (Sheet 1 of 2)

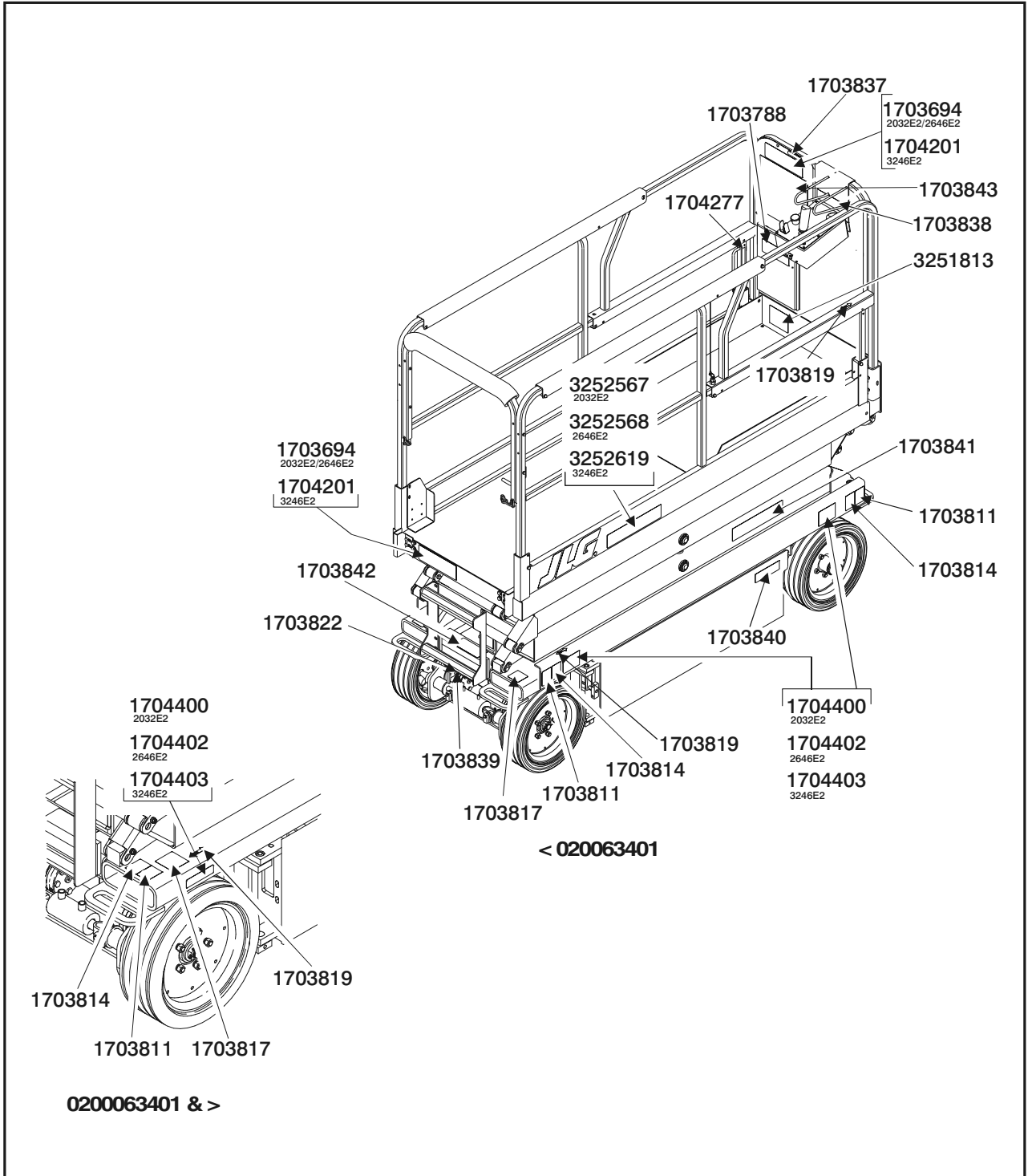


Figure 3-18. Decal Installation - Spanish - 2032E2/2632E2/2646E2/3246E2 (Sheet 2 of 2)

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SECTION 4. MACHINE OPERATION

4.1 DESCRIPTION

This machine is a self-propelled aerial work platform on top of an elevating “scissor” mechanism. The Scissor Lift’s intended purpose is to position personnel with their tools and supplies at positions above ground level. The machine can be used to reach work areas located above machinery or equipment positioned at ground level.

The JLG Scissor Lift has a primary operator Control Station in the platform. From this Control Station, the operator can drive and steer the machine in both forward and reverse directions, and raise and lower the platform. The machine has a Ground Control Station which will override the Platform Control Station. Ground Controls operate lift up and down. Ground Controls are to be used only for pre operational check and in an emergency to lower the platform to the ground or retract the platform extension should the operator in the platform be unable to do so.

Instructions and hazard warnings are posted adjacent to both operator control stations and at other places on the machine. It is extremely important that operators know what instructions and warnings are placed on the machine, and review these periodically so that they are fresh in their minds. Vibrations emitted by these machines are not hazardous to an operator in the work platform.

The JLG Scissor Lift is designed to provide efficient and safe operation when maintained and operated in accordance with warnings on the machine, the Operating and Safety Manual, the Service and Maintenance Manual and all jobsite and government rules and regulations. As with any type of machinery, the operator is very important to efficient and safe operation. Owner/User/Operator must be familiar with section 6,7,8 of ANSI A92.6-1999. It is absolutely necessary that the JLG Lift be regularly maintained in accordance with this manual and the machine Service and Maintenance Manual, and that any evidence of lack of maintenance, malfunction, excessive wear, damage or modification to the machine be reported immediately to the machine owner or the jobsite supervisor or safety manager and that the machine be taken out of service until all discrepancies are corrected.

The JLG Scissor Lift is not intended to be used to lift material other than supplies which personnel in the platform require to do their job. Supplies or tools which extend outside the platform are prohibited. It must not be used as a forklift, crane, support for overhead structure, or to push or pull another object.

The JLG Scissor Lift is powered using hydraulic motors and cylinders for the various machine motions. The hydraulic components are controlled by electrically activated hydraulic valves using switches and control levers. The drive speeds are controlled by a toggle switch from low to high speed. Functions controlled by toggle or push-button switches are either on or off.

The JLG Scissor Lift is a two wheel drive machine with drive power being supplied by a hydraulic motor for each drive wheel. The rear wheels are supplied with spring applied, hydraulically released brakes. These brakes are automatically applied any time the Drive controller (joystick) is returned to the neutral position.

The weight in the platform should be uniformly distributed in the platform. The total combined weight of personnel, tools and supplies must not exceed the figures in Figure 4-1, Operating Specifications.

NOTE: *The platform may be raised only when positioned on firm, level and uniform surfaces.*

SECTION 4 - MACHINE OPERATION

4.2 GENERAL

This section provides the necessary information needed to operate the machine. Included in this section are the procedures for starting, stopping, traveling, steering, park-

ing, platform loading and transporting the machine. It is important that the user read and understand the proper procedures before operating the machine.

Table 4-1. Operating Specifications

Model	1532E2	1932E2	2032E2	2632E2	2646E2	3246E2
Maximum Occupants	2	2	2	2	2	2
Maximum Workload (Capacity) Extension Only:	600 lb 250 lb	500 lb 250 lb	750 lb 250 lb	500 lb 250 lb	750 lb 250 lb	700 lb 250 lb
Maximum Travel Grade (Gradeability):	20%	20%	25%	25%	25%	25%
Maximum Platform Height:	15 ft	19 ft	20 ft	26 ft	26 ft	32 ft
Maximum Tire Load	Reference Decal on Machine					
Maximum Drive Speed	2.5 mph	2.5 mph	2.5 mph	2.0 mph	2.0 mph	2.0 mph
Gross Machine Weight	2925 lb	3000 lb	3910 lb	5325 lb	4325 lb	6100 lb

4.3 MOTOR OPERATION

Power Selector Switch

The power selector switch functions to direct battery power to the desired control station. With the switch in the ground position, battery power is supplied to the emergency stop switch at the ground control station. When the switch is in the platform position, battery power is supplied to the emergency stop switch at the platform control station. The power selector switch should be in the off position when recharging the batteries and/or parking the machine overnight.

Emergency Stop Switch

This switch, when in the on (out) position, provides battery power to the ground controls or platform controls, as applicable. In addition, the switch can be used to turn off power (push the switch in) to the function controls in the event of an emergency.

NOTE: If the machine is equipped with a footswitch (Japanese Specification Only), the footswitch must be depressed in conjunction with the red trigger switch, located on the joystick. Power is removed from the platform controls when the footswitch is released.

Motor Activation

With the power selector switch in the appropriate position (platform or ground) and the applicable emergency stop switch in the on position and a function switch or controller is operated and held, the motor becomes activated and operates the desired function. When operating from the ground controls, the power selector switch must be held in the ground position while the function is being operated. When operating the platform controls, the lift switch must be used in conjunction with the enable

switch, to drive the lever must be depressed in conjunction with the joystick travel.

IMPORTANT

IF A MOTOR MALFUNCTION NECESSITATES UNSCHEDULED SHUTDOWN, DETERMINE AND CORRECT CAUSE BEFORE RESUMING ANY OPERATION.

IMPORTANT

ALWAYS POSITION POWER SELECTOR AND EMERGENCY STOP SWITCHES TO THE 'OFF' POSITION WHEN MACHINE IS NOT IN USE.

4.4 RAISING AND LOWERING (LIFTING)

WARNING

DO NOT RAISE PLATFORM EXCEPT ON A HARD, LEVEL SURFACE FREE OF OBSTRUCTIONS AND HOLES.

NOTE: The lift switch will not operate if the red trigger switch on the joystick is depressed.

Raising

1. If the machine is shut down, place the power selector switch to the desired position (platform or ground).
2. Position the applicable emergency stop switch to the on position.

NOTE: If the machine is equipped with a footswitch (Japanese Specification Only), the footswitch must be depressed in conjunction with the red trigger switch, located on the joystick. Power is removed from the platform controls when the footswitch is released.

3. If operating from the ground controls, position the lift switch to up and hold until desired elevation is achieved. If operating from the platform controls, press and hold the enable switch, move the lift switch forward (up) and hold until desired elevation is reached. The lift switch works in conjunction with the enable switch.

Lowering

⚠ WARNING

ENSURE SCISSOR ARM AREA IS FREE OF PERSONNEL PRIOR TO LOWERING PLATFORM.

NOTE: The machine is equipped with a decent alarm which will sound as the machine is being lowered.

If operating from the ground controls, position the lift switch to down and hold until desired elevation is achieved or until platform is fully lowered. If operating from the platform controls, press the enable switch and push the lift switch backward (down) and hold until desired elevation is reached or until platform is fully lowered. The lift switch works in conjunction with the enable switch.

⚠ WARNING

DO NOT 'LIFT DOWN' WITHOUT COMPLETELY RETRACTING THE PLATFORM EXTENSION.

4.5 PLATFORM EXTENSION

Manual Platform Extension

The machine is equipped with a mechanically extendible deck, which adds 3 ft (0.9 m) to the front of the platform, giving the operator better access to worksites. To extend the deck, pull the plunger pin, attached to lanyards, located at the right side of the platform extension, extend platform extension and release the pin so that it locks in the front hole in the rail. Do not drive machine unless platform extension is properly pinned. To retract the deck, remove pin, pull platform extension back in and install pin back into rear hole. Do not drive machine unless platform extension is properly pinned. Maximum capacity of the deck extension is 250 lb (120 kg) - 1 person.

4.6 STEERING

To steer the machine, the thumb operated steer control switch on the joystick is positioned to the right for traveling right, or to the left for traveling left. When released, the switch will return to the center-off position and the wheels will remain in the previously selected position. To return the wheels to the straightened position, the switch must be activated in the opposite direction until the wheels are centered.

4.7 TRAVELING (DRIVING)

NOTE: High drive is cut out when the platform is raised above the following preset heights:

Table 4-2. High Drive Cutout

Model	In	m
1532E2	46 - 55	1.2 - 1.4
1932E2	48 - 60	1.2 - 1.5
2032E2	84	2.1
2646E2	102	2.6
2632E2	114	2.9
3246E2	60 - 65	1.5 - 1.7

⚠ WARNING

DO NOT DRIVE WITH PLATFORM RAISED EXCEPT ON A SMOOTH, FIRM AND LEVEL SURFACE FREE OF OBSTRUCTIONS AND HOLES.

TO AVOID LOSS OF TRAVEL CONTROL OR UPSET ON GRADES AND SIDESLOPES, ON 1532E2 AND 1932E2 DO NOT DRIVE MACHINE ON GRADES EXCEEDING 20%. ON 2032E2/2632E2/2646E2/3246E2 DO NOT DRIVE MACHINE ON GRADES EXCEEDING 25%.

⚠ WARNING

TRAVEL GRADES IN "LOW" DRIVE SPEED ONLY. USE EXTREME CAUTION WHEN DRIVING IN REVERSE AND AT ALL TIMES WHEN DRIVING WITH PLATFORM ELEVATED AND ESPECIALLY WHEN DRIVING WITH ANY PART OF MACHINE WITHIN 6 FEET (1.8 METERS) OF AN OBSTRUCTION.

TO GO BACK DOWN THE GRADE, IF TRAVELING FORWARD UP THE GRADE, BUMP THE CONTROL HANDLE FORWARD SLIGHTLY TO ENSURE THE BRAKES ARE RELEASED BEFORE DESCENDING THE GRADE

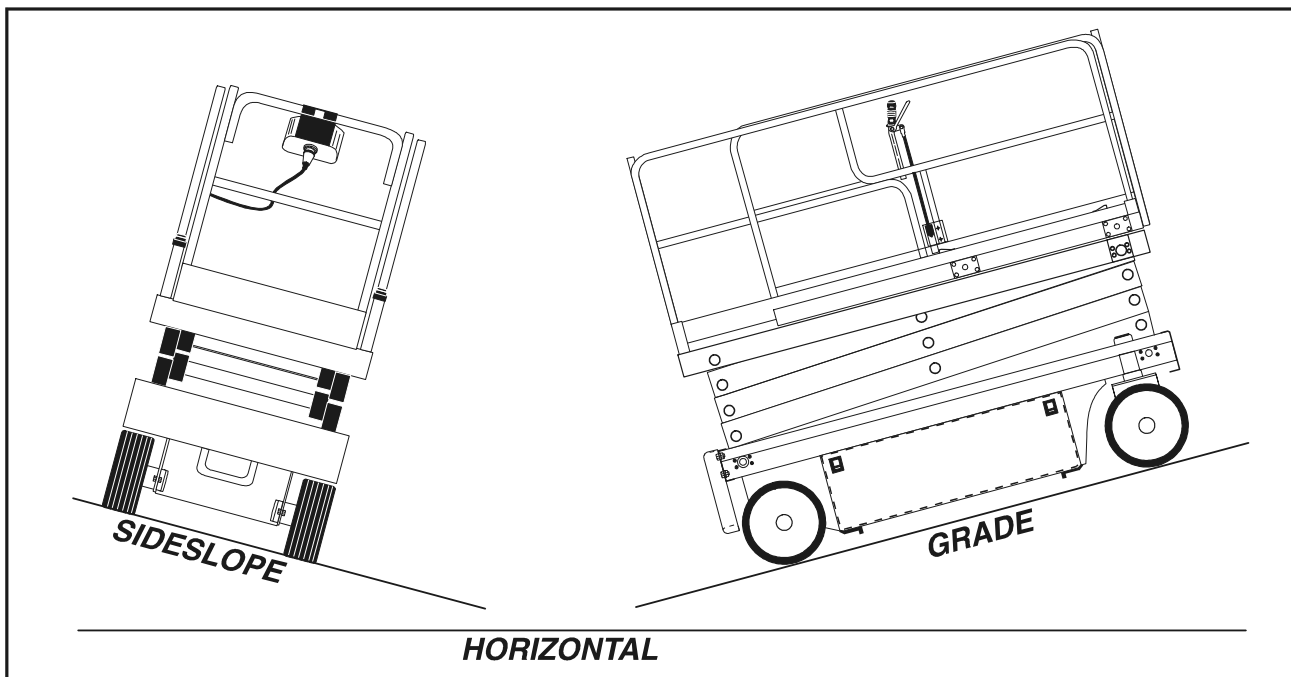


Figure 4-1. Grade and Sideslope

⚠ WARNING

MAKE SURE DECK EXTENSION IS LOCKED IN PLACE BEFORE DRIVING MACHINE.

NOTE: The machine is equipped with a Pothole Protection System which lowers automatically when the platform is raised or a door is opened. If the pothole protection does not fully lower, the drive function is cut out until the platform is completely lowered.

NOTE: When the machine is raised, and a door is opened, the machine will not drive.

Traveling Forward

1. Place power selector switch at ground control station to platform.
2. Position emergency stop switch at platform control station to on position.
3. Using the speed select switch, select low or high speed.
4. Squeeze controller (joystick), depressing red trigger on front of joystick, and move joystick forward for duration of travel. For additional drive speed, push the joystick completely forward, this will run the machine in high drive.

IMPORTANT

WHEN TRAVELING A GRADE, MAXIMUM TRACTION IS OBTAINED BY TRAVELING IN REVERSE ON 1532E2 AND 1932E2. REVERSE TRAVEL SHOULD BE USED WHEN LOADING ON A TRUCK OR WHEN ADEQUATE TRACTION IS NOT ACHIEVED BY TRAVELING FORWARD.

Traveling in Reverse

1. Position power selector switch at ground control station to platform.
2. Position emergency stop switch at platform control station to on position.
3. Squeeze joystick, depressing red trigger on front of joystick, and move joystick backward (reverse) for duration of travel. For additional drive speed pull joystick completely back, this will run the machine in high drive. When driving in reverse only use low speed.

⚠ WARNING

MAKE SURE DECK EXTENSION IS PINNED IN PLACE BEFORE DRIVING MACHINE.

4.8 PARKING AND STOWING

NOTE: *When parking battery-powered units overnight, batteries should be charged in accordance with instructions in Section 2 to ensure readiness for the following workday.*

Park and stow machine as follows:

1. Drive machine to a reasonably well-protected and well-ventilated area.
2. Ensure platform is fully lowered.
3. Position emergency stop switch to off position.
4. If necessary, cover the instruction placards, caution and warning decals so that they will be protected from hostile environment.
5. Chock at least two wheels when parking machine for an extended period of time.
6. Turn switch to off and remove key to disable machine from unauthorized use.

4.9 PLATFORM LOADING

The platform maximum rated load capacity is shown on a placard located on the platform and the manufactures nameplate located at the front of the machine and is based upon the following criteria.

1. Machine is positioned on a smooth, firm and level surface.
2. All braking devices are engaged.
3. Maximum platform capacity for each model in its standard configuration is as follows:

1532E2 - 600 lb (270 kg)

1932E2 - 500 lb (230 kg)

2032E2 - 750 lb (340 kg)

2632E2 - 500 lb (230 kg)

2646E2 - 750 lb (340 kg)

3246E2 - 700 lb (320 kg)

4. Maximum capacity of the manual platform extension is 250 lb. (120 kg) - 1 person.

NOTE: *The weight in the platform should be uniformly distributed in the platform. The total combined weight of personal, tools and supplies must not exceed the above figures.*

4.10 SAFETY PROP

⚠ WARNING

THE SAFETY PROP MUST BE USED WHENEVER MAINTENANCE PERFORMED ON THE MACHINE REQUIRES THE SCISSOR ARMS TO BE RAISED.

To engage the safety prop, raise the platform, then remove the prop from the prop bracket until it hangs vertically. Lower the platform until the safety prop rests on the point provided on the arm. Maintenance can now begin.

To store the safety prop, raise the platform so that the prop can be rotated counterclockwise until it rests on the bracket provided on the scissor arms.

4.11 TIE DOWN AND LIFTING

When transporting the machine, the platform extension must be fully retracted and the platform fully lowered in the stowed mode with the machine securely tied down to the truck or trailer deck. There are tie down eyes located at all four corners of the machine for shipping. Refer to Figure 4-2., Lift and Tie Down for specific tie down instructions.

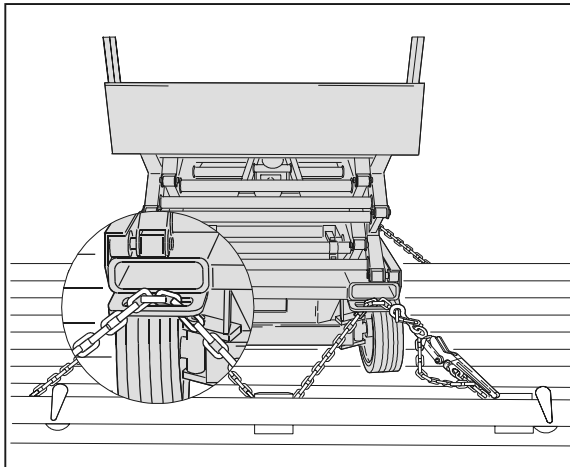


Figure 4-2. Lift and Tie Down
(Front and Rear Typical)

Lifting

If it becomes necessary to lift the machine, it is possible to lift the machine with a forklift. On 2032E2, 2632E2, 2646E2 and 3246E2 forklift pockets are provided at the front and rear of the machine. The 1532E2 and 1932E2 can only be lifted from the rear forklift pockets. It is very important that the forklift operator use only the designated lifting areas to lift the machine.

NOTE: Do not lift the machine from the sides.

Forklifts, cranes, or other lifting devices must be capable of handling the following weights: 1532E2 - 2,940 lb. (1,334 kg); 1932E2 - 2,970 lb. (1,337 kg); 2032E2- 3,890lb. (1,764 kg); 2632E2- 5,325 lb. (2,414 kg); 2646E2 - 4,280 lb. (1,941 kg); 3246E2 - 6180lb (2,803 kg).

TOWING

It is not recommended that this machine be towed, except in the event of an emergency such as a machine malfunction or a total machine power failure. Refer to Section 6 for emergency towing procedures.

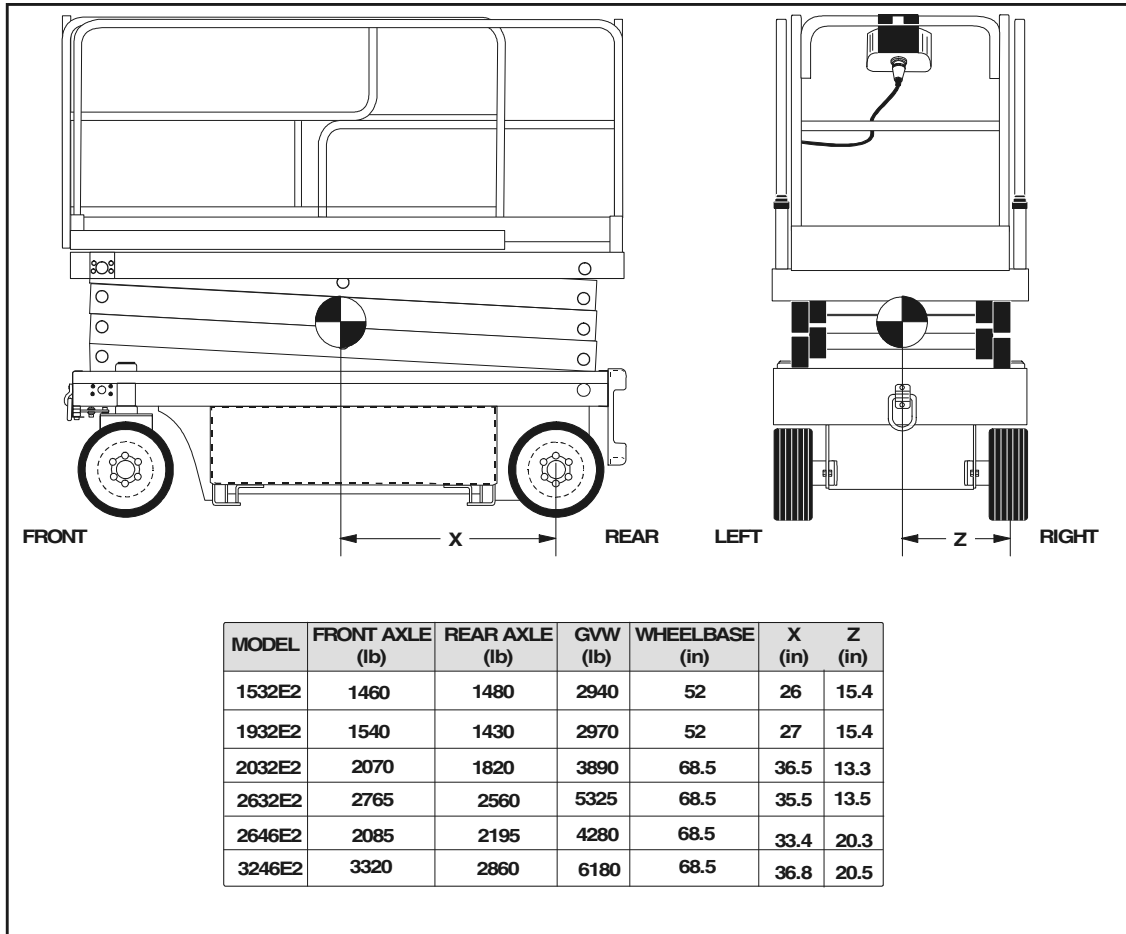


Figure 4-3. Lifting Chart

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SECTION 5. EMERGENCY PROCEDURES

5.1 GENERAL

This section provides information on the procedures to be followed and on the systems and controls to be used in the event an emergency situation is encountered during machine operation. Prior to operation of the machine and periodically thereafter, the entire operating manual, including this section, should be reviewed by all personnel whose responsibilities include any work or contact with the machine.

5.2 EMERGENCY TOWING PROCEDURES

Although towing the machine is prohibited, provisions for moving the machine, in case of a malfunction, power failure, or for loading on a truck, have been incorporated. The following procedures are to be used ONLY for emergency movement to a suitable maintenance area or to load the machine on a truck. These procedures are also found on a decal affixed to the frame at the rear of the machine.

1. Chock the wheels securely.
2. Turn the black knob on the main control valve counterclockwise all the way out to disengage the drive motors.
3. Using a 3/4 in wrench, release the parking brake by moving the brake cams to the horizontal position.
4. Using suitable equipment for assistance, remove the chocks, and move the machine to an appropriate maintenance area or onto the truck.

After moving the machine, complete the following procedures:

1. Position the machine on a firm, level surface.
2. Chock the wheels securely.
3. Using a 3/4 in wrench, engage the parking brake by moving the brake cams to the vertical position.
4. Turn the black knob on the main control valve clockwise all the way in to engage the drive motors.
5. Remove the chocks from the wheels.

5.3 EMERGENCY CONTROLS AND THEIR LOCATIONS

Emergency Stop Switch

These large red buttons, one located at the Ground Control Station and one at the Platform Control Station, will immediately stop the machine when depressed.

⚠ WARNING

CHECK MACHINE DAILY TO MAKE SURE EMERGENCY STOP BUTTON IS IN PLACE AND THAT GROUND CONTROL INSTRUCTIONS ARE IN PLACE AND LEGIBLE.

Power Selector Switch

The key-operated POWER SELECT switch, located at the Ground Control Station, can also be used to shut down the machine in an emergency situation. To shut off machine power, turn the POWER SELECT switch to the center OFF (O) position.

Ground Control Station

The Ground Control Station is located on the left side of the machine frame. The controls on this panel provide the means for overriding the platform controls and for controlling the platform lift up and down functions from the ground. Place the power select switch in the ground position and operate the lift switch to lift up or down.

Manual Descent

The manual descent valve is used, in the event of total power failure, to lower the platform using gravity. The manual descent handle is located at the rear of the machine behind the ladder on the 1932E2 and 2032E2. Pulling the manual descent handle opens the valve spool, lowering the platform.

The 2646E2/3246E2 may be equipped with either a manual descent lever or a manual descent pump, both located at the rear of the machine behind the ladder. If your 2646E2 or 3246E2 is equipped with a manual descent lever. Pushing the manual descent lever opens the valve spool, lowering the platform. If your 2646E2 or 3246E2 is equipped with a manual pump, operate as follows:

1. Turn knob (clockwise) on lowering valve until fully closed
2. Install handle, and pump until holding valve opens and desired descent speed is attained.
3. When platform is fully lowered, turn knob on lowering valve (counterclockwise) to reopen valve and return handle to stowed position.

5.4 EMERGENCY OPERATION

Use of Ground Controls

⚠ WARNING

KNOW HOW TO USE THE GROUND CONTROLS IN AN EMERGENCY SITUATION.

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

Operator Unable to Control Machine

⚠ WARNING

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

1. Operate the machine from ground controls **ONLY** with the assistance of other personnel and equipment (cranes, overhead hoists, etc.) as may be required to safely remove the danger or emergency condition.
2. Other qualified personnel on the platform may use the platform controls. **DO NOT CONTINUE OPERATION IF CONTROLS DO NOT FUNCTION NORMALLY.**
3. Cranes, forklift trucks or other equipment which may be available are to be used to remove platform occupants and stabilize motion of the machine in case machine controls are inadequate or malfunction when used.

Platform Caught Overhead

If the platform becomes jammed or snagged in overhead structures or equipment, do not continue operation of the machine from either the platform or the ground until the operator and all personnel are safely moved to a secure location. Only then should an attempt be made to free the platform using any necessary equipment and personnel. Do not operate controls to cause one or more wheels to leave the ground.

Righting of Tipped Machine

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

Post-Incident Inspection

Following any accident, thoroughly inspect the machine and test all functions first from the ground controls, then from the platform controls. Do not lift above 3 meters until you are certain that all damage has been repaired, if required, and that all controls are operating correctly.

5.5 INCIDENT NOTIFICATION

It is imperative that JLG Industries, Inc. be notified immediately of any incident involving a JLG product. Even if no injury or property damage is evident, the Product Safety and Reliability Department at the factory should be contacted by telephone and provided with all necessary details.

It should be noted that 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.



TRANSFER OF OWNERSHIP

To: JLG, Gradall, Lull and Sky Trak product owner:

If you now own, but ARE NOT the original purchaser of the product covered by this manual, we would like to know who you are. For the purpose of receiving safety-related bulletins, it is very important to keep JLG Industries, Inc. updated with the current ownership of all JLG products. JLG maintains owner information for each JLG product and uses this information in cases where owner notification is necessary.

Please use this form to provide JLG with updated information with regard to the current ownership of JLG Products. Please return completed form to the JLG Product Safety & Reliability Department via facsimile (717) 485-6573 or mail to address as specified on the back of this form.

Thank you,
Product Safety & Reliability Department
JLG Industries, Inc.
1 JLG Drive
McConnellsburg, PA 17233-9533
Telephone: (717) 485-5161
Fax: (717) 485-6573

NOTE: Leased or rented units should not be included on this form.

Mfg. Model: _____

Serial Number: _____

Previous Owner: _____

Address: _____

City: _____ State: _____

Zip: _____ Telephone: (_____) _____

Date Of Transfer: _____

Current Owner: _____

Address: _____

City: _____ State: _____

Zip: _____ Telephone: (_____) _____

Who in your organization should we notify?

Name: _____

Title: _____

Please cut on the dotted line and fax to 717-485-6573





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