

OPERATOR'S MANUAL

MOBILE ELEVATING WORK PLATFORM S1932E EDRV, S2632E EDRV, S2646E EDRV, S3246E EDRV, S4046E EDRV, S4550E EDRV

EN - 9841/9167 ISSUE 5 - 07/2024

THIS MANUAL SHOULD ALWAYS STAY WITH THE MACHINE



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This manual contains original instructions, verified by the manufacturer (or their authorized representative).

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Foreword

The Operator's Manual

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You and others can be killed or seriously injured if you operate or maintain the machine without first studying the Operator's Manual. You must understand and follow the instructions in the Operator's Manual. If you do not understand anything, ask your employer or JCB dealer to explain it.

Do not operate the machine without an Operator's Manual, or if there is anything on the machine you do not understand.

Treat the Operator's Manual as part of the machine. Keep it clean and in good condition. Replace the Operator's Manual immediately if it is lost, damaged or becomes unreadable.

California Proposition 65

▲ WARNING Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Machine Delivery and Installation

Even if you have operated this type of equipment before, it is very important that your new machines operations and functions are explained to you by a JCB Dealer Representative following delivery of your new machine.

Following the installation you will know how to gain maximum productivity and performance from your new product.

Please contact your local JCB dealer if the Installation Form (included in this manual) has not yet been completed with you.

Your local JCB Dealer is							





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Acronyms Glossary

AC Alternating Current
DC Direct Current

ECU Electronic Control Unit
LCD Liquid Crystal Display
LED Light Emitting Diode

PIN Product Identification Number
PPE Personal Protective Equipment

RCD Residual Current Device



Notes:		



Introduction About this Manual

Model and Serial Number

This manual provides information for the following model(s) in the JCB machine range:

Table 1.

Model	VIN Prefix. Refer to: Machine (Page 9).
S1932 EDRV	RAJA0151, RAJA0B51
S2632 EDRV	RAJA0452, RAJA0E52
S2646 EDRV	RAJA0552, RAJA0F52
S3246 EDRV	RAJA0653, RAJA0G53
S4046 EDRV	RAJA0753, RAJA0H53
S4550 EDRV	RAJA0854, RAJA0J54

Using the Manual

The Quick Start Guide or Quick Reference Guide (if supplied) with the machine does not replace the Operator's Manual. You must read all the disclaimers and safety instructions in the Operator's Manual before initially operating the machine.

This Operator's Manual is arranged to give you a good understanding of the machine and its safe operation. It also contains maintenance and technical data.

Read this manual from the front to the back before you use the machine for the first time, even if you have used machines of a similar/same type before as the technical specification, systems and controls of the machine may have changed. Particular attention must be given to all the safety aspects of operating and maintaining the machine.

If there is anything you are not sure about, ask your JCB dealer or employer. Do not guess, you or others could be killed or seriously injured.

The general and specific warnings in this section are repeated throughout the manual. Read all the safety statements regularly, so you do not forget them. Remember that the best operators are the safest operators.

The illustrations in this manual are for guidance only. Where the machines are different, the text and / or the illustration will specify.

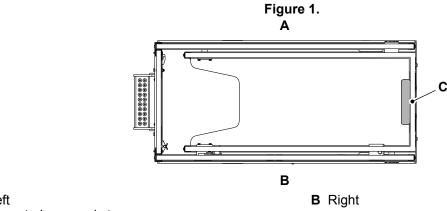
The manufacturer's policy is one of continuous improvement. The right to change the specification of the machine without notice is reserved. No responsibility will be accepted for discrepancies which may occur between specifications of the machine and the descriptions contained in this manual.

All the optional equipment included in this manual may not be available in all territories.

Left-Hand Side, Right-Hand Side

In this manual, 'left' and 'right' mean your left and right when you are stood in the platform facing the operator's manual storage case.





A Left C Operator's manual storage case

Cross References

In this manual, cross references are made by presenting the subject title in blue (electronic copy only). The number of the page upon which the subject begins is indicated within the brackets. For example: Refer to: Cross References (Page 2).

Location of Manual

The operator's manual is located in a storage case at one end of the platform. The manual should always be returned to its case after use.

Refer to: Main Component Locations (Page 7).

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Safety

Safety - Yours and Others

All machinery can be hazardous. When a machine is correctly operated and maintained, it is a safe machine to work with. When it is carelessly operated or poorly maintained it can become a danger to you (the operator) and others.

In this manual and on the machine you will find warning messages, you must read and understand them. They inform you of potential hazards and how to avoid them. If you do not fully understand the warning messages, ask your employer or JCB dealer to explain them.

Safety is not just a matter of responding to the warnings. All the time you are working on or with the machine you must be thinking of what hazards there might be and how to avoid them.

Do not work with the machine until you are sure that you can control it.

Do not start any work until you are sure that you and those around you will be safe.

If you are not sure of anything, about the machine or the work, ask someone who knows. Do not assume anything.

Remember:

- · Be careful.
- Be alert.
- Be safe.

Safety Warnings

In this manual there are safety notices. Each notice starts with a signal word. The signal word meanings are given below.

The signal word 'DANGER' indicates a hazardous situation which, if not avoided, will result in death or serious injury.

The signal word 'WARNING' indicates a hazardous situation which, if not avoided, could result in death or serious injury.

The signal word 'CAUTION' indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

The signal word 'Notice' indicates a hazardous situation which, if not avoided, could result in machine damage.

The safety alert system symbol (shown) also helps to identify important safety messages in this manual. When you see this symbol your safety is involved, carefully read the message that follows.

Figure 2. The safety alert system symbol



General Safety

Training

To operate the machine safely you must have received the appropriate training. The operator's manual instructs you on the machine, its controls and its safe operation; it is not a training manual. Ensure that you receive the correct training before operating the machine. Failure to do so will result in incorrect operation of the machine and you will be putting yourself and others at risk. You must abide by all local site regulations. Make sure that you and your machine comply with relevant local laws and jobsite requirements – it is your responsibility.



Care and Alertness

All the time you are working with or on the machine, take care and stay alert.

Clothing

You can be injured if you do not wear the correct clothing. Loose clothing can get caught in the machinery. Keep cuffs fastened. Do not wear a necktie or scarf. Keep long hair restrained. Remove rings, watches and personal jewelry.

Alcohol and Drugs

It is extremely dangerous to operate machinery when under the influence of alcohol or drugs. Do not consume alcoholic drinks or take drugs before or while operating the machine or attachments. Be aware of medicines which can cause drowsiness.

Feeling Unwell

Do not attempt to operate the machine if you are feeling unwell. By doing so you could be a danger to yourself and those you work with.

Cell Phones

Switch off your cell phone before entering an area with a potentially explosive atmosphere. Sparks in such an area could cause an explosion or fire resulting in death or serious injury.

Lifting Equipment

You can be injured if you use incorrect or faulty lifting equipment. You must identify the weight of the item to be lifted then choose lifting equipment that is strong enough and suitable for the job. Make sure that lifting equipment is in good condition and complies with all local regulations.

Raised Machine

Never position yourself or any part of your body inside the raised scissor pack which is not correctly supported. If the machine moves unexpectedly you could become trapped and suffer serious injury or be killed.

Lightning

Lightning can kill you. Do not use the machine if there is lightning in your area.

Machine Modifications

This machine is manufactured in compliance with prevailing legislative requirements. It must not be altered in any way which could affect or invalidate its compliance. For advice consult your JCB dealer.

Clothing and Personal Protective Equipment (PPE)

Do not wear loose clothing or jewelry that can get caught on controls or moving parts. Wear protective clothing and personal safety equipment issued or called for by the job conditions, local regulations or as specified by your employer.



About the Product Introduction

General

Before you start using the machine, you must know how the machine operates. Use this part of the manual to identify each control lever, switch, gage, button and pedal. Do not guess. If there is anything you do not understand, ask your JCB dealer.

Name and Address of the Manufacturer

JCB Access Limited, Lakeside Works, Rocester, Uttoxeter, United Kingdom, ST14 5JP

Product Compliance

Your JCB product was designed to comply with the laws and regulations applicable at the time of its manufacture for the market in which it was first sold. In many markets, laws and regulations exist that require the owner to maintain the product at a level of compliance relevant to the product when first produced. Even in the absence of defined requirements for the product owner, JCB recommend that the product compliance be maintained to ensure safety of the operator and exposed persons and to ensure the correct environmental performance. Your product must not be altered in any way which could affect or invalidate any of these requirements. For advice consult your JCB dealer.

For its compliance as a new product, your JCB and some of its components may bear approval numbers and markings, and may have been supplied with a Declaration/Certificate of Conformity. These markings and documents are relevant only for the country/region in which the product was first sold to the extent that the laws and regulations required them.

Re-sales and import/export of products across territories with different laws and regulations can cause new requirements to become relevant for which the product was not originally designed or specified. In some cases, pre owned products irrespective of their age are considered new for the purposes of compliance and may be required to meet the latest requirements which could present an insurmountable barrier to their sale/use.

Despite the presence of any compliance related markings on the product and components, you should not assume that compliance in a new market will be possible. In many cases it is the person responsible for import of a pre-owned product into a market that becomes responsible for compliance and who is also considered the manufacturer.

JCB may be unable to support any product compliance related enquiry for a product which has been moved out of the legislative country/region where it was first sold, and in particular where a product specification change or additional certification would have been required in order for the product to be in compliance.



Description

General

This machine is a self propelled aerial work platform on the top of an elevating scissor arm mechanism.

Intended Use

The machine is intended to lift personnel with their tools, and position them at a level of working height safely. The machine can be used to reach areas located above machinery or equipment positioned at ground level by use of the extending structure and platform.

The machine is intended to be used for the applications and in the environmental conditions as described in this manual. Use in any other way not described in the manual is considered contrary to intended use of this machine.

The machine is not intended for use in mining and quarrying applications, in demolition activities, forestry, any use underground, or in any kind of explosive atmosphere. This is not an exhaustive list. For any activity not described here, it is recommended that a risk assessment must be done prior to operation.

If the machine is to be used in applications where there is a high silica concentration, risk due to materials containing asbestos or similar hazards, additional protective measures such as the use of PPE (Personal Protective Equipment) may be required.

The machine should not be operated by any person who does not have an appropriate level of qualification, training or experience of use of this type of machine.

Prior to use of the machine, its suitability (size, performance, specification etc.) should be considered with regards to the intended application and any relevant hazards that may exist. Contact your JCB dealer for support in determining the appropriate JCB machine, attachment and any optional equipment that is suitable for the application and environment.

The machine is not intended to be used as a towing machine. Do not attach trailers or other towing devices to the machine.

Log Moving/Object Handling

Do not use the machine to move or handle logs or other objects. You could cause serious injury to yourself and damage to the machine. Do not use the machine as a crane. Do not overload the platform with tools or equipment.

Refer to: Technical Data (Page 111). For more information, contact your JCB dealer.

Danger Zone

The danger zone is any zone within and/or around the machinery in which a person is subject to a risk to their health or safety. During operation of the machine, keep all persons out of the danger zone. Persons in the danger zone could be injured.

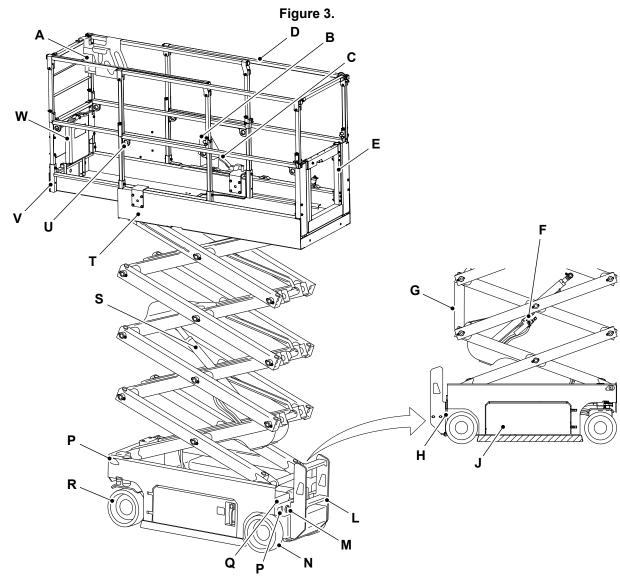
Before you do a maintenance task, make the product safe. Refer to: Maintenance Positions (Page 82).



Main Component Locations

(For: S1932E EDRV [RAJ])

Quick Folding Rail



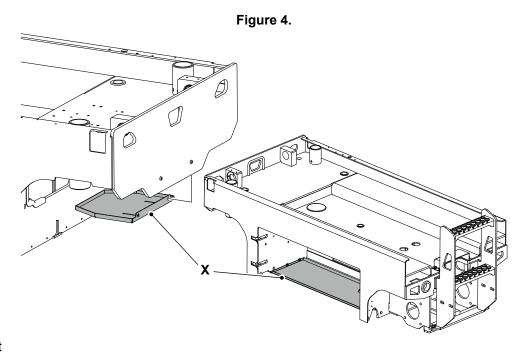
- A Platform controller
- **C** Extension platform pedal
- **E** Platform door
- **G** Safety strut
- J Ground controller, key switch and emergency stop
- M Charging plugP Lifting/tie-down point
- **R** Front wheel (drive and brake)
- **T** Main platform
- **V** Platform extension

- **B** AC (Alternating Current) power socket (option)
- **D** Quick folding rail
- F Lift control valve
- H Power to platform plug
- **L** Ladder
- N Rear wheel
- **Q** Forklift pocket
- S Lift ram
- **U** Safety harness fastening point
- W Operator manual holder

Spill Kit (If Fitted)

The illustration shows the typical spill kit (if fitted). Number of spill trays and its design on your machine may vary.





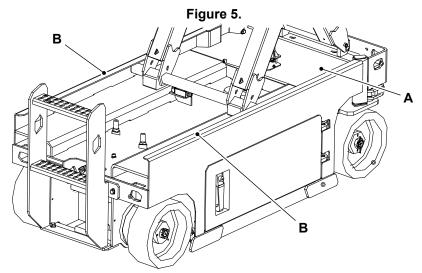
X Spill kit



Product and Component Identification

Machine

Your machine has an identification plate as shown. Refer to Figure 5.



A Machine identification plate location

B VIN Stamping location

Explanation of Machine Identification Plate

Figure 6.

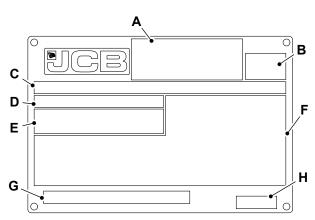


Table 2.

Α	Manufacturers address
В	Regional certification mark (if applicable) ⁽¹⁾
С	PIN (Product Identification Number) ISO10261
D	Model
E	Model and manufacture year ⁽²⁾
F	Model data
G	Product description and relevant design standards
Н	Part number

⁽¹⁾ This only applies to markets requiring a certification mark. example a CE mark.

⁽²⁾ This only applies to markets requiring a model and manufacture year.



Safety Labels

General

▲ WARNING Safety labels on the machine warn you of particular hazards. You can be injured if you do not obey the safety instructions shown.

The safety labels are strategically placed around the machine to remind you of possible hazards.

If you need eye-glasses for reading, make sure you wear them when reading the safety labels. Do not overstretch or put yourself in dangerous positions to read the safety labels. If you do not understand the hazard shown on the safety label, then refer to Safety Label Identification.

Keep all of the safety labels clean and readable. Replace a lost or damaged safety label. Make sure the replacement parts include the safety labels where necessary. Each safety label has a part number printed on it, use this number to order a new safety label from your JCB dealer.

Safety Label Identification

(For: S1932E EDRV [RAJ])

Figure 7.

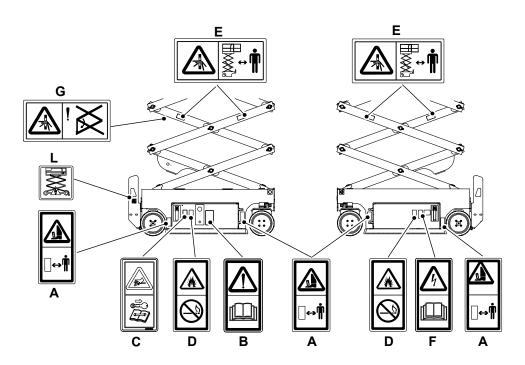




Figure 8.

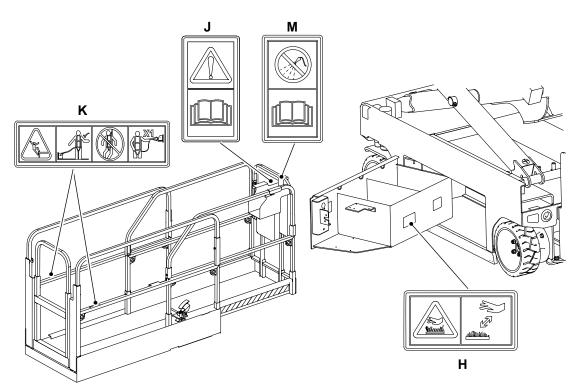


Table 2. Safety Labels

Item	Part No.	Description	Qty.
Α	400/G0761	Crush hazard (to feet). Keep a safe distance. The attachment may roll forward when released.	
В	817/70092	Warning. Read the Operator's Manual before you operate the machine.	1
С	400/G0762	Pressure hazard. Stop the machine, remove the ignition key and consult service manual before carrying out any servicing and maintenance work.	1
D	400/G0767	Explosion hazard. Remove the sources of ignition.	2
Е	400/D0831	Warning. Crush hazard. Keep a safe distance from scissor pack/ mechanism.	4
F	400/G6092	Electrical hazard. Read Operator's Manual.	1
G	400/D2141	Warning. Engage safety strut before carrying out maintenance within the scissor pack.	1
Н	332/P7128	Burns to fingers and hands. Stay a safe distance away.	1
J	400/G0705	Warning. Read operator's manual before operating machine.	1
K	402/C0849	Warning. Possible fall from height. Harness attachment point, for fall restraint harnesses only, not for fall arrest type harnesses, for 1 person only.	4
L	400/D1103	Electrical hazard. Stay a safe distance away from power lines.	1
М	400/Y6352	Warning. Do not pressure wash. Read operator manual.	1



(For: S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ])

Figure 9.

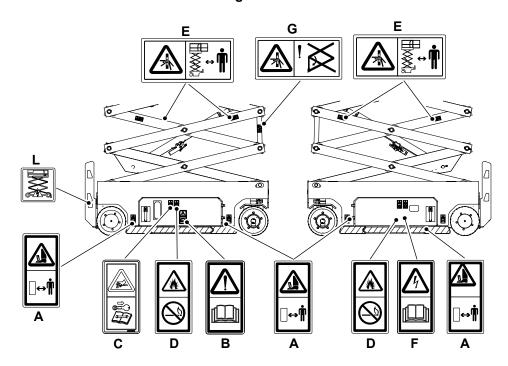


Figure 10.

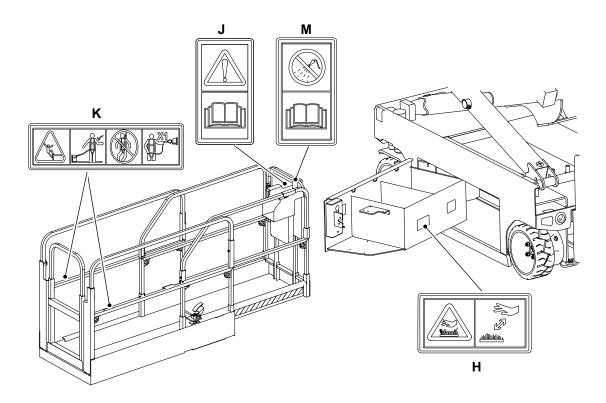




Table 2. Safety Labels

Item	Part No.	Description	Qty.
Α	332/P7135	Crush hazard (to feet). Keep a safe distance. The attachment may roll forward when released.	4
В	817/70092	Warning. Read the Operator's Manual before you operate the machine.	1
С	817/70002	Pressure hazard. Stop the engine/motor, remove the starter key and consult the service manual before you complete any service or maintenance work.	1
D	817/70042	Explosion hazard. Remove sources of ignition.	2
Е	400/D0831	Warning. Crush hazard. Keep a safe distance from scissor pack/ mechanism.	4
F	817/70032	Electrical hazard. Read the Operator's Manual.	1
G	400/D2141	Warning. Engage safety strut before carrying out maintenance within the scissor pack.	1
Н	332/P7128	Burns to fingers and hands. Stay a safe distance away.	1
J	400/G0705	Warning. Read operator's manual before operating machine.	1
K	402/C0849	Warning. Possible fall from height. Harness attachment point, for fall restraint harnesses only, not for fall arrest type harnesses, for 1 person only.	4
L	400/D1103	Electrical hazard. Stay a safe distance away from power lines.	1
М	400/Y6352	Warning. Do not pressure wash. Read operator manual.	1



Notes:			



OperationIntroduction

General

The aim of this part of the manual is to guide the operator step-by-step through the task of learning how to operate the machine efficiently and safely. Read the Operation section through from beginning to end.

The operator must always be aware of events happening in or around them. Drive the machine in an open space, clear of people. Always check the area you intend to operate the machine in and look in the direction of travel. Get to know the 'feel' of the machine and its driving controls.

When you understand the operating controls and switches, practice using them.

Do not rush the job of learning, make sure you fully understand everything in the Operation section. Take your time and work efficiently and safely.

Remember:

- · Be careful.
- · Be alert.
- Be safe.



Operating Safety

General

Training

Make sure that you have had adequate training and that you are confident in your ability to operate the machine safely before you use it. Practice using the machine and its attachments until you are completely familiar with the controls and what they do. Where applicable you may be required to show competency to a national certification scheme. Ensure you comply with local legislation and jobsite rules. With a careful, well trained and experienced operator, your machine is a safe and efficient machine. With an inexperienced or careless operator, it can be dangerous. Do not put your life, or the lives of others, at risk by using the machine irresponsibly. Before you start to work, tell your colleagues what you will be doing and where you will be working. On a busy site, use a signalman.

Before doing any job not covered in this manual, find out the correct procedure. Your local JCB distributor will be glad to advise you.

Machine Condition

A defective machine can injure you or others. Do not operate a machine which is defective or has missing parts. Make sure the maintenance procedures in this manual are completed before using the machine.

Machine Limits

Operating the machine beyond its design limits can damage the machine, it can also be dangerous. Do not operate the machine outside its limits. Do not try to upgrade the machine performance with unapproved modifications or additional equipment.

Communications

Bad communications can cause accidents. Keep people around you informed of what you will be doing. If you will be working with other people, make sure any hand signals that may be used are understood by everybody. Worksites can be noisy, do not rely on spoken commands.

You must stop the machine operation, isolate the controls and turn off the machine when persons are required to interact with it.

Parking

An incorrectly parked machine can move without an operator. Follow the instructions in the Operator's Manual to park the machine correctly.

Banks and Trenches

Banked material and trenches can collapse. Do not work or drive too close to banks and trenches where there is danger of collapse.

Safety Barriers

Unguarded machines in public places can be dangerous. In public places, or where your visibility is reduced, place barriers around the work area to keep people away.

Sparks

Explosions and fire can be caused by sparks from the electrical system. Do not use the machine in closed areas where there is flammable material, vapor or dust.

Regulations

Obey all laws, worksite and local regulations which affect you and your machine.

Electrical Power Cables

You could be electrocuted or badly burned if you get the machine or its attachments too close to electrical power cables.

You are strongly advised to make sure that the safety arrangements on site comply with the local laws and regulations concerning work near electric power lines.

Before you start using the machine, check with your electricity supplier if there are any buried power cables on the site.

There is a minimum clearance required for working beneath overhead power cables. You must obtain details from your local electricity supplier.



Machine Safety

Stop work at once if a fault develops. Abnormal sounds and smells can be signs of trouble. Examine and repair before resuming work.

Traveling at High Speeds

Traveling at high speeds can cause accidents. Always travel at a safe speed to suit working conditions.

Traveling at Height

If it is not part of the work task, lower the platform before traveling. Only travel at height if it is necessary and the travel area has been inspected.

Confined Areas

Pay extra attention to proximity hazards when operating in confined areas. Proximity hazards include buildings, traffic and bystanders.

Safe Working Loads

Overloading the machine can damage it and make it unstable. Study the specifications in the Operator's Manual before using the machine.

Lightning

If there is lightning, stay away from the machine and do not use the machine. If you are on the machine, exit the machine and get to safety. Do not attempt to mount or enter the machine.

If the machine is struck by lightning do not use the machine until it has been checked for damage and malfunction by trained personnel.

Tools and Objects

Do not cover the platform sides or carry objects with a large surface area when operating outdoors.

Worksite Safety

"Workplace Inspection" will help operators to determine whether the workplace is suitable for operation. Operators must inspect the workplace before they move machines there. It is the operator's responsibility to understand and keep in mind the hazards in the workplace, He/she must pay attention and avoid these problems when moving, installing and operating the machine. Check for hazards such as but not limited to:

- Drop-offs, or potholes including those concealed by water mud, etc.
- Slopes.
- Bumps and floor obstructions.
- Debris.
- Overhead obstructions and electrical conductors.
- Hazardous locations and atmospheres.
- Inadequate surface and support to withstand all load forces imposed by the platform in all operating configurations.
- Wind and weather conditions.
- Presence of unauthorized persons.
- Other possible unsafe conditions.
- Underground utilities and pipes.
- Overhanging objects, tree branches.

Risk Assessment

It is the responsibility of the competent people that plan the work and operate the machine to make a judgement about the safe use of the machine, they must take into account the specific application and conditions of use at the time.

It is essential that a risk assessment of the work to be done is completed and that the operator obeys any safety precautions that the assessment identifies.

If you are unsure of the suitability of the machine for a specific task, contact your JCB dealer who will advise you.



The following considerations are intended as suggestions of some of the factors to be taken into account when a risk assessment is made. Other factors may need to be considered.

A good risk assessment depends on the training and experience of the operator. Do not put your life or the lives of others at risk.

Personnel

- Are all persons who will take part in the operation sufficiently trained, experienced and competent? Are they fit and sufficiently rested? A sick or tired operator is a dangerous operator.
- Is supervision needed? Is the supervizor sufficiently trained and experienced?
- As well as the machine operator, are any assistants or lookouts needed?

The Machine

- Is it in good working order?
- Have any reported defects been corrected?
- Have the daily checks been carried out?
- Are the tires in good condition?
- Is the battery sufficiently charged to complete the job?

Working Area

- Is it level?
- Is the ground solid? Will it support the weight of the machine when loaded?
- How rough is the ground? Are there any sharp projections which could cause damage, particularly to the tires?
- Are there any obstacles or hazards in the area, for example, debris, excavations, manhole covers, power lines?
- Is the space sufficient for safe maneuvering?
- Are any other machines or persons likely to be in or to enter the area while operations are in progress?

The Route to be Traveled

- How solid is the ground, will it provide sufficient traction and braking? Soft ground will affect the stability
 of the machine and this must be taken into account.
- How steep are any slopes, up/down/across? A cross slope is particularly hazardous, is it possible to detour to avoid them?

Weather

- How windy is it? High wind will adversely affect the stability of a loaded machine.
- Is it raining or is rain likely? The ground that was solid and smooth when dry will become uneven and slippery when wet, and it will not give the same conditions for traction, steering or braking.

Emergency Plan

Make sure that emergency rescue plan is in place and understood by those involved, it is important to make sure that those involved in the rescue plan are aware of the location of the lowering controls and how to operating the machine from platform controller at height.



Walk-Around Inspection

General

The following checks must be made each time you return to the machine after leaving it for any period of time. We advise you also to stop the machine occasionally during long work sessions and do the checks again.

All these checks concern the serviceability of the machine. Some concern your safety. Get your service engineer to check and correct any defects.

- 1. Check for cleanliness.
 - 1.1. Remove dirt and debris, especially from around the linkages, cylinders, pivot points.
 - 1.2. Make sure the platform floor and handrails are clean and dry.
 - 1.3. Clean all of the safety and instructional labels. Replace any label that is missing or cannot be read.
- 2. Check for damage.
 - 2.1. Examine the machine generally for damaged and missing parts.
 - 2.2. Make sure that all of the fasteners and pivot pins are correctly installed.
 - 2.3. Check the operation of the platform side rails.
 - 2.4. Check the condition of the tires.
 - 2.5. Check for leaks.
 - 2.6. Check the operation of platform door.
- 3. Make sure that all of the access panels are closed correctly.
 - 3.1. If access panels are installed with locks, we recommend that you lock them to prevent theft or tampering.
- 4. Check the operation of all controls.
- 5. Check the operator's manual is in good condition and is kept in the operator's manual storage compartment.
- 6. Check the level of the hydraulic fluid and for leaks.
- 7. Check the visual condition of the batteries, cables and wiring. Check the battery cables are secured correctly.
- 8. Check the battery electrolyte level.

Refer to: Check (Electrolyte Level) (Page 105).

9. Check the operation of the safety equipment.

Refer to: Check (Operation) (Page 94).



Entering and Leaving the Operator Station

General

CAUTION If the guardrails have been folded down, use extreme caution when entering and leaving the operator station. Do not operate the controls from the platform when the guard rails are folded.

CAUTION Entering or leaving the operator station must only be made where steps and handrails are provided. Always face the machine when entering and leaving. Make sure the steps, handrails and your boot soles are clean and dry. Do not jump from the machine. Do not use the machine controls as handholds, only use the handrails.

Make sure the machine is stopped, correctly parked and fully stowed before entering or leaving the platform. Refer to: Stopping and Parking (Page 23).

When entering and leaving the platform always maintain three points of contact with the guardrails and step. Do not use the machine controls as handholds.

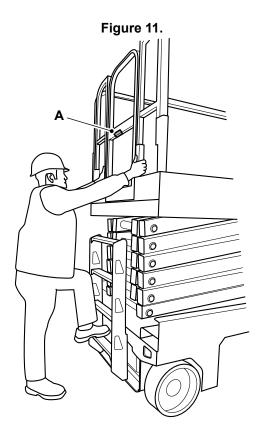
Entering the Platform

- 1. Hold the two guardrails, then use the steps to climb up to the platform. Refer to Figure 11.
- 2. Depress the lever and open the platform door.
- 3. Step into the platform.
- 4. Close the platform door and make sure it latches correctly.
- 5. Always maintain three points of contact with the machine.

Leaving the Platform

- 1. Park the machine on solid (slabbed or paved), level ground.
- 2. Depress the lever and open the platform door.
- 3. Hold both of the guardrails and step backward out of the platform onto the steps.
- 4. Close the platform door and make sure it latches correctly.
- 5. Use the steps to climb down backward onto the ground.





A Lever



Battery Isolator

General

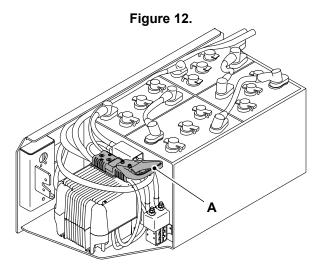
A WARNING The batteries remain live even when the isolator key is removed.

Disconnect the Machine Electrics:

- 1. Turn the key switch to the off position.
- Get access to the battery isolator. Refer to: Access Apertures (Page 91).
- 3. Disconnect the battery isolator by pulling handle. Refer to Figure 12.

Connect the Machine Electrics:

- 1. Make sure the key switch is at off position.
- 2. Connect the battery isolator.



A Battery isolator



Stopping and Parking

General

This machine has park brakes installed on the front wheels only.

The park brakes will release automatically during travel, the brake will not release during lifting.

- 1. Select a safe place to stop where the ground is firm and level such as slabbed or paved surface, where the machine will not cause an obstruction and away from heavy traffic.
- 2. Lower the platform.
- 3. Turn the key switch to the off position. Remove the key to avoid unauthorized use.
 - 3.1. Before switching off the machine check the battery level. If necessary, put the machine on charge to ensure that the battery is fully charged for the next time the machine is used.

Brake Operational Limits

The brakes are capable to hold the machine on the maximum gradient as stated in this manual. Refer to: Driving Performance (Page 124).

It is recommended that the machine is not parked or left unattended on slopes greater than those specified in this manual. It is the responsibility of the operator to assess the ground and atmospheric conditions before using or parking the machine on gradients.

The machine must be immediately taken out of service until corrected if the brakes do not operate within specifications or performance requirements as defined in this manual or any other in-service, periodic or post-maintenance brake verification.



Instruments

Instrument Panel

▲ CAUTION Keep the machine controls clean and dry. Your hands and feet could slide off slippery controls. If that happens you could lose control of the machine.

This display show information and machine settings by text within different menus. If an error or alert is detected on the machine, the relevant fault code and error message is shown on the display.

Base Display Control Panel

The identification of the buttons on the base display control panel is given in this manual. Refer to: Control Layouts (Page 31).

Hourmeter Menu

- 1. Turn the machine ON and wait for the chassis side lights to flash. This indicates that the start up is completed.
- 2. On startup the base display shows software version and machine configuration for a very short time and then displays the hourmeter.

Figure 13.

A DisplayC LED fault (amber)

- B LED (Light Emitting Diode) power (green)
- **D** LED overload (red)



Getting the Machine Moving

General

WARNING Watch for obstructions around machine and overhead when driving. Check clearance above, to sides, at bottom of machine when lifting or lowering the platform.

WARNING Keep hands and arms out of the path of the scissor arms when lowering the platform.

WARNING Do not use the platform controller to release the platform when it is stuck, snagged or caught. In this case, use the ground controller only when there are no persons on the platform.

CAUTION Do not raise platform with the guardrails folded down. The guardrails must be in their upright positions and properly secured when raising the platform.

Raising and Lowering the Platform

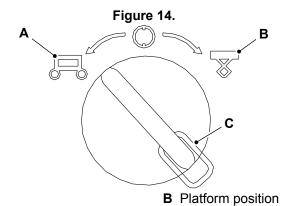
Refer to: Transporting the Product (Page 63).

Refer to: Moving a Disabled Machine (Page 54).

Refer to: Operating Levers/Pedals (Page 31).

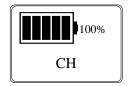
Operation from the Ground

1. Turn the key switch to chassis control. Refer to Figure 14.



- A Chassis position
- C Key switch
- 2. Make sure the ground and platform emergency stop buttons are pulled out.
- 3. Once chassis control mode is selected, the platform controller will show "CH" on display. Refer to Figure 15.

Figure 15.





4. Before trying to operate any controls, wait until the green LED (Light Emitting Diode) on platform controller turns solid, so that the machine can complete its start-up checks.



- 5. If there are any codes generated on the display, contact your nearest JCB dealer.
- 6. Press and hold the enable switch and move the toggle switch up to raise the platform. Refer to Figure 16.
- 7. Press and hold the enable switch and move the toggle switch down to lower the platform. Refer to Figure 16.

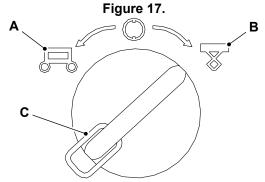
Figure 16.

- A Enable switch
- C Platform raising

- **B** Platform raise and lower toggle switch
- **D** Platform lowering

Operation from the Platform

1. Turn the key switch to platform control.



- A Chassis position
- C Key switch

- **B** Platform position
- 2. Make sure the ground and platform emergency stop buttons are pulled out.
- 3. Before trying to operate any controls, wait until the green LED at platform controller turns solid, so that the machine can complete its start-up checks.
- 4. If there are any codes generated on the display, contact your nearest JCB dealer.
 - 4.1. After machine startup Drive/Lift LEDs will blink continuously indicating neutral mode. After mode selection LED will turn to solid for the selected mode and other will be off.
 - 4.2. After specified duration of inactivity the controller goes back to neutral mode and mode needs to be reselected for operation.

Duration: 10s

- 5. Press the raise/lower mode button on the platform controller. The button should illuminate.
- 6. Press and hold the enable switch. Refer to Figure 16.
- 7. Move the joystick forward or backward. Check the arrow colors on the joystick with the operating direction. Move forward to lower the platform. Move backward to raise the platform.
- 8. When lowering the platform, the platform will stop part way down for safety. Release the joystick and check there are no obstructions in the scissors. Move the joystick down again to fully lower the platform.

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Operation in Raised Position

The automatic pothole protection system folds down and drive speed is reduced when the platform is at or above descent delay height.



Slopes

General

▲ WARNING Make sure that you have been trained and are familiar with the use of machines on slopes, and understand the adverse effects that slopes and site conditions can have on stability. Never use the machine on a slope if you do not understand the recommended practices for the use of machines in such applications.

There are a number of factors which can adversely affect the stability of the machine and the safety of the machine and operator when used on a slope.

It is essential that a risk assessment of the work to be done is completed and that the operator complies with any safety precautions that the assessment identifies.

Driving on Slopes

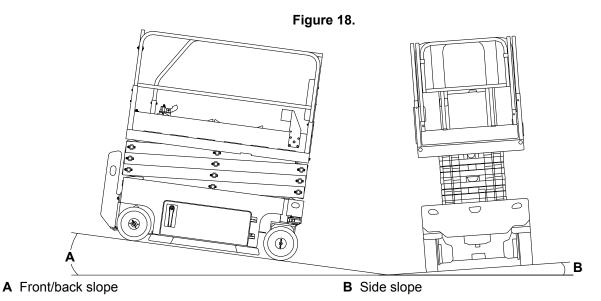
▲ WARNING If the tilt indicator warning light/alarm is activated while driving with platform raised, lower the platform and drive to a smooth firm level surface.

WARNING Make sure that the platform is fully stowed while driving the machine on slopes and gradient, otherwise it may affect the stability of the machine.

While driving on slopes it is possible to raise the platform to the down limit switch, even when the chassis angle is above the rated maximum limit.

While driving on slopes with the platform fully stowed make sure that the front/back and side slope does not exceed the rated gradient for the machine.

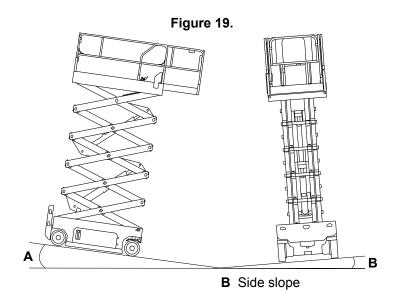
Refer to: Performance Dimensions (Page 124).



While driving on slopes with the platform raised make sure that front/back slope and side slope does not exceed the rated gradient for the machine.

Refer to: Performance Dimensions (Page 124).





A Front/back slope



Driving the Machine

General

Operation from the Ground

1. Drive and steer functions are not available on the ground controller.

Operation from the Platform

Machine travel speed is reduced when the platform is elevated above the lower limit switch position.

- 1. Turn the key switch to platform control.
 - Refer to: Control Layouts (Page 31).
- 2. Make sure the ground and platform emergency stop buttons are pulled out.
- 3. Wait until the Side Lights on the chassis to begin to flash before trying to operate any controls, so that the machine can complete its start-up checks.
- 4. If there are any codes on the display, contact your nearest JCB dealer.
- 5. Press the drive mode button. The button should illuminate. Always check that the machine is in the correct mode before moving the joystick.
 - 5.1. The default drive mode is 'Tortoise'.
- 6. Press and hold the safety trigger.
- 7. Slowly move the joystick forward or backward. Move forward to move the machine forward. Move backward to move the machine backward.

Drive Speed

There are two drive speeds available when the machine is stationary. Press the speed button to switch between hare speed and tortoise speed. When the light is illuminated tortoise speed is enabled. When the light is extinguished hare speed is enabled. Tortoise speed is activated when the platform is raised. Always check that the machine is in the correct drive speed before moving the joystick, especially after lowering the platform.

For all machines, when the platform is raised the maximum speed is 0.8km/h (0.5mph). Refer to: Performance Dimensions (Page 124).

Steering

Press and hold the safety trigger. Press the steering switch left or right to change the steering direction of the steering wheels.



Operating Levers/Pedals

Control Layouts

CAUTION Keep the machine controls clean and dry. Your hands and feet could slide off slippery controls. If that happens you could lose control of the machine.

Ground Controller

▲ **WARNING** Do not operate the machine with the ground controller when there are personnel in the platform except in an emergency.

Figure 20.

- A Base display
- C Up/down switch
- E Ignition ON/OFF switch

- **B** Enable switch
- **D** Emergency stop switch

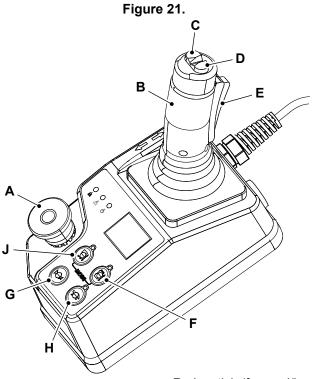
Ground Controller Display

The display is used to show the service faults and machine hours.

Platform Controller

▲ WARNING Do not drive the machine with the platform raised except on smooth, firm and level surface free of obstructions and pot holes.



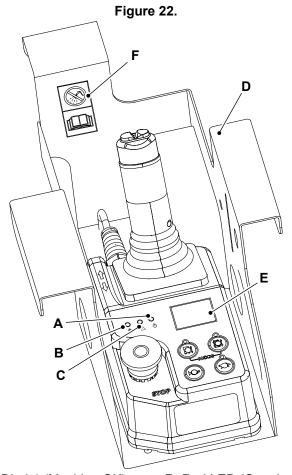


- A Emergency stop button
 C Turn left switch
 E Safety trigger/enable switch
 G Horn button
- **J** Lift mode button

- B Joystick (forward/backward)
 D Turn right switch
 F Drive mode button
 H Drive speed button

The platform control lever is installed on a portable bracket that can be moved around the platform.





- A Green LED (Light Emitting Diode) (Machine OK)
- C Amber LED (Fault code)
- **E** Display

- **B** Red LED (Over load)
- **D** Bracket
- **F** Warning. Do not pressure wash. Read operator manual.

Platform Controller Display

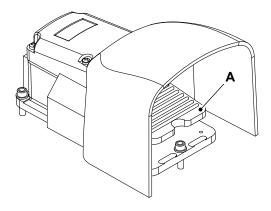
The display is used to show the battery level and error codes. Refer to: Check (State of Charge) (Page 105). Refer to Figure 22.

Foot Pedal (Only for South-East Asia)

While using any operation through the platform controller, the foot pedal must be pressed along with the safety trigger to perform the operation.



Figure 23.



A Foot pedal

Diagnostics Menu

- 1. Press and hold the drive mode button and the lift mode button while turning the machine ON.
 - 1.1. Hold the buttons until the main menu is displayed.
 - 1.2. This is the diagnostic menu. Refer to Table 3.
- 2. The drive mode button is used as the enter button.
- 3. The turn left switch and turn right switch are used to increase/decrease values.
- 4. The safety trigger/enable switch is used to select the digit of the passcode to enter the menu. Contact JCB dealer for passcode.
- 5. The lift mode button is used for the up command in the menu structure.
- 6. The horn button is used for the down command in the menu structure.
- 7. The tortoise mode button is used for the return command in the menu structure.
 - 7.1. When in the menu structure you cannot exit using the return command (tortoise mode button), a machine restart is required.

Make sure that the version of the PCU (Platform Control Unit) is 00.00.26 or above for the menus (Refer to Table 3.) to work.

Table 3.

Screen	Command	Graphic	Description
Main menu		Main Menu > OEM Settings OPR Settings Fault History	Displays when the diagnostic menu access is successful. Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	OEM Settings		Select to access the diagnostic menu settings.
	OPR Settings		Select to access the operator menu settings.
	Fault History		Select to display the list of errors generated.



Screen	Command	Graphic	Description
OEM settings	Enter Password: Cancel	OEM Settings > Enter Password: Cancel	Select to enter the passcode to enter the diagnostic menu. Contact JCB dealer for passcode. Select to exit the main menu.
Input password		Input Password XXXX	Use the safety trigger/enable switch to select digit, turn left/turn right switch to increase/decrease value, and drive mode button for enter.
OEM settings		OEM Settings Speed Settings Machine Options >Cal Settings	Displays when the correct pass- code is entered. Use the lift mode button to move up and horn but- ton to move down the menu, and drive mode button for enter.
	Speed Settings	> Height Mode	Select to enter the speed settings menu.
	Machine Options	Service Mode Cancel	Select to enter the machine options menu.
	Cal Settings		Select to enter the calibration settings menu.
	Height Mode		Select to enter the height mode menu.
	Service Mode		Select to enter the service mode.
	Cancel		Select to exit the OEM settings main menu.
Speed settings		Speed Settings > Fast 100.0% Slow 50.0% Elevated 17.2%	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	Fast	>Lift Speed 51% Steer Speed255% Cancel	Select to set the maximum machine travel speed in the fast speed mode. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	Slow		Select to set the maximum machine travel speed in slow speed mode. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	Elevated		Select to set the maximum machine travel speed when platform is elevated. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	Lift Speed		Select to set the maximum elevation/descent speed of platform. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.



Screen	Command	Graphic	Description
	Steer Speed		Select to set the maximum steer speed. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	Cancel		Select to exit the speed settings menu.
Machine options		Machine Options >PH Alarm On Descent Del Off Load Sense On	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	PH Alarm Machine C	Machine Options	Select to set the pothole alarm ON/OFF. Use turn left/turn right switch to change value, and drive mode button for enter.
	Descent delay		Select to set the platform descent delay ON/OFF. Use turn left/turn right switch to change value, and drive mode button for enter.
	Load Sense		Select to set the load sensing ON/ OFF. Use turn left/turn right switch to change value, and drive mode button for enter.
	Miscellaneous		Select to enter the miscellaneous settings menu.



Screen	Command	Graphic	Description
Miscellaneous	Joystick Direction ⁽²⁾	Miscellaneous) Jstk Dir INV Foot Sw Off Ovr Prvt Off	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter. The menu has 2 options, NOR =
	·	Miscellaneous Jstk Dir INV >Foot Sw On	Normal and INV = Inverted. The joystick direction for lift/lower operation will be inverted if this is changed to INV.
	Foot Switch ⁽²⁾	Ovr Prvt Off Miscellaneous	This is only applicable to machines that have a foot pedal installed. To turn this ON, the foot pedal needs to be pressed along
	Overrise Prevention ⁽²⁾	Jstk Dir INV Foot Sw Off Ovr Prvt On	with the joystick to drive or lift the machine. This is only applicable to machines fitted with an overrise pre-
	Cutout ⁽²⁾	Cutout LFT Elvt Drv Off Dual Hght Off Cancel	vention system. If overrise prevention is activated and LFT is appearing on the display, the machine lift will be disabled until the overrise condition is cleared. If overrise prevention
		Cutout LFT >Elvt Drv On Dual Hght Off	is activated and ALL is appear- ing on the display, the machine lift and drive will be disabled until the overrise condition is cleared.
	Elevated Drive ⁽²⁾	Cutout LFT Elvt Drv Off >Dual Hight On	This option is only available for machines equipped with an elevated drive prevention switch. If this option is activated, the machine will not operate if the platform is raised more than 80mm.
	Dual Height ⁽³⁾	Cancel	This option is only available for machines fitted with the dual height feature.
	Cancel ^(2, 3)		Select to exit the miscellaneous settings menu.
Calibration settings		Cal Settings >Cal Settings Cal Status Cancel	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	Cal Settings		Select to enter the calibration settings menu.
	Cal Status		Select to enter the calibration status menu.
	Cancel		Select to exit to Cal settings menu.





Screen	Command	Graphic	Description
Calibration settings		Cal Settings >Enable Off Angle Sensor Off NL Static Off	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	Enable		After changing the value from the selected calibration, go to enable
		>FL Static Off NL Dynamic Off FL Dynamic Off Cancel	option and select to set the en- able ON/OFF. Use turn left/turn right switch to change the value, and drive mode button for enter to start the calibration process.
	Angle Sensor		Select to set the angle sensor calibration ON/OFF. Use turn left/turn right switch to change value, and drive mode button for enter.
	NL Static		Select to set the no load static calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	FL Static		Select to set the full load static calibration ON/OFF. Use turn left/turn right switch to change value, and drive mode button for enter.
	NL Dynamic		Select to set the no load dynamic calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	FL Dynamic		Select to set the full load dynamic calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	Cancel		Select to exit the calibration settings main menu.
Calibration status		Cal Status >AS Complete Y NL Static Y FL Static Y	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	AS Complete		Shows the completion status of the angle sensor calibration.
	NL static	>NL Dynamic Υ FL Dynamic Υ	Shows the completion status of the no load static calibration.
	FL static	PS Failure N AS Failure N	Shows the completion status of the full load static calibration.
	NL Dynamic		Shows the completion status of the no load dynamic calibration.
	FL Dynamic	Data Change N > Cancel	Shows the completion status of the full load dynamic calibration.
	PS Failure		Shows the failure status of the pressure sensor.
	AS Failure		Shows the failure status of the angle sensor.
	Data Change		Select to accept the updated calibration data. Use turn left/turn right switch to change value, and drive mode button for enter.



Screen	Command	Graphic	Description
	Cancel		Select to exit the calibration status main menu.
Height mode		Height Mode >DD Height 1.16m DL Height 0.50m Cancel	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	DD height		Select to set the DD height. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	DL height		Select to set the DL height. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
Service mode	Enable	Service Mode >Enable Off	Select to enable the service mode ON/OFF. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
OPR Settings		OPR Settings >Batt Alarm On Batt Del 5min Brake Rel Off	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	Battery Alarm	Idle Light On Motion AI On >Field Cal Cancel	Select to set the low battery alarm ON/OFF. Use turn left/turn right switch to change the value, and drive mode button for enter.
	Battery Delay		Select to set the battery alarm de- lay. Use turn left/turn right switch to increase/decrease value, and drive mode button for enter.
	Brake Release	SW Ver:00.00.26	Select to set the brake release ON/OFF. Use turn left/turn right switch to change the value, and drive mode button for enter.
	Idle Light		Select to set the idle lights ON/ OFF. Use turn left/turn right switch to change the value, and drive mode button for enter.
	Motion Alarm		Select to set the motion alarm ON/OFF. Use turn left/turn right switch to change the value, and drive mode button for enter.
	Field Cal ⁽¹⁾		Select to enter the field calibration menu.
	Cancel		Select to exit the OPR settings menu.



Screen	Command	Graphic	Description
Field calibration		Field Cal >Enable Off Angle Sensor Off NL Static Off	Use the lift mode button to move up and horn button to move down the menu, and drive mode button for enter.
	Enable		After changing the value from the selected calibration, go to enable option and select to set the enable ON/OFF. Use turn left/turn right switch to change the value, and drive mode button for enter to start the calibration process.
		>NL Dynamic Off Cancel	
	Angle Sensor		Select to set the angle sensor calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	NL Static		Select to set the no load static calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	NL Dynamic		Select to set the no load dynamic calibration ON/OFF. Use turn left/ turn right switch to change value, and drive mode button for enter.
	Cancel		Select to exit the field calibration menu.
Fault history		Fault History DTC 061 DTC 047 DTC 061	Displays the list of errors generated.

- (1) Joystick firmware must be updated to version 00.00.26 or above to perform the field calibration.
- (2) Applicable for South-East Asia.
- (3) Applicable for North America and Canada.

Field Calibration - OPR Settings

When the load sensing system of a machine (angle sensor/pressure sensor) is repaired/reworked, field calibration can help to restore machine functionality with a de-rated capacity temporarily until the machine is fully calibrated with the rated load. Machine load capacity after field calibration will be reduced to approximately 75%-85% of the rated load.

It is always recommended to do the full calibration sequence on machine whenever required. However, in case of non-availability of the suitable weights, field calibration can be performed (lift capacity will be reduced). The machine must be calibrated as per sequence given in the specified table. Refer to Table 3.

To indicate the machine is running in no load (NL) field calibration, the platform and base display will show 'FC' while raising and lowering operation. Refer to Figure 24. Refer to Figure 25.



Figure 24.

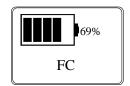
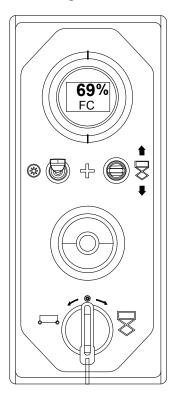




Figure 25.



A standard calibration will restore the 100% load capacity, and 'FC' indication will no longer be visible on the platform or base control panel display.

Field calibration must be completed in one go with all the three below steps in sequence.

Angle Sensor Calibration

- 1. The machine will be raised to the full height during the calibration procedure.
 - 1.1. Make sure that there is sufficient clearance above the platform before starting the calibration.
- 2. The calibration can be interrupted if there is a hazardous event by pressing an emergency stop.
- 3. Any button pressed outside of this time frame will nullify the sequence and require starting from the beginning.



- 4. Take the machine to a suitable testing area.
- 5. Lower the platform to the stowed position.
- 6. Make sure that there is no load on the platform.
- 7. Make sure that the both (base and PCU) emergency switches are in the ON position.
- 8. Press the lift and travel button together on the PCU while switching ON the key to the platform control position.
- 9. The PCU display will display 'Menu'.
- 10. Select 'OPR settings' and press enter.
- 11. Move the platform raise/lower toggle switch to select 'Field cal' function.
- 12. Press the enter button.
- 13. Scroll down and select 'Angle sensor', and press enter.
- 14. Select ON by pressing the left/right button for the angle sensor calibration and press enter.
- 15. Wait for the green light to blink once.
 - 15.1. Scroll up to enable and change the status to ON, and press enter.
- 16. Wait for the green light to blink.
 - 16.1. The calibration will start automatically and platform will move up and down once.
- 17. Once the calibration is complete, base display will show 'FC AS OK'. Perform a key cycle to save the calibration.
- 18. If the calibration result shows 'FC AS NOK' error, do the steps that follow:
 - 18.1. Check the error code.
 - 18.2. Inspect the condition of the corresponding sensors to ensure correct operation.
 - 18.3. Perform the calibration process again.

No Load Static Calibration

- 1. The machine will be raised to the full height during the calibration procedure.
 - 1.1. Make sure that there is sufficient clearance above the platform before starting the calibration.
- 2. The calibration can be interrupted if there is a hazardous event by pressing an emergency stop.
 - 2.1. If field calibration is aborted for any reason, the machine will display 'FC reqd' and cannot be operated until field calibration is finished.
- 3. Any button pressed outside of this time frame will nullify the sequence and require starting from the beginning.
- 4. Take the machine to a suitable testing area.
- 5. Lower the platform to the stowed position.
- 6. Make sure that there is no load on the platform.
- 7. Make sure that the both (base and PCU) emergency switches are in the ON position.
- 8. Press the lift and travel button together on the PCU while switching ON the key to the platform control position.
- 9. The PCU display will display 'Menu'.



- 10. Select 'OPR settings' and press enter.
- 11. Move the platform raise/lower toggle switch to select 'Field cal' function.
- 12. Press the enter button.
- 13. Scroll down and select 'NL Static', and press enter.
- 14. Select ON by pressing the left/right button for the no load static calibration and press enter.
- 15. Wait for the green light to blink once.
 - 15.1. Scroll up to enable and change the status to ON, and press enter.
- 16. Wait for the green light to blink.
 - 16.1. The calibration will start automatically. The platform will raise and lower once, stopping periodically to capture calibration data.
- Once the calibration is complete, the base display will show 'FC NL OK'. Perform a key cycle to save the calibration.
- 18. If the calibration result shows 'FC NL NOK' error, do the steps that follow:
 - 18.1. Check the error code.
 - 18.2. Inspect the condition of the corresponding sensors to ensure correct operation.
 - 18.3. Perform the calibration process again.

No Load Dynamic Calibration

- 1. The machine will be raised to the full height during the calibration procedure.
 - 1.1. Make sure that there is sufficient clearance above the platform before starting the calibration.
- 2. The calibration can be interrupted if there is a hazardous event by pressing an emergency stop.
 - 2.1. If field calibration is aborted for any reason, the machine will display 'FC reqd' and cannot be operated until field calibration is finished.
- 3. Any button pressed outside of this time frame will nullify the sequence and require starting from the beginning.
- 4. Take the machine to a suitable testing area.
- 5. Lower the platform to the stowed position.
- 6. Make sure that there is no load on the platform.
- 7. Make sure that the both (base and PCU) emergency switches are in the ON position.
- 8. Press the lift and travel button together on the PCU while switching ON the key to the platform control position.
- 9. The PCU display will display 'Menu'.
- 10. Select 'OPR settings' and press enter.
- 11. Move the platform raise/lower toggle switch to select 'Field cal' function.
- 12. Press the enter button.
- 13. Scroll down and select 'NL Dynamic', and press enter.
- 14. Select ON by pressing the left/right button for the no load dynamic calibration and press enter.
- 15. Wait for the green light to blink once.



- 15.1. Scroll up to enable and change the status to ON, and press enter.
- 16. Wait for the green light to blink.
 - 16.1. The calibration will start automatically. The platform will raise and lower once continuously.
- 17. Once the calibration is complete, the base display will show 'FC NL OK'. Perform a key cycle to save the calibration.
- 18. If the calibration result shows 'FC NL NOK' error, do the steps that follow:
 - 18.1. Check the error code.
 - 18.2. Inspect the condition of the corresponding sensors to ensure correct operation.
 - 18.3. Perform the calibration process again.



Working with the Platform

General

Trip and Fall Hazards

- Prior to operation, make sure that platform door and all guardrails are fastened and secured.
- It is recommended that all persons in the platform wear full body harnesses with a short lanyard attached to a lanyard anchor point while operating this machine. For further information refer to JCB dealer.
- No more than one person should be attached to each lanyard anchor point.
- Keep both feet firmly on the platform floor at all times. Never position ladders, boxes, steps, planks or other 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.
- Keep your footwear and the platform floor clean of oil, mud and slippery substances.

Electrocution Hazards

- This machine is not insulated and does not provide protection from contact or proximity to electrical current.
- Maintain distance from electrical lines, apparatus, or any energized (exposed or insulated) parts according to the minimum approach distance. Refer to Table 4.
- Allow for machine movement and electrical line swaying.
- Maintain a clearance of at least 3m (3½yd) between any part of the machine and its occupants, their tools, and their equipment from any electrical line or apparatus carrying up to 50,000V. One foot additional clearance is required for every additional 30,000V or less.
- The minimum approach distance may be reduced if insulating barriers are installed to prevent contact, and the barriers are rated for the voltage of the line being guarded. These barriers shall not be part of (or attached to) the machine. The minimum approach distance shall be reduced to a distance within the designed working dimensions of the insulating barrier. This determination shall be made by a qualified person in accordance with the employer, local, or governmental requirements for work practices near energized equipment.

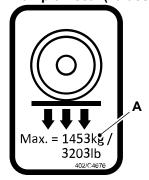
Table 4. Minimum Approach Distance

Voltage Range	Minimum Approach Distance
0-50,000V	3m (3½yd)
50,000–200,000V	5m (5½yd)
200,000–350,000V	6m (6½yd)
350,000–500,000V	8m (8½yd)
500,000-750,000V	11m (12yd)
750,000–1,000,000V	14m (15½yd)

Tipping Hazards

 Make sure 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.

Figure 26. Example Decal (values may vary)



A Maximum tire load

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



- Do not raise the platform or drive with platform raised while on or near a sloping, uneven, or soft surface. Make sure that the machine is positioned on level, solid (slabbed or paved) ground before elevating the platform or driving with the platform in the elevated position.
- Before driving on floors, bridges, trucks, and other surfaces, check the allowable capacity of the surfaces.
- Never exceed the maximum work load as specified on the platform. Keep all loads within the confines of the platform. Evenly distribute the load across the platform, or the machine could become unstable.
- Do not operate the machine when wind conditions exceed the limit.
- 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 item to the platform.
- If the platform or scissor pack becomes stuck or snagged on an adjacent or overhead structure, do not try to free the machine until all personnel are removed from the platform.
- Do not push or pull from the platform against any adjacent or overhead structures.
- Do not cover 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 platform size with unauthorized deck extensions or attachments.
- Do not raise the platform with the access apertures open. Keep the access apertures closed whilst the platform is raised.
- Do not raise the platform with access apertures open and an operator is in the platform. Keep the access apertures closed whilst the platform is raised and an operator is in the platform.
- If the scissor arm or platform is caught so that one or more wheels are off the ground, all the persons and tools must be removed before attempting to free the machine. Use a crane, forklift truck, or other appropriate equipment to stabilize the machine and remove the personnel.

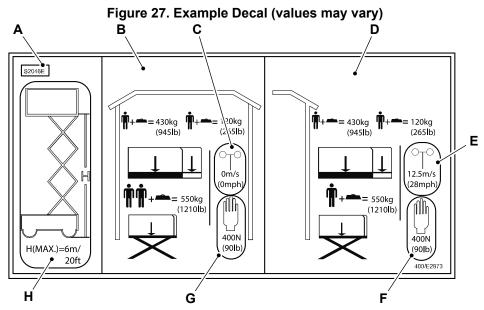
Crushing and Collision Hazards

- Approved head protection must be worn by all operating and ground personnel.
- Keep hand and limbs out of the scissor arm assembly during operation and when raised for maintenance unless the safety strut is installed.
- Watch for obstructions around machine and overhead when driving. Check clearance above, to sides, at bottom of machine when lifting or lowering the platform.
- Always post a lookout when driving in areas where vision is obstructed.
- Keep non-operating personnel at least 1.8m (2yd) away from machine during all operations.
- Under all travel conditions, the operator must limit travel speed according to conditions of the ground surface, congestion, visibility, slope, location of personnel, and other factors.
- Be aware of stopping distances in all drive speeds.
- 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.
- Do not operate over ground personnel. Warn personnel not to work, stand, or walk under a raised platform.
 Position barricades on the floor as necessary.

Platform Information Decals

The decals are located at the backboard of the platform.





- A Machine model
- C Maximum wind speed
- E Maximum wind speed
- **G** Maximum manual force

- **B** Indoor rating
- D Outdoor rating
- Maximum manual force
- **H** Maximum platform height

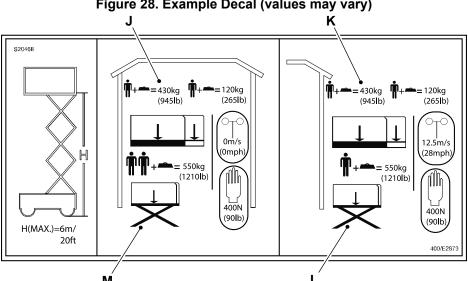


Figure 28. Example Decal (values may vary)

- **J** Weight distribution on the extended platform
- L Weight distribution on the retracted platform
- K Weight distribution on the extended platform
- **M** Weight distribution on the retracted platform



Figure 29. Example Decal (values may vary)

A Not suitable for outdoor use

The decals are located at the entry point of the platform.

For correct values refer Technical Data. Refer to: Driving Performance (Page 124).

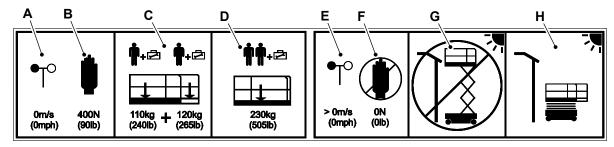
Figure 30. Example Decal (values may vary) В Ε 400N 430kg + 120kg (945lb) + (265lb) 550kg (1210lb) 430kg + (945lb) 120kg (265lb 0m/s 12.5m/s 200N 550kg (45lb) (28mph (1210IÈ (0mph) (90lb) G

A Indoor rating (at 0m/s (0.0feet/s) wind speed)

- C Weight distribution on the retracted platform
- **E** Weight distribution on the extended platform
- G Maximum manual force
- J Maximum manual force

- **B** Weight distribution on the extended platform
- **D** Outdoor Rating (at 12.5m/s (41.0feet/s) wind speed)
- **F** Weight distribution on the retracted platform
- H Wind speed
- K Wind speed

Figure 31. Example Decal (values may vary)



- A Wind speed
- C Weight distribution on the extended platform
- **B** Maximum manual force indoors (with 0m/s (0.0feet/s) wind)
- **D** Weight distribution on the retracted platform

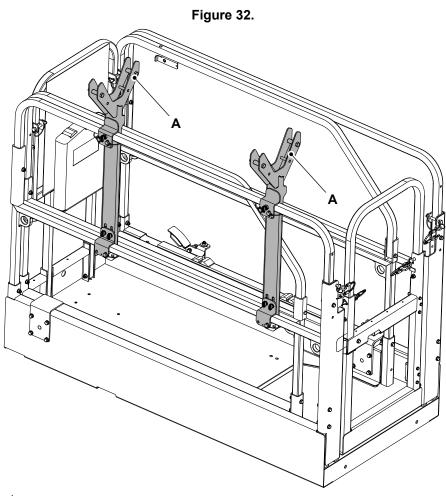


- E Wind speed
- **G** Raised platform not suitable for outdoor use (with > 0m/s (0.0feet/s) wind)
- F Maximum manual force outdoors (with > 0m/s (0.0feet/s) wind)
- **H** Fully lowered platform only may be driven outside (with > 0m/s (0.0feet/s) wind)

Power to Platform

- Maximum extension lead length from power to platform connectors to external power supply should not be more than 10m (11yd).
- Connect power to platform only to an external power supply with suitable RCD (Residual Current Device) rated 30 mA as per EN 60204-1-2019, Chapter 15.1 or BS 7671:2018 Regulation 411.3.3.

Pipe Cradle Post (Accessory)



A Pipe cradle post



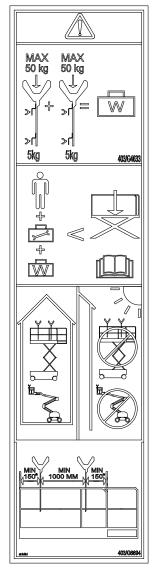


Figure 33. Pipe Cradle Post Decal

Pipe cradle post allows carrying pipes or conduits inside the platform to optimize its utility.

It consists of two cradles attached to the fixed platform rails. Refer to Figure 32. Provision to use the straps is provided on the cradle to secure the load in place.

Note

- The pipe cradle post is rated for indoor use only.
- The pipe cradle post, when fitted on the platform, is included in the overall rated capacity of the platform.
- Make sure that the weight of the pipe cradle post, weight on the pipe cradle plus the weight on the platform must not exceed the overall rated capacity of the platform.
- The weight of the pipe cradle is 10kg (22.05lb) with the maximum load capacity of 100kg (220.46lb) on both the cradles (which must not exceed 50kg (110.23lb) per cradle).
- Retract the platform extension before attaching the pipe cradle post and loading material.
- For installation guidelines, follow instructions given on the pipe cradle post decal. Refer to Figure 33.

Operation

1. Check and make sure that both the cradles are mounted and fastened securely inside the platform rails using the thumb screws and shaft locking pins.



Check (Condition)

- 1. Check that the safety and instructional labels are in place and undamaged.
 - 1.1. Contact JCB dealer to replace damaged labels with new ones when required.
- 2. Check for missing or damaged components. Replace, if necessary.
- 3. Check the condition of fasteners. Replace, if necessary.
- 4. Make sure that the load is secured with the straps during any movement of the machine.

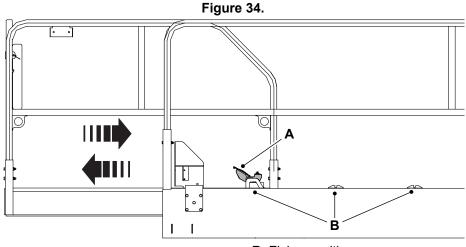
Extending and Retracting the Platform

- ▲ WARNING Do not exceed the maximum rated load stated on the platform.
 - **WARNING** Do not stand on the extension platform while it is moving or not fixed.
 - **CAUTION** Do not lower the platform without completely retracting the platform extension.

Make sure that platform door is latched correctly before extending or retracting the platform.

There are three fixing positions for the extending platform.

- 1. Press the pedal.
- 2. Hold and push the extension platform guard rail.
- 3. Release the pedal when the rail is in one of the three fixing positions. Make sure that it is engaged correctly.



A Pedal

B Fixing positions

4. Press the pedal and pull the extended guardrail to retract the platform.

Folding and Unfolding the Guardrails

(For: S1932E EDRV [RAJ])

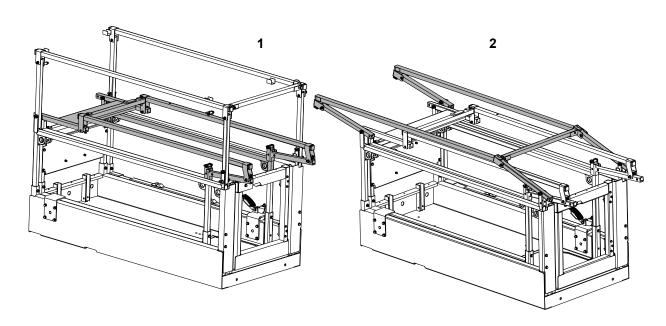
▲ CAUTION If the guardrails have been folded down, use extreme caution when entering and leaving the operator station. Do not operate the controls from the platform when the guard rails are folded.



Folding the Guardrails

- 1. Turn the key switch to the OFF position.
- 2. To fold down each of the guardrail, remove the lock pin for each guardrail. Refer to Figure 35.
- 3. Take a firm hold on the top of the guardrail and carefully lower it until it is fully folded.
 - 3.1. Fold the guardrails in the order as shown. Refer to Figure 35.

Figure 35.



Unfolding the Guardrails

- 1. The unfolding procedure is the opposite of the folding procedure.
 - 1.1. Make sure that the each lock pin is installed when the guardrails are unfolded.

(For: S1932E EDRV [RAJ], S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ], S4550E EDRV [RAJ])

CAUTION If the guardrails have been folded down, use extreme caution when entering and leaving the operator station. Do not operate the controls from the platform when the guard rails are folded.

Fold the guardrails in order as shown. Refer to Figure 36.

- 1. To fold down each of guardrail, remove the lock pin for that guardrail.
- 2. Take a firm hold on the top of the guardrail, carefully lower it until it is fully folded. Follow the sequence of folding order

For unfolding the guardrails, follow the reverse sequence of folding order. Make sure that each lock pin is installed when guardrails are unfolded.



Figure 36.



Moving a Disabled Machine

General

(For: S1932E EDRV [RAJ], S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ], S4550E EDRV [RAJ], Manual Release)

WARNING Do not use the platform controller to release the platform when it is stuck, snagged or caught. In this case, use the ground controller only when there are no persons on the platform.

Notice: Following any incident, thoroughly inspect the machine. Do not raise the platform until you are sure that all damage has been repaired and that all controls are operating correctly. Test all functions first from the ground controller, then from the platform controller.

If the machine becomes disabled, the machine must be made safe, lifted onto a transporter and moved to a location where it can be repaired.

Towing, winching or pushing the machine without following the correct procedure will damage parts of the machine. If possible, repair the disabled machine where it stands.

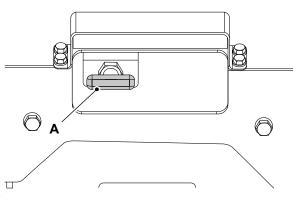
Lower the Platform (Emergency Operation)

The lowering alarm does not sound while lowering but if the machine is switched ON, the fault alarm will sound due to lowering without electrical controls. Lowering may continue.

To lower the platform in emergency conditions:

- 1. Pull out the emergency lowering lever. Refer to Figure 37.
- 2. Release the lever to stop the operation.

Figure 37.



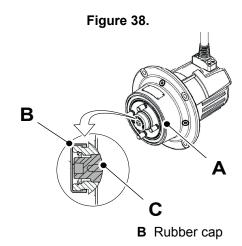
A Emergency lowering lever

Manual Brake Release (for S1932E EDRV)

- ▲ WARNING Make the machine safe. Make sure the park brake is engaged. Use wheel chocks to prevent unintentional movement of the wheels.
- 1. The manual brake release system is located in the front wheels of the machine.
- 2. Remove the rubber cap.
- 3. Use a 3/8" square drive to turn the brake release cap counterclockwise to disconnect.
- 4. Turn the brake release cap clockwise to reconnect after the machine is recovered to reapply the brakes.



- 4.1. Tighten it to the specified torque value.
 - Torque: 40-68N·m (29.5-50.2lb.ft)
- 5. Install the rubber cap again.



A Wheel motorC Brake release cap

Manual Brake Release (for S2632E EDRV, S2646E EDRV, S3246E EDRV, S4046E EDRV, S4550E EDRV)

The brakes are designed to be engaged when the machine is not running. To manually release the brake, if the machine is disabled, the sun gears must be removed which are located in the front wheel motors.

B Capscrew (x2)

Figure 39. Component Identification

A Oil plug (x2)C Cover cap

When the machine is unable to move, there are three possible positions of the oil plugs with respect to the bottom of the cover cap:

- One oil plug is below the bottom of the cover cap and the other oil plug is above the bottom of cover cap.
- Both oil plugs are below the bottom of the cover cap.
- Both oil plugs are above the bottom of the cover cap.

The procedure to drain oil and remove the sun gear varies slightly as per the three possible positions.



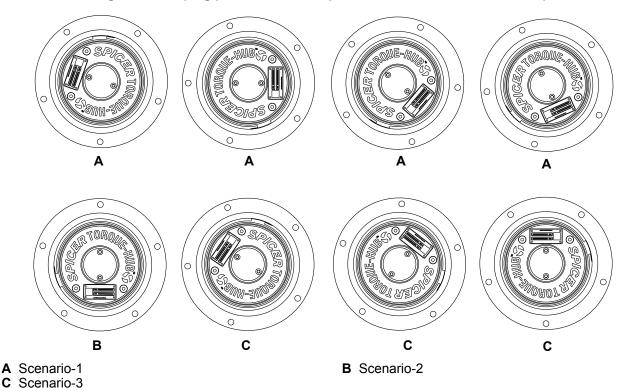


Figure 40. Oil plug positions with respect to the bottom of the cover cap

Before Starting the Procedure

▲ WARNING Make sure wheels chocks are installed to the wheels before releasing the park brake, otherwise the machine could roll away.

WARNING Take care when disconnecting hydraulic hoses and fittings as the oil will be hot.

1. Make the machine safe.

Refer to: Maintenance Positions (Page 82).

2. Allow the machine to cool.

Scenario-1

- 1. Remove the upper oil plug.
- 2. Remove the lower drain plug and drain the oil into a container.
 - 2.1. Measure the oil removed if it is not necessary to perform a complete oil change.
- 3. Install the oil plugs and tighten it to specified torque value.

Torque: 14.6-16.2N·m (10.8-11.9lb.ft)

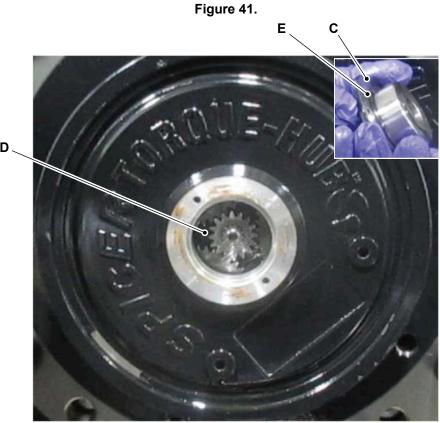
- 4. Use a 2.5mm hex wrench to remove the capscrew (x2). Refer to Figure 39.
- 5. Remove the cover cap.
 - 5.1. The O-ring should remain within the cover cap. Refer to Figure 41.
- 6. Use a magnet or plastic pliers to remove the sun gear from the gearbox.
 - 6.1. As the gearbox may be under some load, you may need to move the machine backward or forward to free the sun gear.
- 7. After the sun gear is removed, the unit will be in freewheel state.



8. Install the cover cap along with the O-ring and tighten the capscrew (x2) to the specified torque value. Refer to Figure 39.

Torque: 2.8-3.4N·m (2.1-2.5lb.ft)

- 9. Repeat steps 1 to 8 for the other wheel of the machine.
- 10. The machine can now be towed or pushed as required.



C Magnet E O-ring

D Sun gear

Scenario-2

In this case, remove both oil plugs at the bottom to drain the oil and continue with the rest of the steps of scenario 1.

Scenario-3

- 1. Remove the upper most oil plug to remove any pressure.
- 2. Use a 2.5mm hex wrench to remove the capscrew (x2).
- 3. Remove the cover cap and the drain oil into a container.
 - 3.1. Measure the oil removed if it is not necessary to perform a complete oil change.
- 4. Install the oil plug and tighten to the specified torque value.

Torque: 14.6-16.2N·m (10.8-11.9lb.ft)

- 5. Use a magnet or plastic pliers to remove sun gear from gearbox.
 - 5.1. As the gearbox may be under some load, you may need to move the machine backward or forward to free the sun gear.

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- 6. After the sun gear is removed, the unit will be in freewheel state.
- 7. Install the cover cap along with the O-ring and tighten the capscrew (x2) to the specified torque value.

Torque: 2.8-3.4N·m (2.1-2.5lb.ft)

- 8. Repeat steps 1 to 7 for the other wheel of the machine.
- 9. The machine can now be towed or pushed as required.

Re-engaging the Brakes

Either replace the same amount of oil removed or drain all oil out before re-installation of the sun gear for complete oil change. If you are re-using the removed oil, skip to step 2.

- 1. While still in freewheel mode, position one of the oil plugs to lower most position and drain the oil into a container.
- 2. While still in freewheel mode position both the plugs to the top most position.
- 3. Remove cover cap.
- 4. Use a magnet to install the sun gear into the gear mesh.
 - 4.1. If required, move the machine backward and forward to allow the splines and gear teeth to align with the sun gear.
 - 4.2. Once the sun gear is installed, the machine will not freewheel.
- 5. Install the cover cap along with O-ring and tighten the capscrew (x2) to the specified torque value.

Torque: 2.8-3.4N·m (2.1-2.5lb.ft)

- 6. Remove both the oil plugs.
- 7. Refill the same amount of oil removed previously or for complete oil drain, refill with the specified quantity of the approved oil.

Volume: 0.3L (0UKgal)

8. Install both the oil plugs and tighten to the specified torque value.

Torque: 14.6-16.2N·m (10.8-11.9lb.ft)

9. Repeat steps 1 to 8 for the other wheel of the machine.

(For: S1932E EDRV [RAJ], S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ], S4550E EDRV [RAJ], Electric Release)

Lower the Platform (Emergency Operation)

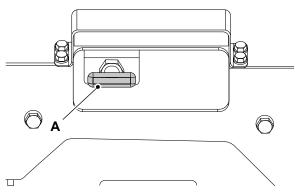
The lowering alarm does not sound while lowering but if the machine is switched on the fault alarm will sound due to lowering without electrical controls. Lowering may continue.

To lower the platform in emergency conditions:

- 1. Pull out the emergency lowering lever. Refer to Figure 42.
- 2. Release the lever to stop the operation.



Figure 42.



A Emergency lowering lever

Electric Brake Release (Through Platform Controller Menu)

WARNING Do not use the platform controller to release the platform when it is stuck, snagged or caught. In this case, use the ground controller only when there are no persons on the platform.

Notice: Following any incident, thoroughly inspect the machine. Do not raise the platform until you are sure that all damage has been repaired and that all controls are operating correctly. Test all functions first from the ground controller, then from the platform controller.

WARNING Make the machine safe. Make sure the park brake is engaged. Use wheel chocks to prevent unintentional movement of the wheels.

The brake can be released electrically in emergency situations by accessing the main menu as shown in the menu structure.

Refer to: Operating Levers/Pedals (Page 31).

When the Brake Release mode is active, the chassis display will show the following screen flashing at a rate of 0.5s.

Figure 43.



Also, when the Brake Release mode is active, the chassis buzzer will beep for 0.5s, then mute for 1s, and repeat.

When the E-stop is pressed or the ignition switch is operated, the brakes will be engaged again.

Electric Brake Release (Through Brake Release Switch, If Fitted)

A WARNING Make the machine safe. Make sure the park brake is engaged. Use wheel chocks to prevent unintentional movement of the wheels.

For model specific brake release switch illustrations, Refer to: Service Points (Page 85).

The brake can be released electrically by accessing the brake release switch inside the RH door. Refer to: Service Points (Page 85).

1. Make the machine safe with the platform lowered.

Refer to: Maintenance Positions (Page 82).



2. Put the machine in the chassis control mode.

Refer to: Getting the Machine Moving (Page 25).

- 3. Open the RH door.
- 4. To release the brake, press and hold the brake release switch for more than the specified duration, and an alarm will sound.

Duration: 3s

5. When brake release is active, 'BRK RELS' will flash on the base display.

When the Brake Release mode is active, the chassis display will show the screen flashing at a rate of 0.5s. Also, the chassis buzzer will beep for 0.5s, then mute for 1s, and repeat.

When the E-stop is pressed or the ignition switch is operated, the brakes will be engaged again.

Service Mode

The Service mode is only intended for use by an authorized and trained service engineers. It is not required for normal machine operation.



Lifting the Product

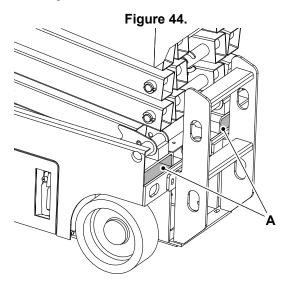
General

Lifting by Forklift

- ▲ **Notice:** Do not lift the machine from the side. Lifting the machine from the side will cause damage to the pothole protection system.
- 1. Make the machine safe with the platform lowered.
 - Refer to: Maintenance Positions (Page 82).
- 2. Check the extension platform, controller and chassis parts are correctly secured.
- 3. Remove any loose items from the machine.
- 4. Keep the machine in the lowered position while lifting with the forklift.
- 5. Use the forklift slots at the ladder side at the end of the machine.
 - 5.1. Align the forks with the forklift slots at the end of the machine.
 - 5.2. Drive the forklift forward until the forks carriage almost touches the ladder.
 - 5.3. When lifting the machine rotate the forks back slightly to ensure the machine will not slide off the forks. Travel with the machine at the specified distance from the ground.

Distance: 0.4m (½yd)

5.4. Level the forks before landing the machine.



A Forklift slots

Lifting by Hoist

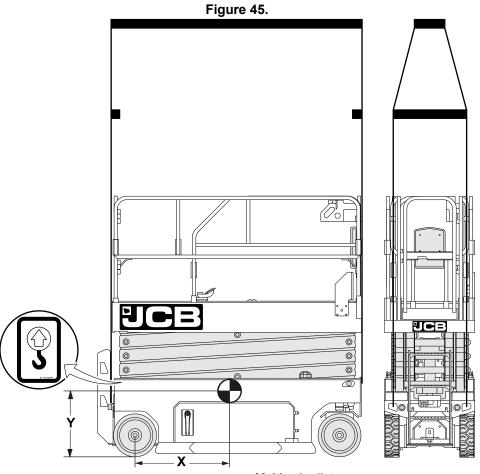
- 1. Make the machine safe with the platform lowered.
- 2. Check the extension platform, controller and chassis parts are correctly secured.
- 3. Remove any loose items from the machine.
- 4. Use the correct length of hoisting rope to prevent damage to the platform base and guardrail.
- 5. Make sure the hoist rigging is in the correct position. Adjust the hoist rigging to prevent machine damage and keep the machine in the level position.
 - 5.1. You must consider the location of the center of gravity on the machine, when you lift the machine. Refer to: Lifting Points (Page 62).



Lifting Points

Lifting by Hoist

Refer to: Lifting the Product (Page 61).



X X axis distance

Y Y axis distance

Table 5. Location of the Center of Gravity

Machine Model	X axis	Y axis	
S1932 EDRV	586mm (23in)	502mm (20in)	
S2632 EDRV	907mm (35½in)	658mm (26in)	
S2646 EDRV	808mm (32in)	610mm (24in)	
S3246 EDRV	844mm (33in)	688mm (27in)	
S4046 EDRV	842mm (33in)	720mm (28½in)	
S4550 EDRV	1,070mm (42in)	780mm (30½in)	



Transporting the Product

General

▲ WARNING The safe transit of the load is the responsibility of the transport contractor and driver. Any machine, attachments or parts that may move during transit must be adequately secured.

CAUTION Before moving the machine onto the trailer, make sure that the trailer and ramp are free from oil, grease and ice. Remove oil, grease and ice from the machine tires. Make sure the machine will not foul on the ramp angle.

Check the condition of the transport vehicle before the machine is loaded on to its trailer.

Make sure that the transport trailer is suitable for the dimensions and weight of your machine.

Before transporting the machine make sure you will be obeying the local rules and laws regarding machine transportation of all the areas that the machine will be carried through.

Loading onto the Transporting Vehicle

Make sure that platform controller is correctly secured. Secure the platform controller to the guardrail at the mounting position provided in the front right corner of the platform. Insert a bolt through the controller cradle into the threaded hole provided.

Lifting the Machine onto the Transporting Vehicle/Trailer

- 1. Turn the machine off and remove the key.
- 2. Remove any loose items from the machine.
- 3. Place the blocks at the front and rear of the trailer wheels.
- 4. Lift the machine on to the trailer.
- 5. Put blocks at the front and rear of all four wheels. Make sure they are securely in place.
- 6. Measure the maximum height of the machine from the ground. Make sure the truck driver knows the clearance height before he drives away.
- 7. If required remove the lock pins from all four corners of the platform and fold the guardrails.
- 8. Secure the machine to the trailer bed with suitable chains. Use the tie down points indicated by the safety decals.

Refer to: Tie Down Points (Page 64).

Driving the Machine onto the Transporting Vehicle/Trailer

- 1. Put the blocks at the front and rear of the trailer wheels.
- 2. Lower the ramps and check for suitability.

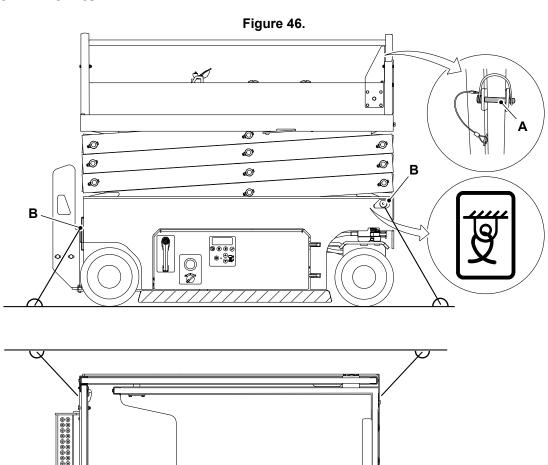
Refer to: Performance Dimensions (Page 124).

- 3. Check the condition and security of the trailer side rails to make sure that the machine cannot be driven off the trailer.
- 4. Drive the machine onto the trailer and position it taking into account the load distribution.
- 5. Put blocks at the front and rear of all four wheels. Make sure they are secure in place.
- 6. Turn the machine off and remove the key.
- 7. Remove any loose items from the machine.
- 8. Measure the maximum height of the machine from the ground. Make sure the truck driver knows the clearance height before he drives away.
- 9. If required remove the lock pins from all four corners of the platform and fold the guardrails.



10. Secure the machine to the trailer bed with suitable chains. Use the tie down points indicated by the decals.

Tie Down Points



A Lock pin B Tie down point



Operating Environment

General

In low and high temperature conditions, take the following precautions. They will make it easier to operate and prevent possible damage to your machine.

The machine has been designed to operate in atmospheric temperatures between -12°C (10.4°F) and 46°C (114.7°F).

Before calibrating the platform overload system at No Load and Full Load, check that the ambient temperature is above 0°C (32.0°F).

When the machine is operated below freezing ambient temperatures, the overload detection system may show reduction in available capacity.

If the machine is operated in different temperature zones and the temperature difference is more than 15°C (59.0°F), full calibration is recommended for the optimum performance.

Refer to: Operating Levers/Pedals (Page 31).

If any problem persists, contact your JCB dealer for a full machine recalibration at the operating ambient temperatures.



Nata		
Notes:		



Preservation and Storage Cleaning

General

WARNING When using cleaning agents, solvents or other chemicals, you must adhere to the manufacturer's instructions and safety precautions.

WARNING Airborne particles of light combustible material such as straw, grass, wood shavings, etc. must not be allowed to accumulate within the battery compartment. Examine these areas frequently and clean at the beginning of each work shift or more often if required. Before opening the battery cover, make sure that the top is clear of debris.

CAUTION To avoid burning, wear personal protective equipment when handling hot components. To protect your eyes, wear goggles when using a brush to clean components.

Notice: Cleaning metal parts with incorrect solvents can cause corrosion. Use only recommended cleaning agents and solvents.

Notice: The efficiency of the rams will be affected if they are not kept free of solidified dirt. Clean dirt from around the rams regularly. When leaving or parking the machine, close all rams if possible to reduce the risk of weather corrosion.

Notice: Never use water or steam to clean inside the battery compartment. The use of water or steam could damage the machine electrics and render the machine inoperable. Remove dirt using a brush or damp cloth.

Clean the machine with water and/or steam. Do not allow mud, debris etc. to collect on the machine.

Before you do any service procedures that require components to be removed:

- The cleaning must be done either in the area of components to be removed, or in the case of major work, the whole machine must be cleaned.
- When cleaning is complete, move the machine away from the wash area or alternatively, remove the material washed from the machine.

When you remove components, be aware of exposure to dirt and debris. Cover any open ports and remove the deposits before proceeding.

Refer to the individual clean procedures throughout the Maintenance section. Refer to: Maintenance Schedules (Page 77).

Detergents

Do not use a full strength detergent. Always dilute the detergents as per the manufacturer's recommendations, or damage to the paint finish can occur.

Always obey the local regulations regarding the disposal of debris created from cleaning the machine.

Pressure Washing and Steam Cleaning

▲ CAUTION When using a steam cleaner, wear safety glasses or a face shield as well as protective clothing. Steam can cause personal injury.

Notice: The battery and other electrical components could be damaged by high pressure washing systems. Special precautions must be taken if the machine is to be washed using a high pressure system.

Do not directly pressure wash the electrical components (including wheel motors and platform controller). Use a low pressure washer and brush to remove dried mud or dirt.

Use a steam cleaner to remove soft dirt and oil.

When cleaning around decals:

- Ensure the water pressure is kept below 138bar (2,001.5psi).
- Keep water temperature below 80°C (175.9°F).



- Use a spray nozzle with a 40° wide angle spray pattern. Keep the nozzle at least 300mm (12in) away from and perpendicular (at 90° degrees) to the decal.

The machine must always be greased (if appropriate) after pressure washing or steam cleaning.



Storage

General

A long period of inactivity can be extremely harmful to lead acid batteries. When placing a battery into storage, follow the procedure below to ensure that the battery remains healthy and ready for use.

You can store, charge or operate the batteries on a concrete floor.

Avoid locations where freezing temperature are expected. Keeping a battery at a high state of charge will also prevent freezing. Freezing results in irreparable damage to the battery's plates and container.

Storage Procedure

- 1. Completely charge the battery before storing.
- 2. Store the battery in cool, dry location, and protected from the elements.
- 3. Always disconnect the battery isolator for long term storage.
- 4. During storage monitor the specific gravity (flooded) or voltage. Batteries in storage should give a boost charge when they show a 70% charge or less.
- 5. Completely charge the battery before re-activating.
- 6. For optimum performance, equalize the batteries (flooded) before putting them back into service.

Table 6. Freezing Point of Electrolyte

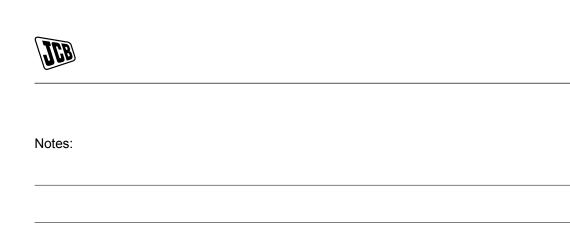
Specific Gravity	Temperature	
1.280	-68.9°C (-91.9°F)	
1.265	-57.4°C (-71.2°F)	
1.250	-52.2°C (-61.9°F)	
1.200	-26.6°C (-15.8°F)	
1.150	-15°C (5.0°F)	
1.100	-7.2°C (19.1°F)	

Hot Climate Storage

Storage in hot environment (greater than 32°C (89.6°F)) can negatively impact the batteries. Avoid direct exposure to heat sources, if possible, during storage. Batteries self discharge faster at higher temperatures. If batteries are stored during hot summer months, monitor state of charge regularly. Check the battery specific gravity or voltage every 2-4 weeks.

Take out of Storage

After long-term storage, it is recommended to service the machine before operation. For more information contact your JCB dealer.





Maintenance Introduction

General

Your machine has been designed and built to give maximum performance, economy and ease of use under a wide variety of operating conditions. Prior to delivery, your machine was inspected both at the factory and by your dealer to make sure that it reaches you in optimum condition. To maintain this condition and trouble free operation it is important that the routine services and maintenance, as specified in this manual, are done at the recommended specified intervals and it is recommended that this is done by an approved JCB dealer using genuine JCB parts. Servicing/repairs carried out by unauthorized personnel or the use of non-genuine inferior quality parts could limit machine warranty.

After completing any routine servicing, maintenance or repairs you must complete the functional checks according to the maintenance schedule.

This section of the manual gives full details of the service requirements necessary to maintain your JCB machine at peak efficiency.

It can be seen from the service schedules on the following pages that many essential service checks must only be done by a JCB trained specialist competent person. JCB dealer service engineers have been trained by JCB to do such specialist tasks, and are equipped with the necessary special tools and test equipment to do such tasks, thoroughly, safely, accurately and efficiently.

JCB regularly updates its dealers to advise them of any machine developments, changes in specifications and procedures. Therefore only a JCB dealer is fully able to safely service the machine to the latest requirements, which makes them best placed to maintain and service your machine.

A service record sheet or book is provided at the back of this publication which will enable you to plan your service requirements and keep a service history record. It must be dated, signed and stamped by your dealer each time your machine is serviced.

Remember, if your machine has been correctly maintained, not only will it give you improved reliability but its resale value will be greatly enhanced.

When the machine is removed from service, local regulations for machine decommissioning and disposal will vary. Contact your nearest JCB dealer for further information.

Owner/Operator Support

JCB together with your dealer wants you to be completely satisfied with your new JCB machine. However, if you do have a problem, you can contact your dealer's service department who are there to help you!

You will have been given the names of the relevant service contacts at your dealer when the machine was supplied.

To get the most from your dealer please help them to satisfy you by providing them with:

- 1. Your name, address and telephone number.
- 2. Your machine model and serial number.
- 3. The date of purchase and hours of work.
- 4. The nature of the problem.

Remember, only your JCB dealer has access to the vast resources available at JCB to help support you. In addition, your dealer is able to offer a variety of programs covering warranty, fixed price servicing, safety inspections, including weight tests, covering both legal and insurance requirements.

It is machine owner's responsibility to ensure that the maintenance is carried out properly in accordance with the requirement of this manual.



Service/Maintenance Agreements

To help plan and spread the costs of maintaining your machine, we strongly recommend you take advantage of the many service and maintenance agreements your dealer can offer. These can be tailor made to meet your operating conditions, work schedule etc.

Please consult your JCB dealer for details.

Obtaining Spare Parts

If you use non-genuine JCB parts or consumables, they could cause compatibility issues, malfunctions or failures. The health and safety of the operator and bystanders could be compromised.

A parts book for your machine is available from your JCB dealer. The parts book will help you identify parts and order them from your JCB dealer.

Your dealer will need to know the exact model, build and serial number of your machine. Refer to: Product and Component Identification (Page 9).

The data plate also shows the serial numbers of the engine, transmission and axle(s), where applicable. Remember, if any of these units have been changed, the serial number on the data plate may be wrong. Check on the unit itself.



Maintenance Safety

General

Raised Machine

Never position yourself or any part of your body inside the raised scissor pack which is not correctly supported. If the machine moves unexpectedly you could become trapped and suffer serious injury or be killed.

Compressed Air

Compressed air is dangerous. Wear personal protective equipment. Never point a compressed air jet at yourself or others.

Springs

Always wear personal protective equipment when dismantling assemblies containing components under pressure from springs. This will protect against eye injury from components accidentally flying out.

Metal Splinters

You can be injured by flying metal splinters when driving metal pins in or out. Use a soft faced hammer or copper drift to remove and install metal pins. Always wear personal protective equipment.

Repairs

If your machine does not function correctly in any way, get it repaired straight away. Neglect of necessary repairs could result in an accident or affect your health. Do not try to do repairs or any other type of maintenance work you do not understand. To avoid injury and/or damage get the work done by a specialist engineer.

Hydraulic Pressure

Hydraulic fluid at system pressure can injure you. Before connecting or removing any hydraulic hose, residual hydraulic pressure trapped in the service hose line must be vented. Make sure the hose service line has been vented before connecting or removing hoses. Make sure the machine cannot be started while the hoses are open.

'O' rings, Seals and Gaskets

Badly installed, damaged or rotted 'O' rings, seals and gaskets can cause leakages and possible accidents. Renew whenever disturbed unless otherwise instructed. Do not use Trichloroethane or paint thinners near 'O' rings and seals.

Soft Ground

A machine can sink into soft ground. Never work under a machine on soft ground.

Working Under the Machine

Make the machine safe. Make sure the park brake is engaged and machine is fully isolated. Remove the machine key switch, disconnect the battery. Use blocks to prevent unintentional movement of the wheels.

Hydraulic Hoses

Never re-use hydraulic hose end crimps or use reusable hose end crimps.

Personal Protective Equipment

Use the appropriate personal protective equipment before performing maintenance on the machine, otherwise you could be injured.

Working at Height

Use appropriate access equipment such as ladders or a working platform if it is necessary to work at height to perform maintenance tasks on the machine. If you do not use suitable access equipment there is a risk of falling, resulting in personal injury or death.

Fluids and Lubricants

Fluid Under Pressure

Fine jets of fluid at high pressure can penetrate the skin. Keep face and hands well clear of fluid under pressure and wear personal protective equipment. Hold a piece of cardboard close to suspected leaks and then examine the cardboard for signs of fluid. If fluid penetrates your skin, get medical help immediately.



Hygiene

JCB lubricants are not a health risk when used correctly for their intended purposes.

However, excessive or prolonged skin contact can remove the natural fats from your skin, causing dryness and irritation.

Low viscosity oils are more likely to do this, so take special care when handling used oils, which might be diluted with fuel contamination.

Whenever you are handling oil products you must maintain good standards of care and personal and plant hygiene. For details of these precautions we advise you to read the relevant publications issued by your local health authority, plus the following.

Storage

Always keep lubricants out of the reach of children.

Never store lubricants in open or unlabeled containers.

Waste Disposal

A CAUTION It is illegal to pollute drains, sewers or the ground. Clean up all spilt fluids and/or lubricants.

Used fluids and/or lubricants, filters and contaminated materials must be disposed of in accordance with local regulations. Use authorized waste disposal sites.

CAUTION Damaged or spent batteries and any residue from fires or spillage must be put in a suitable closed receptacle and must be disposed of in accordance with local environmental waste regulations.

All waste products must be disposed of in accordance with all the relevant regulations.

The collection and disposal of used hydraulic oil must be in accordance with any local regulations. Never pour used hydraulic oil into sewers, drains or on the ground.

Handling

New Oil

There are no special precautions needed for the handling or use of new oil, beside the normal care and hygiene practices.

Used Oil

Here are precautions to protect your health when handling used hydraulic oil:

- Avoid prolonged, excessive or repeated skin contact with used oil
- Apply a barrier cream to the skin before handling used oil. Note the following when removing hydraulic oil from skin:
 - · Wash your skin thoroughly with soap and water
 - Using a nail brush will help
 - Use special hand cleansers to help clean dirty hands
 - Never use gas, diesel fuel, or paraffin for washing
- Avoid skin contact with oil soaked clothing
- Don't keep oily rags in pockets
- Wash dirty clothing before re-use
- Throw away oil-soaked shoes

First Aid - Oil

Eyes

In the case of eye contact, flush with water for 15min. If irritation persists, get medical attention.



Swallowing

If oil is swallowed do not induce vomiting. Get medical advice.

Skin

In the case of excessive skin contact, wash with soap and water.

Spillage

Absorb with sand or a locally approved brand of absorbent granules. Scrape up and remove to a chemical disposal area.

Fires

▲ WARNING Do not use water to put out an oil fire. This will only spread it because oil floats on water. Extinguish oil and lubricant fires with carbon dioxide, dry chemical or foam.

Batteries

Warning Symbols

▲ DANGER Set all switches to off before disconnecting and connecting the battery. When disconnecting the battery, take off the earth (-) lead first.

When reconnecting, attach the positive (+) lead first.

DANGER Batteries give off explosive gases. Keep flames and sparks away from the battery. Do not smoke close to the battery. Make sure there is good ventilation in closed areas where batteries are being used or charged. Do not check the battery charge by shorting the terminals with metal. Use a hydrometer or voltmeter.

WARNING Do not connect the charger when the batteries are not connected. Doing so could result in danger of live terminals from the charger.

Do not carry out maintenance on a machine whilst the charger is connected to an external power supply (i.e. do not work on a live machine). Cables from the charger to the batteries may remain live even if the batteries are disconnected/removed from the machine. There is a risk of serious electrical shock.

Always disconnect all external power supplies to the machine before carrying out maintenance.

WARNING Battery electrolyte is toxic and corrosive. Do not breathe the gases given off by the battery. Keep the electrolyte away from your clothes, skin, mouth and eyes. Wear safety glasses.

CAUTION Understand the electrical circuit before connecting or disconnecting an electrical component. A wrong connection can cause injury and/or damage.

CAUTION Damaged or spent batteries and any residue from fires or spillage must be put in a suitable closed receptacle and must be disposed of in accordance with local environmental waste regulations.

The following warning symbols may be found on the battery.

Figure 47.













A Keep away from children

C No smoking, no naked flames, no sparks

B Shield eyes

D Explosive gas



E Battery acid

F Note operating instructions

First Aid - Electrolyte

Eyes

In the case of eye contact, flush with water for 15min. always get medical attention.

Swallowing

Do not induce vomiting. Drink large quantities of water or milk. Then drink milk of magnesia, beaten egg or vegetable oil. Get medical help.

Skin

Flush with water, remove affected clothing. Cover burns with a sterile dressing then get medical help.



Maintenance Schedules

General

WARNING Maintenance must be done only by suitably qualified and competent persons.

Before doing any maintenance make sure the machine is safe, it must be correctly parked on solid, level ground.

To prevent anyone starting the machine, remove the key. Disconnect the battery (by means of the battery isolator if installed) when you are not using electrical power. If you do not take these precautions you could be killed or injured.

A badly maintained machine is a danger to the operator and the people working around the operator. Make sure that the regular maintenance and lubrication tasks listed in the service schedules are done to keep the machine in a safe and efficient working condition.

Apart from the daily tasks, the schedules are based on time. Keep a regular check on the hourmeter readings to monitor the hourmeter equivalents. When there is no hourmeter installed, use the calendar equivalents to determine the service intervals.

Do not use a machine which is due for a service. Make sure any defects found during the regular maintenance checks are corrected immediately.

How to Use the Maintenance Schedules

The schedules show the service tasks which must be done and their intervals.

The services must be done at either the hourly interval or the calendar equivalent, whichever occurs first.

The intervals given in the schedules must not be exceeded. If the machine is operated under severe conditions (high temperature, dust, water, etc.) shorten the intervals. Where local regulations require more frequent checks, the local regulations intervals should be followed.

Table 7.

0	Service task can be completed by a competent operator. Details of how to complete the service task are given in the Operator's Manual.
	We recommend that a Service Engineer completes the service task. Details of how to complete the service task are given in the Service Manual.

Maintenance Intervals

Table 8.

Interval (h)	Calendar Equivalent
5	Daily
20	Weekly
250	Three months
500	Six months
1000	Yearly
2000	Two years

Operator Maintenance Tasks

Table 9.

Component	Task	Daily	Weekly
Operator platform	Check (condition)	0	0
Operator platform and chassis sliding block ⁽¹⁾	Check (condition and grease)	0	0



Component	Task	Daily	Weekly
Safety labels	Check (condition)	0	0
Hydraulic hoses	Check (condition)	0	0
Hydraulic oil	Check (lev- el)	0	0
Hydraulic oil	Check (leaks)	0	0
Ventilation system - hydraulic tank	Check (operation)	0	0
Battery electrolyte	Check (lev- el)	0	0
Battery electrolyte	Check (leaks)	0	0
Battery leads	Check (condition)	0	0
All electrical cables and conductors	Check (condition)	0	0
AC power to platform and charger cables	Visual inspec- tion/check (operation)	0	0
Equipotential bond cables damage ⁽²⁾	Check (condition)		0
Welds	Check (condition)	0	0
Machine damage, missing parts	Check (condition)	0	0
Fasteners	Check (condition)	0	0
Lateral guard rail	Check (condition)	0	0
Wheel nut	Check (condition)	0	0
Wheel rim and tire	Check (condition)	0	0
Tilt sensor	Check (condition)	0	0
Pothole protection system	Check (condition)	0	0
Lanyard anchor point on platform	Check (condition)	0	0
Ground controller			
Emergency stop	Check (operation)		0
Platform raise and lower functions	Check (operation)	0	0
Platform emergency lowering	Check (operation)	0	0
Ignition switch	Check (operation)	0	0
Platform controller			
Emergency stop	Check (operation)	0	0



Component	Task	Daily	Weekly
Platform raise and lower functions	Check (operation)	0	0
Horn	Check (operation)	0	0
Steering	Check (operation)	0	0
Drive and brake	Check (operation)	0	0
General	,	'	
Limited driving speed (with platform lifted and stowed)	Check (operation)	0	0
Tilt sensor	Check (operation)	0	0
Pothole protection system	Check (operation)	0	0

Service Engineer Maintenance Tasks

Table 10.

Component	Task	3 Months	6 Months	Yearly	2 Years
Operator platform	Check (con- dition)				
Safety labels	Check (condition)				
Hydraulic hoses	Check (condition)				
Hydraulic oil	Check (lev- el)				
Hydraulic oil	Check (condition)				
Hydraulic oil	Check (leaks)				
Hydraulic oil	Replace				
Hydraulic return filter	Replace				
Vent filter - hydraulic tank	Check (condition)				
Vent filter - hydraulic tank	Replace				
Wheel Motor Oil ⁽¹⁾	Replace				
Battery electrolyte	Check (lev- el)				
Battery electrolyte	Check (leaks)				
Battery leads	Check (condition)				
All electrical cables and conductors	Check (condition)				
Equipotential bond cables resistance ⁽²⁾	Check (condition)				
Welds	Check (condition)				

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⁽¹⁾ Check grease, apply if required.(2) Check condition and replace if damaged (yellow/green and braided equipotential bond earthing cables).



Component	Task	3 Months	6 Months	Yearly	2 Years
Machine damage, missing parts	Check (condition)				
Fasteners	Check (condition)				
Lateral guard rail	Check (condition)				
Scissor base & basket sliders	Check (condition)				
Wheel rim and tire	Check (condition)				
Lift ram(s)	Grease				
Steer pivots	Grease				
Scissor base slider	Grease				
Scissor basket slider	Grease				
Scissor arm bush	Check (condition)				
Wheel nut	Check (condition)				
Tilt sensor	Check (condition)				
Pothole protection system	Check (condition)				
Lanyard anchor point on platform	Check (condition)				
Ground controller					
Emergency stop	Check (operation)				
Platform raise and lower functions	Check (operation)				
Platform emergency lowering	Check (operation)				
Ignition switch	Check (operation)				
Platform controller					
Emergency stop	Check (operation)				
Platform raise and lower functions	Check (operation)				
Horn	Check (operation)				
Steering	Check (operation)				
Drive and brake	Check (operation)				
General					
Limited driving speed (with platform lifted and stowed)	Check (operation)				
Tilt sensor	Check (operation)				
Pothole protection system	Check (operation)				



Component	Task	3 Months	6 Months	Yearly	2 Years
Ventilation system- hydraulic tank	Check (operation)				
Overload system	Check (operation)				
Hydraulic system pressure	Check (set- tings)				
Hydraulic system functional test	Check (operation)				
Overload test	Check (operation)				
AC (Alternating Current) power to platform and charger cables	Visual in- spection				
AC power to platform and charger cables	Check (operation)				

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⁽¹⁾ An initial oil change should be made after the first 50 Hours only, to be completed by your JCB Distributor. (2) Check resistance from ground to the protective earth in the on board charger plug to be no greater than 0.2 ohms.



Maintenance Positions

General

Make the machine safe before you start a maintenance procedure.

- 1. Park the machine on level, solid (slabbed/paved) ground.
- 2. Turn off the machine and remove the key.
 - Refer to: Control Layouts (Page 31).
- 3. Disconnect the battery to prevent accidental operation.
 - Refer to: Battery Isolator (Page 22).
- 4. Put wheel chocks on the front or rear side of all wheels.

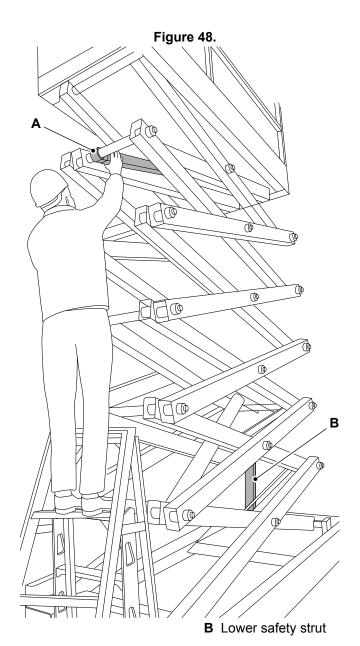
Maintenance Position- Platform Raised

▲ WARNING If a second person is involved with the operation ensure that the machine controls are not operated whilst they are in the working envelope of the machine and attachment, otherwise the other person could be killed or injured if a control is moved accidentally.

Make sure that the safety strut is installed before performing any maintenance task on a raised platform.

When installing the upper safety strut always maintain three points of contact with the ladder and scissor end bars. Use the scissor end bars as handrails.





A Upper safety strut

The minimum clearance height required to install the safety struts is shown. Refer to Table 11.

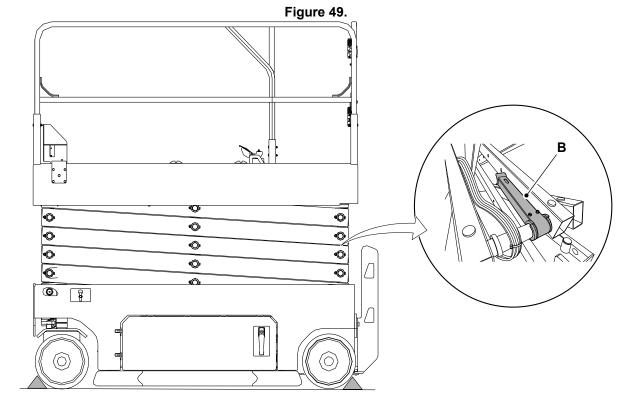
Table 11.

Machine	Length
S1932 EDRV	3.61m (12ft)
S2632 EDRV	3.75m (12½ft)
S2646 EDRV	3.75m (12½ft)
S3246 EDRV	4.2m (14ft)
S4046 EDRV	4.6m (15ft)
S4550 EDRV	4.6m (15ft)

Maintenance Position- Platform Lowered

Make sure that the safety strut is in its stowed position before lowering the platform.





B Safety strut stowage position



Service Points

General

For: S1932E EDRV [RAJ]	Page 85
For: S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ	۸J]
	Page 87
For: S4550E EDRV [RAJ]	-

(For: S1932E EDRV [RAJ])

Hydraulic Compartment

6

Figure 50. В

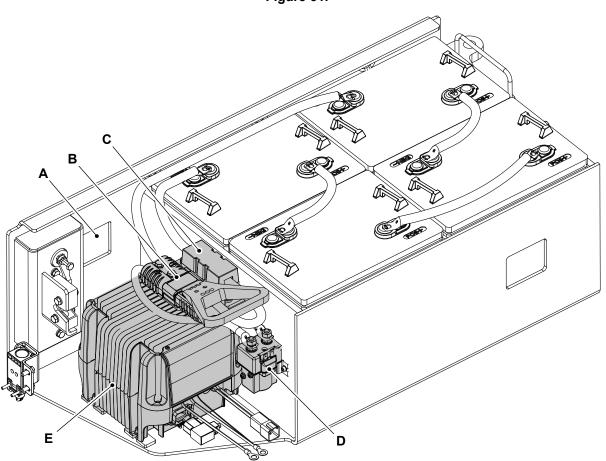
- **A** Motor
- C Hydraulic breather
 E Hydraulic oil filler cap
 G Hydraulic oil filter
- J ECU (Electronic Control Unit)
- L Motor controller / inverter
- N Park brake release decal (if fitted)

- B Gear pump
 D Hydraulic tank
 F Secondary fuses
 H Valve block
- **K** Ground control panel
- M Brake release switch (if fitted)



Battery Compartment

Figure 51.



- A Battery charger status sight holeC Primary fuse (200A rating)E Battery charger

- B Battery isolatorD DC (Direct Current) contactor



(For: S2632E EDRV [RAJ], S2646E EDRV [RAJ], S3246E EDRV [RAJ], S4046E EDRV [RAJ])

Hydraulic Compartment

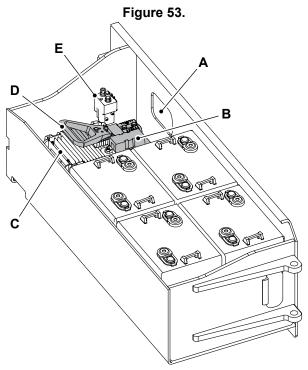
Figure 52. В H G Ε

- A Gear pumpC Hydraulic oil filler cap
- E Hydraulic oil filter
- **G** Motor
- **J** Motor controller / inverter
- L Ground control panel
- **N** Park brake release decal (if fitted)

- B Hydraulic breatherD Hydraulic tank
- **F** Secondary fuses
- **H** Valve block
- **K** ECU
- M Brake release switch (if fitted)



Battery Compartment



- A Battery charger status sight holeC Battery chargerE DC contactor

- B Primary fuse (200A rating)D Battery isolator



(For: S4550E EDRV [RAJ])

Hydraulic Compartment

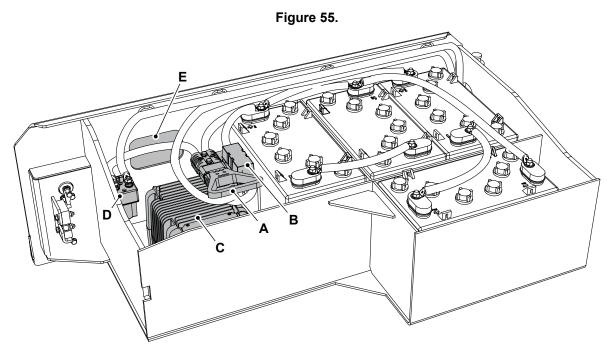
Figure 54. R

- A Motor controller
- C Motor
- E Gear pump
 G Hydraulic breather
 J Display switch
- L Hydraulic tank
- N Fuse
- **Q** Brake release switch (if fitted)

- **B** Relay **D** ECU
- White noise reverse alarm
- **H** Horn
- K Hydraulic oil filler capM Hydraulic oil filter
- P Válve block
- R Park brake release decal (if fitted)



Battery Compartment



- A Battery isolatorC Battery chargerE Battery charger status sight hole

- B Primary fuse (200A rating)D DC contactor



Access Apertures

General

▲ WARNING The hydraulic and battery components will be hot after the unit has been running. Allow the components to cool before servicing the unit otherwise you could be burned.

When moved to their maintenance position, the access panels give access to parts or areas of the machine that are not required during machine operation.

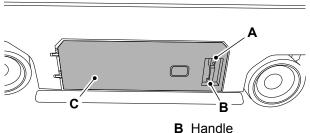
Before you operate the machine, make sure that all of the access panels are correctly in their closed or installed positions.

Battery Cover

Open

- 1. Make the machine safe.
- 2. Remove the key from the machine.
- 3. Use the key to unlock the battery compartment door.
- 4. Press the lock and pull the handle to open the door. Refer to Figure 56.

Figure 56.



A LockC Battery compartment door

Close

- 1. Close the battery compartment door.
- 2. Make sure the door is closed correctly.
- 3. Use the key to lock the door. Refer to Figure 56.

Hydraulic Compartment Cover

Open

- 1. Make the machine safe.
- 2. Remove the key from the machine.
- 3. Use the key to unlock the hydraulic compartment door.
- 4. Press the lock and pull the handle to open the door.



Figure 57.

A

C

B Handle

A LockC Hydraulic compartment door

Close

- 1. Close the hydraulic compartment door.
- 2. Make sure the door is secured correctly.
- 3. Use the key to lock the door.



Body and Framework

General

Check (Condition)

- 1. Make sure that all of the guards and protective devices are in position, secured by their locking devices and free from damage.
- 2. Inspect all of the steelwork for damage. Include the following:
 - 2.1. Examine all of the pivot point welds.
 - 2.2. Examine the condition of all the pivot pins.
 - 2.3. Check that the pivot pins are correctly in position and secured by their locking devices.
- 3. Check the steps and guardrails are undamaged and correctly attached.
- 4. Check that all of the safety and instructional labels are undamaged and in position. Install new labels where necessary.
- 5. Note any damaged paintwork for future repair.
- 6. Inspect the machine for broken or loose fasteners.
- 7. Raise the platform until pot hole protection is activated.
- 8. Check the condition of the pothole protection bars and the pothole protection decal.



Safety Equipment

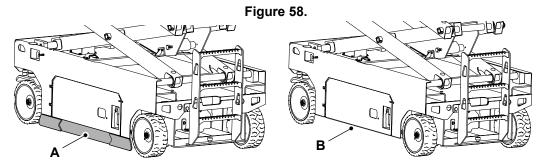
Check (Operation)

If any of the safety equipment is defective stop using the machine until the defect has been rectified.

Pot Hole Protection System

The pot hole protection system should be activated when the platform elevated. The pot hole protection system is monitored by two limit switches to ensure correct deployment. If the pothole protection system does not activate the alarm will sound and the platform will not raise any higher.

- 1. Raise the platform.
- 2. Install the safety strut.
- 3. The pot hole protection plates must automatically unfold within few seconds of each other.
- 4. Inspect the pothole protection plates on both sides of the chassis. The plates should be stowed fully to the vertical position.
- 5. Inspect the linkages inside the compartments on both sides of the chassis. The linkages should be connected, with no visible signs of damage.
- 6. Remove the safety strut.
- 7. Lower the platform.
- 8. The pot hole protection plates should automatically fold.
- 9. Place an obstacle under the plate on each side. Start with left side and repeat same for right side.
- 10. Raise the platform. The platform should automatically stop when the plate cannot be deployed. Check the reaction: the alarm should sound at the platform controller and the chassis, the lights should flash on the chassis and the LCD (Liquid Crystal Display) displays should show "18".



A Pot hole protection plate - unfold position

B Pot hole protection plate - fold position

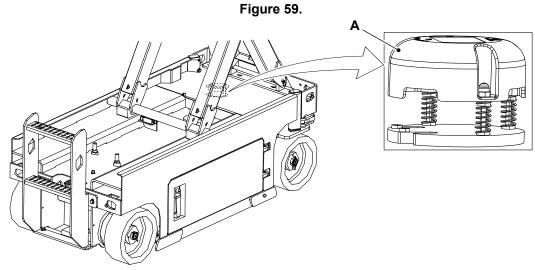
Tilt Sensor

- 1. Raise the platform.
- 2. Install the safety strut.
- 3. With your hand push the tilt sensor down on one side until the sensor is tilted at its highest angle. Hold the tilt sensor down for at least the duration specified. Check the reaction: the alarm should sound at the platform controller and the chassis, the lights should flash on the chassis and the LCD displays should show "LL".

Duration: 1.5s

4. Keep clear of material and debris which can be trapped in the tilt sensor affecting it's performance. Keep the chassis clean.





A Tilt sensor

Driving

Make a note of the following.

- The correct drive function is necessary for safe machine operation.
- The drive function must respond quickly and smoothly to operator control.
- The drive performance must be free of hesitation, jerking and unusual noise over the entire proportionally controlled speed range.
- Do this procedure with the machine on a firm, level surface that is free of obstructions.

You must check the platform for correct operation in three different modes as follows.

Hare Speed and Platform in Stowed Position

1. Make the machine safe with the platform stowed.

Refer to: Maintenance Positions (Page 82).

2. Put marks on the ground for start and finish lines. Make sure that the distance between the lines is as specified.

Length/Dimension/Distance: 10m (11yd)

- 3. Turn the ignition switch to platform control position.
- 4. Pull out the ground emergency stop button to the ON position.
- 5. Pull out the platform emergency stop button to the ON position.
- 6. Make a note of the point on the machine (contact patch of a tire) as a visual reference when you cross the test line.
- 7. Make sure that the tortoise drive speed light is in OFF position.
 - 7.1. If the tortoise drive speed light is ON, press the drive speed select button to turn OFF the tortoise drive speed function.
- 8. Press the drive function button (if installed).
- 9. Press and hold the drive/steer function enable switch on the control handle.
- 10. Move the control lever in the forward direction.
- 11. Bring the machine to top drive speed before you reach the start line.
- 12. Start the timing when the selected reference point on the machine crosses the start line.



- 13. Continue at full speed and note the time when your reference point on the machine passes the finish line.
- 14. Make sure that the values are within the specified limits.

Refer to: Driving Performance (Page 124).

Tortoise Speed and Platform in Stowed Position

1. Make the machine safe with platform stowed.

Refer to: Maintenance Positions (Page 82).

2. Put marks on the ground for start and finish lines. Make sure that the distance between the lines is as specified.

Length/Dimension/Distance: 10m (11yd)

- 3. Turn the ignition switch to platform control position.
- 4. Pull out the ground emergency stop button to the ON position.
- 5. Pull out the platform emergency stop button to the ON position.
- 6. Make a note of the point on the machine (contact patch of a tire) as a visual reference when you cross the test line.
- 7. Make sure that the tortoise drive speed light is in ON position.
 - 7.1. If the tortoise drive speed light is OFF, press the drive speed select button to turn ON the tortoise drive speed function.
- 8. Press the drive function button.
- 9. Press and hold the drive/steer function enable switch on the control handle.
- 10. Move the control lever in the forward direction.
- 11. Bring the machine to top drive speed before you reach the start line.
- 12. Start the timing when the selected reference point on the machine crosses the start line.
- 13. Continue at full speed and note the time when your reference point on the machine passes the finish line.
- 14. Make sure that the values are within the specified limits.

Refer to: Driving Performance (Page 124).

Platform in Elevated Position

When the platform is elevated, the machine automatically goes to the tortoise speed mode.

1. Make the machine safe.

Refer to: Maintenance Positions (Page 82).

2. Put marks on the ground for start and finish lines. Make sure that the distance between the lines is as specified.

Length/Dimension/Distance: 10m (11yd)

- 3. Turn the ignition switch to platform control position.
- 4. Pull out the ground emergency stop button to the ON position.
- 5. Pull out the platform emergency stop button to the ON position.
- 6. Raise the platform to the specified height above the ground.
- 7. Make sure that pothole protection system activates.



- 8. Make a note of the point on the machine (contact patch of a tire) as a visual reference when you cross the test line.
- 9. Press the drive function button.
- 10. Press and hold the drive/steer function enable switch on the control handle.
- 11. Move the control lever in the forward direction.
- 12. Bring the machine to top drive speed before you reach the start line.
- 13. Start the timing when the selected reference point on the machine crosses the start line.
- 14. Continue at full speed and note the time when your reference point on the machine passes the finish line.
- 15. Calculate the speed of the machine.
- 16. Make sure that the speed is as specified limits.

Refer to: Driving Performance (Page 124).



Brakes

Park Brake

Check (Operation)

The brakes must be able to hold the machine on any slope it is able to climb. Refer to: Driving on Slopes (Page 28).

If the machine fails to hold, stop using the machine and contact your JCB dealer.

Service Brake

Check (Operation)

You must check the brakes for correct operation at regular intervals. The correct brake function is necessary for safe machine operation.

The brake function must operate smoothly, free of hesitation, jerking and unusual noise.

To test the brake function perform the procedure below with the machine on a firm, level surface that is free of obstructions.

- 1. Make the machine safe with the platform lowered.
- 2. Make sure that the platform extension is in the fully retracted position.
- 3. Put a mark on the ground to use as a test line.
- 4. Turn the ignition switch to platform control.
- 5. Pull out the ground emergency stop button to the ON position.
- 6. Pull out the platform emergency stop button to the ON position.
- 7. Make a note of the point on the machine (contact patch of a tire) as a visual reference when you cross the test line.
- 8. Press the drive function button (if installed).
- 9. Press and hold the drive/steer function safety trigger / enable switch on the control handle.
- 10. Move the control lever in the forward direction.
- 11. Bring the machine to top drive speed before you reach the test line.
- 12. Release the control lever when the selected reference point on the machine crosses the test line.
- 13. Measure the distance between the test line and the machine reference point.
- 14. Make sure that the braking distance is within the specified limits.
- 15. Raise the platform.
- 16. Do the steps 3 to 13 with the platform raised.
- 17. Make sure that the braking distance is within the specified limits.



Steering System

General

Check (Operation)

- 1. Enable the joystick by pressing the safety trigger/enable switch. Refer to: Operating Levers/Pedals (Page 31).
- 2. Press the left steering switch to turn left.
- 3. Press the right steering switch to turn right.

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Tires

General

Check (Condition)

Always drive with consideration for the condition of the tires. Check the tires daily for the signs of damage and wear. For example:

- · Signs of distortion
- Cuts
- Embedded objects (nails, etc.)
- Continuous tread
- Edge damage
- Uneven wear
- Compare wear between tires

Never modify tires or install tires which are not intended for use on this machine. Contact you local JCB dealer to replace the parts.



Hydraulic System

General

Check (Condition)

Hydraulic Hoses

▲ WARNING Damaged hoses can cause fatal accidents. Examine the hoses regularly. Do not use the machine if a hose or hose fixture is damaged.

Examine the hoses for:

- Damaged hose ends
- Worn outer covers
- Ballooned outer covers
- Kinked or crushed hoses
- Embedded armoring in the outer covers
- Displaced hose end fittings.

Replace a damaged hose before you use the machine again.

The replacement hoses must be of the same size and standard. If necessary, for more information contact your JCB dealer.

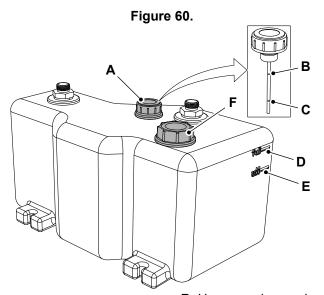
Oil

Check (Level)

- ▲ Notice: If the fluid is cloudy, then water or air has contaminated the system. This could damage the hydraulic pump. Contact your JCB dealer immediately.
- 1. Make the machine safe with the platform stowed.
- 2. Get access to the hydraulic compartment.
- 3. Check the oil level.
 - 3.1. Look at the Add/Full mark on the hydraulic oil tank. The hydraulic oil level must be between the marks. Refer to Figure 60.
 - 3.2. Alternatively, remove the breather cap. Check that the hydraulic oil level is between the two marks on the dipstick. Refer to Figure 60.
- 4. If necessary, add the recommended hydraulic fluid.
 - 4.1. Open the hydraulic oil filler cap.
 - 4.2. Use a suitable container to add the hydraulic fluid through the filler port.
 - 4.3. Check the level of hydraulic fluid.
 - 4.4. Close the filler cap.

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- A Hydraulic breatherC Lower mark minimum
- E Oil Add mark

- B Upper mark maximumD Oil Full markF Hydraulic oil filler cap



Electrical System

General

Check (Operation)

Make sure all of the electrical equipment operates correctly, for example:

- Switches
- Warning lights
- Beacon
- Alarms
- Horn
- Hourmeter/display
- Battery
- Lights

All defective equipment must be repaired before the machine is used.

Check (Condition)

▲ WARNING Battery electrolyte is toxic and corrosive. Do not breathe the gases given off by the battery. Keep the electrolyte away from your clothes, skin, mouth and eyes. Wear safety glasses.

DANGER Batteries give off explosive gases. Keep flames and sparks away from the battery. Do not smoke close to the battery. Make sure there is good ventilation in closed areas where batteries are being used or charged. Do not check the battery charge by shorting the terminals with metal. Use a hydrometer or voltmeter.

CAUTION Understand the electrical circuit before connecting or disconnecting an electrical component. A wrong connection can cause injury and/or damage.

Examine the electrical circuits regularly for:

- Damaged connectors
- Loose connections
- · Chafing on the wiring harnesses
- Corrosion
- Missing insulation
- Incorrect routing of the wiring harnesses
- Insulation covers on battery terminals and leads

Do not use the machine if one or more of these faults are found. You must make sure that the electrical circuit is repaired immediately.

Battery

Clean

- ▲ WARNING Keep metal watch straps and any metal fasteners on your clothes, clear of the positive (+) battery terminal. Such items can short between the terminal and nearby metal work. If it happens you can get burned.
- 1. Make the machine safe.

Refer to: Maintenance Positions (Page 82).

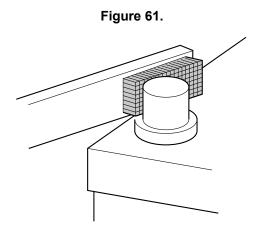
2. Get access to the battery.

Refer to: Access Apertures (Page 91).

3. If the terminal posts are corroded and covered with white powder wash them with hot water. If there is considerable corrosion, clean the terminal posts with a wire brush or abrasive paper. Refer to Figure 61.

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4. Apply a thin layer of petroleum jelly to the terminal posts.

Connect

▲ CAUTION The machine is negatively earthed. Always connect the negative pole of the battery to earth. When connecting the battery, connect the earth (-) lead last.

When disconnecting the battery, disconnect the earth (-) lead first.

Get access to the batteries.

Refer to: Disconnect (Page 104).

- 2. Make sure that the terminal covers are fitted except exposed terminal posts.
- 3. Connect the battery leads. Connect the earth (-) terminal last.
- 4. If the machine has a battery isolator key, then connect the isolator.

Refer to: Battery Isolator (Page 22).

Disconnect

▲ WARNING Do not use batteries lighter than the original ones. The batteries work as counterweight and are critical to the stability of machine.

WARNING Do not use the machine with the counterweights removed. The counterweights are critical to the stability of machine.

CAUTION Batteries are heavy. Use an appropriate number of people to lift the batteries. Use appropriate lifting techniques.

CAUTION The machine is negatively earthed. Always connect the negative pole of the battery to earth.

When connecting the battery, connect the earth (-) lead last.

When disconnecting the battery, disconnect the earth (-) lead first.

Notice: Do not isolate the machine electrics when the machine is in operation, this may cause damage to the machine electrics.

1. Make the machine safe.

Refer to: Maintenance Positions (Page 82).

2. Get access to the batteries.

Refer to: Access Apertures (Page 91).

3. If the machine has a battery isolator, then disconnect the battery isolator.

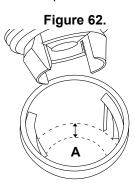
Refer to: Battery Isolator (Page 22).



4. Disconnect the battery leads. Disconnect the earth (-) terminal first.

Check (Electrolyte Level)

- **WARNING** Do not top the battery up with acid. The electrolyte could boil out and burn you.
- 1. Make the machine safe.
- 2. Open the battery compartment cover.
- 3. Remove the vent caps.
- 4. Check the electrolyte level.
 - 4.1. The minimum level is at the top of the plates.
 - 4.2. If necessary, add just enough distilled water to cover the plates at this time.
- 5. Install the vent caps.
- 6. Put batteries on a complete charge.
- 7. Remove the vent caps.
- 8. Add distilled water until the electrolyte level is below the bottom of the fill well by the specified value. Distance: 3mm (0in)
 - 8.1. If necessary, use a piece of rubber as a dipstick to determine this level.



- A Electrolyte level (3mm (0in))
- 9. Clean the vent caps.
- 10. Install the vent caps.

Check (State of Charge)

▲ WARNING Do not connect the charger when the batteries are not connected. Doing so could result in danger of live terminals from the charger.

Do not carry out maintenance on a machine whilst the charger is connected to an external power supply (i.e. do not work on a live machine). Cables from the charger to the batteries may remain live even if the batteries are disconnected/removed from the machine. There is a risk of serious electrical shock.

Always disconnect all external power supplies to the machine before carrying out maintenance.

Electrolyte checks must be done to check state of the battery.

To check the battery state of charge:

- 1. Disconnect the isolator.
- 2. Ensure the charger is not connected to an external power supply.

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3. Measure the voltage across the battery terminals.

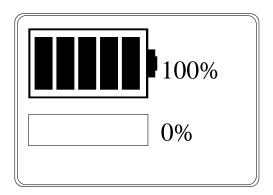
The battery state of charge can also be read from the charger display when the machine is on charge. Refer to Figure 64.

An approximate charge level of the battery is shown on the platform controller. Refer to Figure 63.

When the charge level of the batteries is about 20%, the battery must be charged. Never let the battery fully discharge before charging.

When the battery voltage is low, select tortoise speed mode and drive at slowly/half throttle to a charge location.

Figure 63. Platform Control Display

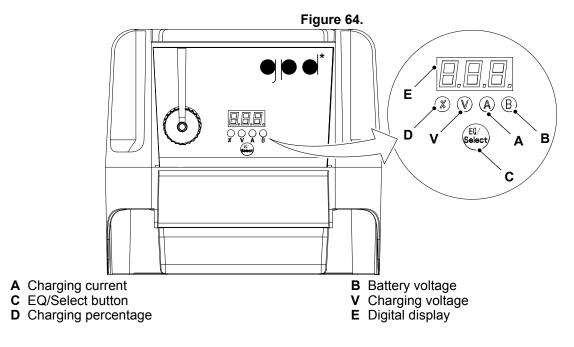


Charge the Battery

When charging the batteries, refer to the battery charger display to view the charge status of the batteries.

It is recommended to charge batteries to full, i.e. 100%, as displayed in battery charger display. Opportunity charging/partial charging may reduce the life of battery and result in lower capacity over time.

In case of opportunity charging/partial charging, battery charge percentage on base display & PCU may show 100% initially. It will stabilize to actual percentage after few minutes of operation.

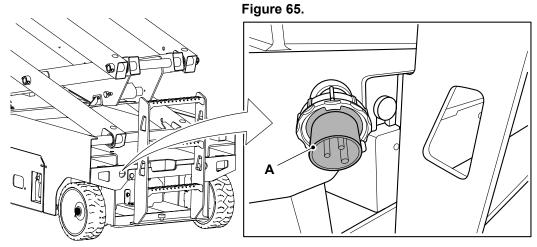


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Only use the original charger installed to the machine with the original batteries. Charge the battery in a well ventilated place. Use an appropriate grounded industrial power supply with the correct AC (Alternating Current) input voltage to charge.

- 1. Make sure the battery is properly connected before charging. Check the terminal connections are tight.
- 2. Remove the ventilation cap and check the electrolyte level is above the polar plate. Replenish with distilled water if required. Do not overfill. Install the ventilation cap.
- 3. Connect the charger to the AC supply. Refer to Figure 65.
- 4. When disconnecting the charger make sure that the cable is not pulled or damaged. Hold both the ends of connector when removing.



A Battery charging socket

Battery and power to platform connectors may be mounted rigidly in the mounting holes or hung loose with their cables according to configuration.

According to the territories different types of plugs are used on the machine. Refer to Table 12.

Table 12.

Region	Voltage	Color of Plug	Plug Specifica- tion	Plug Image
Europe/India/Aus- tralia	230V	Blue	230 IEC Industrial Plug	
USA	110V	Yellow	110 NEMA5 15P Plug	



Region	Voltage	Color of Plug	Plug Specifica- tion	Plug Image
UK	110V	Yellow	110 IEC Industrial Plug	
Europe/South- East Asia	250V	Blue	250V Schuko Plug	

Fault Indicator

When a fault occurs, an error code will be displayed on LED (Light Emitting Diode) screen. Refer to Table 13.

Table 13.

Error code	Cause	Remedy
E01 bAt	The battery is not connected or the battery voltage is too low	No charging at the time or the individual battery voltage is less than 4V. Remove the battery and charge with 6V battery charger.
E02 AC	Abnormal AC Power Input (Voltage)	Check AC input cord is connected between charger and AC outlet. Make sure AC plug is tightly secured into the AC outlet and connected to charger correctly.
E03 Hot	Charger High Temperature Protection	Charger shuts down and goes into protection mode due to charger / environmental temperature too high for charger to function properly. Place the charger into an area with ambient air flow or to a cooler place. Disconnect the charger and wait for 15–20min before reconnecting it for charging.
E04 bAt	Battery High Temperature Protection	Charger will reduce or even stop charging when the battery temperature exceeds 50°C (121.9°F). This is to protect the battery from overheating. Disconnect the charger and wait for 15–20min before reconnecting it for charging.
E06 bAt	Battery Voltage is too high (> 28.5V)	Contact JCB dealer.

Battery Isolator

Check (Operation)

- **▲ Notice:** Do not isolate the machine electrics when the machine is in operation, this may cause damage to the machine electrics.
- Isolate the machine electrics.
 Refer to: Battery Isolator (Page 22).
- 2. Make sure that the machine electrics are isolated.

A defective isolator must be repaired before the machine is used. For more information, contact your JCB dealer.



Fuses

Replace

The electrical circuits are protected by fuses. If a fuse blows, find out why before a new one is installed.

Primary Fuses

The primary fuses are located in the battery compartment compartment. Refer to: General (Page 85).

Secondary Fuses

The secondary fuses are located in the hydraulic compartment compartment. Refer to: General (Page 85).

Relays

Replace

The relays are situated in the hydraulic compartment. Refer to: General (Page 85).



Notes:		



Technical Data Introduction

General

All the rated operating capacities/rated lift capacities are based on the criteria of the machine being level on a firm supporting ground and wind speed is below the specified limit.



Static Dimensions

Dimensions

For:	S1932E	EDRV	[RAJ]	Page	113
For:	S2632E	EDRV	[RAJ]	 Page	114
				 -	
For:	S2646E	EDRV	[RAJ]	 Page	116
For:	S4046E	EDRV	[RAJ]	 Page	117
For:	S4550E	EDRV	[RAJ]	 Page	118



(For: S1932E EDRV [RAJ])

Table 14.

Description	Dimension
Maximum platform height	5.71m (18ft-9in)
Maximum working height ⁽¹⁾	7.71m (24ft-9in)
Platform size (L x W x H) ⁽²⁾	1.64m (5ft-5in) x 0.77m (2ft-6.5in) x 1.1m (3ft-7in)
Ground clearance	0.07m (1.5in)
Wheelbase	1.33m (4ft 4in)
Extension outreach	0.9m (2ft-11in)
Overall length (stowed)	1.78m (5ft-10in)
Overall width (stowed)	0.82m (2ft-8.3in)
Overall height (stowed, guardrail folded)	1.85m (6ft-1in)
Overall height (stowed, guardrail unfolded) ⁽³⁾	2.12m (6ft-11in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms.

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⁽²⁾ For Australia, New Zealand and South-East Asia, platform height will be 1m (3ft-4in).
(3) For Australia, New Zealand and South-East Asia, overall height (stowed, guardrail unfolded) will be 2.02m (6ft-7in).



(For: S2632E EDRV [RAJ])

Table 15.

Description	Dimension
Maximum platform height	7.92m (26ft)
Maximum working height ⁽¹⁾	9.92m (32ft)
Platform size (L x W x H)	2.25m (7ft-5in) x 0.83m (2ft-8.5in) x 1.1m (3ft-7in)
Ground clearance	0.06m (2.3in)
Wheelbase	1.85m (6ft)
Extension outreach	0.9m (2ft-11in)
Overall length (stowed)	2.39m (7ft-10in)
Overall width	0.83m (2ft-8.5in)
Overall height (stowed, guardrail folded)	1.96m (6ft-5in)
Overall height (stowed, guardrail unfolded)	2.33m (7ft-8in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms



(For: S3246E EDRV [RAJ])

Table 16.

Description	Dimension
Maximum platform height	9.68m (31ft-9in)
Maximum working height ⁽¹⁾	11.68m (37ft-9in)
Platform size (L x W x H)	2.25m (7ft-5in) x 1.17m (3ft-10in) x 1.1m (3ft-7in)
Ground clearance	0.1m (4in)
Wheelbase	1.85m (6ft-1in)
Extension outreach	0.9m (2ft-11in)
Overall length (stowed)	2.39m (7ft-10in)
Overall width (stowed)	1.18m (3ft-10.5in)
Overall height (stowed, guardrail folded)	1.86m (6ft-1in)
Overall height (stowed, guardrail unfolded)	2.48m (8ft-2in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms.



(For: S2646E EDRV [RAJ])

Table 17.

Description	Dimension
Maximum platform height	7.90m (25.9ft)
Maximum working height ⁽¹⁾	9.9m (32.4ft)
Platform size (L x W x H)	2.25m (7ft-5in) x 1.15m (3ft-9in) x 1.1m (3ft-7in)
Ground clearance	0.1m (4in)
Wheelbase	1.85m (6ft-1in)
Extension outreach	0.95m (3ft-1in)
Overall length (stowed)	2.39m (7ft-10in)
Overall width	1.18m (3ft-10.5in)
Overall height (stowed, guardrail folded)	1.73m (5ft-9in)
Overall height (stowed, guardrail unfolded)	2.35m (7ft-8in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms.



(For: S4046E EDRV [RAJ])

Table 18.

Description	Dimension
Maximum platform height	11.9m (40ft)
Maximum working height ⁽¹⁾	13.9m (45ft)
Platform size (L x W x H)	2.25m (7ft-5in) x 1.15m (3ft-9in) x 1.1m (3ft-7in)
Ground clearance	0.1m (4in)
Wheelbase	1.85m (6ft)
Extension outreach	0.9m (3ft)
Overall length (stowed)	2.39m (7ft-10in)
Overall width	1.18m (3ft-10.5in)
Overall height (stowed, guardrail folded)	1.98m (6ft-6in)
Overall height (stowed, guardrail unfolded)	2.6m (8ft-6in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms.



(For: S4550E EDRV [RAJ])

Table 19.

Description	Dimension
Maximum platform height	13.8m (45.3ft)
Maximum working height ⁽¹⁾	15.8m (51ft-3in)
Platform size (L x W x H)	2.64m (8ft-8in) x 1.15m (3ft-9in) x 1.1m (3ft-7in)
Ground clearance	0.1m (4in)
Wheelbase	2.22m (87in)
Extension outreach	0.9m (35in)
Overall length (stowed)	2.76m (9ft-1in)
Overall width (stowed)	1.27m (4.16ft)
Overall height (stowed, guardrail folded)	2.2m (7ft-3in)
Overall height (stowed, guardrail unfolded)	2.6m (8ft-6in)

⁽¹⁾ Maximum working height adds 2m to the metric platform height, and adds 6ft to the imperial platform height, based on regional norms.

Weights

For: S1932E EDRV [RAJ]	Page	118
For: S2632E EDRV [RAJ]	_	
For: S3246E EDRV [RAJ]	_	
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For: S4550E EDRV [RAJ]	_	

(For: S1932E EDRV [RAJ])

Table 20.

Description	Dimension
Overall weight	1,590kg (3,510lb)
Load capacity	230kg (510lb)
Maximum platform occupants (indoor)	2 persons
Maximum platform occupants (outdoor)	1 person
Maximum allowable side force (indoor)	400N (90lb)
Maximum allowable side force (outdoor)	200N (40lb)
Maximum wheel loads ^(1, 2)	603kg (1,330lb)
Ground pressure per tire ^(1, 2)	1135 kN/m²

 $[\]overline{\text{(1) This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter <math>x$ wheel width.

(For: S2632E EDRV [RAJ])

Table 21.

Description	Dimension	
Overall weight	2,180kg (4,806lb)	
Load capacity ⁽³⁾	250kg (551lb)	
Extension desk maximum load capacity	120kg (260lb)	
Maximum platform occupants (indoor)	2 persons	
Maximum platform occupants (outdoor)	N/A	

⁽²⁾ Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.



Description	Dimension
Maximum allowable side force (indoor)	400N (89.9lb)
Maximum allowable side force (outdoor)	N/A
Maximum wheel loads ^(1, 2)	1,135kg (2,502.2lb)
Localized pressure per tire ^(1, 2)	1469 kN/m²

- (1) This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter x wheel width.
- (2) Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.
- (3) Mass of all additional accessories must be considered as part of platform load capacity for use and load calibration.

(For: S3246E EDRV [RAJ])

Table 22.

Description	Dimension
Overall weight	2,865kg (6,320lb)
Load capacity	320kg (710lb)
Maximum platform occupants (indoor)	2 persons
Maximum platform occupants (outdoor)	1 person
Maximum allowable side force (indoor)	400N (90lb)
Maximum allowable side force (outdoor)	200N (40lb)
Maximum wheel loads ^(1, 2)	1,268kg (2,800lb)
Localized pressure per tire ^(1, 2)	1632 kN/m²

⁽¹⁾ This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter x wheel width.

(For: S2646E EDRV [RAJ])

Table 23.

Description	Dimension
Overall weight	2,647kg (5,836lb)
Load capacity	450kg (992lb)
Extension desk maximum load capacity	120kg (260lb)
Maximum platform occupants (indoor)	2 persons
Maximum platform occupants (outdoor)	2 persons
Maximum allowable side force (indoor)	400N (89.9lb)
Maximum allowable side force (outdoor)	400N (89.9lb)
Maximum wheel loads ^(1, 2)	1,453kg (3,203.3lb)
Localized pressure per tire ^(1, 2)	1880 kN/m²

⁽¹⁾ This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter x wheel width.

(For: S4046E EDRV [RAJ])

Table 24.

Description	Dimension
Overall weight	3,060kg (6,750lb)
Load capacity	320kg (710lb)

⁽²⁾ Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.

⁽²⁾ Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.



Description	Dimension
Extension desk maximum load capacity	120kg (260lb)
Maximum platform occupants (indoor)	2 persons
Maximum platform occupants (outdoor)	N/A
Maximum allowable side force (indoor)	400N (90lb)
Maximum allowable side force (outdoor)	N/A
Maximum wheel loads ^(1, 2)	1,206kg (2,660lb)
Localized pressure per tire ^(1, 2)	1561 kN/m²

⁽¹⁾ This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter *x* wheel width.

(For: S4550E EDRV [RAJ])

Table 25.

Description	Dimension
Overall weight	3,538kg (7,800lb)
Load capacity	230kg (510lb)
Extension desk maximum load capacity	120kg (260lb)
Maximum platform occupants (indoor)	2 persons
Maximum platform occupants (outdoor)	N/A
Maximum allowable side force (indoor)	400N (90lb)
Maximum allowable side force (outdoor)	N/A
Maximum wheel loads ^(1, 2)	1,212kg (2,670lb)
Localized pressure per tire ^(1, 2)	15.73bar (228.1psi)

⁽¹⁾ This assumes the typical wheel surface area in contact with the ground is approximately 15% wheel diameter x wheel width.

120 9841/9167-5 120

⁽²⁾ Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.

⁽²⁾ Wheel loads and pressures are approximate and only cover standard manufacturer wheel configurations. These figures should only be used with adequate safety factors.



Visibility Diagrams

The visibility map/s provided in this manual are for guidance, and may be used to improve visibility or as part of a risk assessment for work site safe operation, introduction of additional visual aids or site management.

The visibility map(s) show machines in standard configuration. Modifications or environment may increase or add blind spots around the machine. It is the responsibility of the operator and worksite management to determine if the visibility for the machine in its worksite is acceptable.

The visibility map(s) shown within this manual are to scale for the S1932 EDRV, with the machine platform in the extended and retracted configurations. The machine is shown at the downward decent delay height with the operator positioned at the front-right default position. At lower heights, the blind spots from the front-right position are decreased. At greater heights, the blind spots from the front-right position are increased. The operator can move the control position in the platform to any edge of the platform to have clear 360° visibility. This visibility diagram is representative of all models in this manual, the respective dimensions for the blind spots are given in the table below. Refer to Table 26.

The visibility map(s) shows the combined approximate blind spots of direct vision. The operator's eye position is 1.75m (2yd) above the platform floor, 0.4m ($\frac{1}{2}$ yd) in from the side and 0.5m ($\frac{1}{2}$ yd) in from the front of the platform. This represents what a standing operator can approximately see from the front-right default controller position.

The visibility map shows the combined visibility from 1m (1yd) from the machine boundary to a 12m (13yd) radius circle, guidance taken from EN 474 part 1 : 2006 i.e ISO5006 : 2017.

Iab	le	26	Ď.

Model	S1932	S2632	S2646	S3246	S4046	S4550
	EDRV	EDRV	EDRV	EDRV	EDRV	EDRV
Platform height	2.1m	2.4m	2.2m	2.6m	2.9m	3m
	(2½yd)	(2½yd)	(2½yd)	(3yd)	(3yd)	(3½yd)
Blind spot, right	0.6m	0.6m	0.6m	0.7m	0.8m	0.6m
	(½yd)	(½yd)	(½yd)	(1yd)	(1yd)	(½yd)
Blind spot, left	0.6m	0.7m	1.2m	1.4m	1.6m	0.7m
	(½yd)	(1yd)	(1½yd)	(1½yd)	(1½yd)	(1yd)
Blind spot, back (retracted)	1.6m	2.8m	2.5m	3m	3.3m	4.2m
	(1½yd)	(3yd)	(2½yd)	(3½yd)	(3½yd)	(4½yd)
Blind spot, back (extended)	2.8m	4.2m	3.9m	4.5m	5.1m	6m
	(3yd)	(4½yd)	(4½yd)	(5yd)	(5½yd)	(6½yd)



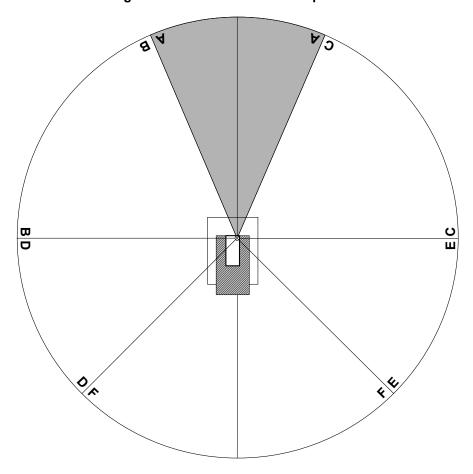


Figure 66. Platform in retracted position

Table 27. Icon Identification

Icon	Description
	Filament position
	Masking
	Direct visibility



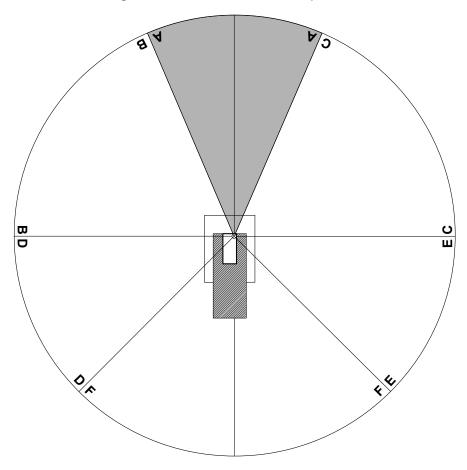


Figure 67. Platform in extended position

Table 28. Icon Identification

Icon	Description
	Filament position
	Masking
	Direct visibility



Performance Dimensions

Driving Performance

For:	S1932E	EDRV	[RAJ]	 Page	124
				 -	
For:	S3246E	EDRV	[RAJ]	 Page	125
For:	S2646E	EDRV	[RAJ]	 Page	125
For:	S4046E	EDRV	[RAJ]	 Page	126
For:	S4550E	EDRV	[RAJ]	 Page	126

(For: S1932E EDRV [RAJ])

Table 29.

Description	Dimension
Maximum allowable wind speed (outdoor)	12.5m/s (28.0mph) (1 person only)
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	1.54m (5ft-1in)
Turning radius (inside)	0.06m (2.4in)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd) (1)	0.8km/h (0.5mph)/42-49s
Hare speed/time over 10m (11yd) (2)	4km/h (2.5mph)/10-12s
Tortoise speed/time over 10m (11yd) (2)	1.8km/h (1.1mph)/19–23s
Rising speed (full load)	20–25s
Lowering speed (full load)	25–30s
Rising speed (no load)	15–20s
Lowering speed (no load)	30–35s
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	$0.4 \pm 0.1 \text{m} (\frac{1}{2} \pm 0 \text{yd})$

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
- (4) Limit the travel speed to tortoise mode while coming down a slope/grade.

(For: S2632E EDRV [RAJ])

Table 30.

Description	Dimension
Maximum allowable wind speed (outdoor)	0m/s (0.0mph) (Indoor only)
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	2.1m (6ft-10.68in)
Turning radius (inside)	0m (0ft-0in)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd) (1)	0.8km/h (0.5mph)/45–49s
Hare speed/time over 10m (11yd) (2)	4.5km/h (2.8mph)/10–14s
Tortoise speed/time over 10m (11yd) (2)	1.8km/h (1.1mph)/19–23s
Rising speed (full load)	28–34s
Lowering speed (full load)	32–38s
Rising speed (no load)	25–31s
Lowering speed (no load)	38–44s



Description	Dimension
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	0.8 ± 0.1m (1 ± 0yd)

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
- (4) Limit the travel speed to tortoise mode while coming down a slope/grade.

(For: S3246E EDRV [RAJ])

Table 31.

Description	Dimension
Maximum allowable wind speed (outdoor)	12.5m/s (28.0mph) (1 person only)
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	2.35m (7ft-8.5in)
Turning radius (inside)	0m (0ft-0in)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd) (1)	0.8km/h (0.5mph)/45-49s
Hare speed/time over 10m (11yd) (2)	4.5km/h (2.8mph)/10–14s
Tortoise speed/time over 10m (11yd) (2)	1.8km/h (1.1mph)/19–23s
Rising speed (full load)	49–54s
Lowering speed (full load)	40–46s
Rising speed (no load)	44–50s
Lowering speed (no load)	47–53s
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	0.8 ± 0.1m (1 ± 0yd)

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
- (4) Limit the travel speed to tortoise mode while coming down a slope/grade.

(For: S2646E EDRV [RAJ])

Table 32.

Description	Dimension
Maximum allowable wind speed (outdoor)	12.5m/s (28.0mph)
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	2.35m (7ft-8in)
Turning radius (inside)	0m (0ft-0in)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd)	0.8km/h (0.5mph)/45-49s
Hare speed/time over 10m (11yd)	4.5km/h (2.8mph)/7–9s
Tortoise speed/time over 10m (11yd)	2.2km/h (1.4mph)/14–17s
Raising speed (full load)	43–49s
Lowering speed (full load)	30–36s
Rising speed (no load)	34–40s
Lowering speed (no load)	42–48s



Description	Dimension
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	0.76 ± 0.1m (1 ± 0yd)

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
- (4) Limit the travel speed to tortoise mode while coming down a slope/grade.

(For: S4046E EDRV [RAJ])

Table 33.

Description	Dimension
Maximum allowable wind speed (outdoor)	0m/s (0.0mph), Indoor Only
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	2.35m (7ft-8in)
Turning radius (inside)	0m (0ft-0in)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd)	0.8km/h (0.5mph)/45-49s
Hare speed/time over 10m (11yd)	4.5km/h (2.8mph)/7-9s
Tortoise speed/time over 10m (11yd)	2.2km/h (1.4mph)/14–17s
Raising speed (full load)	62–67s
Lowering speed (full load)	46–54s
Rising speed (no load)	57–62s
Lowering speed (no load)	52–60s
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	$0.62 \pm 0.1 \text{m} (\frac{1}{2} \pm 0 \text{yd})$

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
- (4) Limit the travel speed to tortoise mode while coming down a slope/grade.

(For: S4550E EDRV [RAJ])

Table 34.

Description	Dimension
Maximum allowable wind speed (outdoor)	0m/s (0.0mph) (Indoor only)
Maximum allowable slope (front/back) ⁽¹⁾	3°
Maximum allowable slope (side/side) ⁽¹⁾	1.5°
Turning radius (outside)	2.56m (8ft-5in)
Turning radius (inside)	Om (Oft-Oin)
Gradability ^(2, 3, 4)	25%
Elevated driving speed/time over 10m (11yd)	0.8km/h (0.5mph)/45-49s
Hare speed/time over 10m (11yd)	4.5km/h (2.8mph)/7–9s
Tortoise speed/time over 10m (11yd)	2.2km/h (1.4mph)/14–17s
Raising speed (full load)	73–83s
Lowering speed (full load)	56–66s
Rising speed (no load)	63–73s
Lowering speed (no load)	65–75s



Description	Dimension
Drive, steer and brake	2, front-wheel
Brake distance (level ground)	0.77 ± 0.1m (1 ± 0yd)

- (1) Platform in raised condition.
- (2) Platform in stowed condition.
- (3) Gradability is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce gradability.
 (4) Limit the travel speed to tortoise mode while coming down a slope/grade.



Noise Emissions

General

The noise data values for this type of machine have been provided on the following page(s) and may be used for the assessment of risks to exposure from noise.

For information relating to this machine when used with other JCB approved attachments, please refer to the literature accompanying the attachments.

Table 35. Definition of terms

Term	Definition	Notes
LpA	A-weighted sound pressure level measured at the operator's station.	Determined in accordance with the test method defined in ISO 6396.
LwA	Equivalent A-weighted sound power level emitted by the machine.	

Noise Data

All Machines

Noise value does not exceed 82dBA.



Vibration Emissions

Vibration Data

For:	S1932E	EDRV	[RAJ]	Page	129
For:	S2632E	EDRV	[RAJ]	 Page	129
For:	S3246E	EDRV	[RAJ]	 Page	129
For:	S2646E	EDRV	[RAJ]	 Page	129
For:	S4046E	EDRV	[RAJ]	 Page	129
For:	S4550E	EDRV	[RAJ]	 Page	129

(For: S1932E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.66m/s (2.2feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).

(For: S2632E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.75m/s (2.5feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).

(For: S3246E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.54m/s (1.8feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).

(For: S2646E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.54m/s (1.8feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).

(For: S4046E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.54m/s (1.8feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).

(For: S4550E EDRV [RAJ])

Whole-body vibration emission determined in accordance with ISO 2631-1:1997 does not exceed 0.54m/s (1.8feet/s).

Hand-arm vibration determined in accordance with dynamic test conditions defined in ISO 5349-2: 2001 does not exceed 2.5m/s (8.2feet/s).



Fluids, Lubricants and Capacities

General

JCB recommend that you use the JCB lubricants shown as they have been verified by JCB for use on JCB machines. However, you could use other lubricants that are equivalent to the JCB standards and quality or offer the same machine component protection.

Table 36.

Item	Capaci- ty	Fluid/Lubricant	JCB Part Number	Container Size ⁽¹⁾	Specification
Hydraulic system	14– 16L (3–	JCB Hydraulic Fluid OP 46	4002/2005	20L (4½UKgal)	
	3½UK- gal)	JCB High Performance Hydraulic Oil 32	4002/1020	20L (4½UKgal)	
Grease points	-	JCB Special HP Grease	4003/2000	0.4kg (0.88lb)	
Electrical connections	-	As a corrosion and moisture inhibitor all exposed connections should be coated liberally with petroleum jelly	-	-	
Wheel motor	-	JCB Advanced Gear Oil 68 ⁽²⁾	4000/0404 4000/0401	1L (0UK- gal) 5L (1UK- gal)	 High industrial performance. Long service life of lubricant. Optimum wear and corrosion protection.

⁽¹⁾ For information about the different container sizes that are available (and their part numbers), contact your JCB dealer.

⁽²⁾ For Dana gearboxes only.



Electrical System

General

Table 37.

	S1932 EDRV	S2632 EDRV	S2646 EDRV	S3246 EDRV	S4046 EDRV	S4550 EDRV
Lead acid batteries	T105, 225Al	Н	T125, 240Al	+	T1275, 150A	AΗ
Specification			24V DC - 4x 6V		24V DC - 4x 12V	

Fuses

Fuses

Figure 68.



Table 38.

Fuse	Circuit	Rating
FU1	Ignition	7.5A
FU2	Livelink/Diag Batt	10A
FU3	DC (Direct Current) contact via E-Stop	5A
FU4	Horn	5A
FU5	Switches & Sensors	5A
FU6	ECU (Electronic Control Unit)/Display	15A
FU7	Livelink Ignition	5A
FU8	Switch Supplies	5A

Relays

Figure 69.

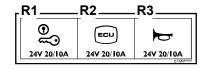


Table 39.

Relay	Circuit	Rating
R1	Ignition	24 20/10 A
R2	ECU (Electronic Control Unit)	24 20/10 A
R3	Horn	24 20/10 A



Batteries

California Proposition 65

▲ WARNING Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Hydraulic System

General

Table 40.

	S1932	S2632	S2646	S3246	S4046	S4055
	EDRV	EDRV	EDRV	EDRV	EDRV	EDRV
Hydraulic oil tank volume	12L (2½UKg	jal)				
Hydraulic system pressure	210bar (3,04	45.8psi)				
Hydraulic system tank volume	14L (3UK-	15L	15L	16L	17L	18L (4UK-
	gal)	(3½UKgal)	(3½UKgal)	(3½UKgal)	(3½UKgal)	gal)



Wheels and Tires

General

Table 41.

Model	Solid Tire Dimensions
S1932 EDRV	305mm (12in) x 114mm (4½in)
S2632 EDRV	380mm (15in) x 127mm (5in)
S2646 EDRV	
S3246 EDRV	
S4046 EDRV	
S4055 EDRV	



Declaration of Conformity

General

This machine complies with ANSI/SAIA A92.6-2006, ANSI/SAIA A92.20-2020, CSA B354.2-01 & CSA B354.6-2017.

Data

Table 42.

Α	Name and Address of the Manufacturer
В	Mobile Elevating Work Platform (Access Platform)
С	Model Name
D	Serial Number
E	EN280-1:2022
F	Managing Director, JCB Vibromax GMBH, Europaallee 113a, 50226 Frechen, Germany.
G	TÜV NORD CERT GmbH Am TÜV 1, 45307 Essen, Germany.
Н	TUV UK Limited AMP House, Suites 27 – 29, Fifth Floor, Dingwall Road, Croydon, CR0 2LX, United Kingdom
J	Rocester
K	Date of Declaration
L	Engineering Manager



Figure 70.

Declarati	ion of Conformity	
NAME AND ADDRESS OF MANUFACTURER		
		Α
HEREBY DECLARES THAT THE MACHINERY / EQUIPMENT DESCRIBED		
BELOW COMPLIES WITH ALL UK AND EU RULES AS APPLICABLE:		В
DESCRIPTION OF MACHINERY / EQUIPMENT TRADE NAME:		_
		_
MODEL NAME		С
SERIAL NUMBER OF MACHINERY / EQUIPMENT		D
COMPLIES WITH THE PROVISIONS OF THE MACHINERY DIRECTIVE 2006/42	2/EC [AS AMENDED]	
AND THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008 [AS AMEN	DED]	
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FOR UK REFER TO ADDRESS ABOVE AND SIGNATORY		F
COMPLIES WITH THE PROVISIONS OF THE ELECTRO-MAGNETIC COMPAT.	ABILITY DIRECTIVE 2014/30/EU [AS AMENDED]	
ELECTROMAGNETIC COMPATIBILITY REGULATIONS 2016 [AS AMENDED]		
ELECTROMAGNETIC COMPATIBILITY REGULATIONS 2016 [AS AMENDED] NAME AND ADDRESS OF NOTIFIED BODY:		G
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Warranty Information

Service Record Sheet

Table 43.

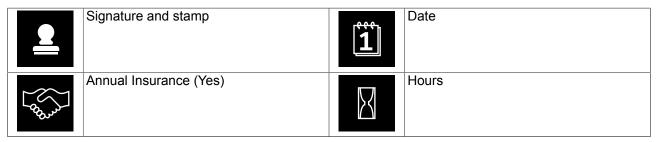


Figure 71. Installation Checklist

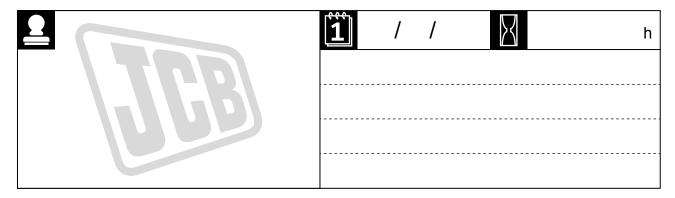


Figure 72. 1st 100h/1 Month

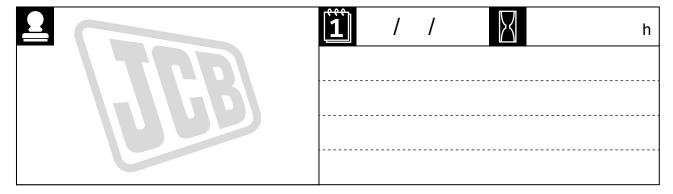


Figure 73. 500h/6 Month

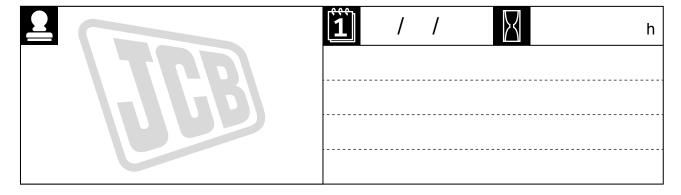




Figure 74. 1000h/12 Month

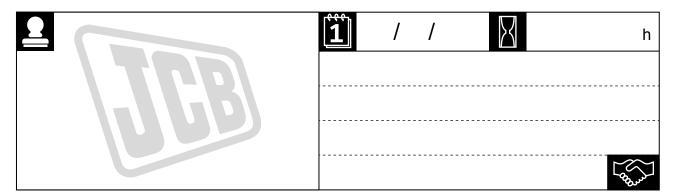


Figure 75. 1500h/18 Month

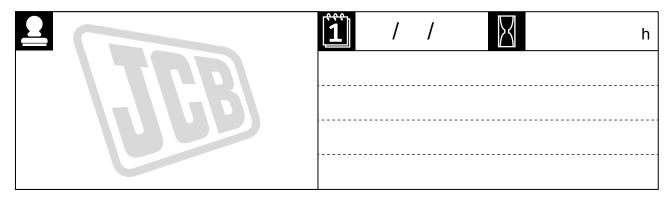


Figure 76. 2000h/24 Month

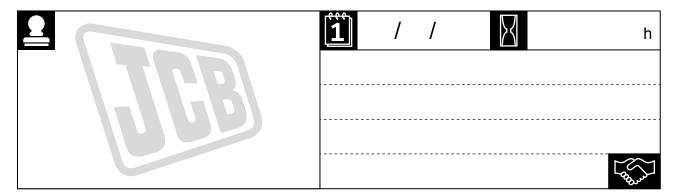


Figure 77. 2500h/30 Month

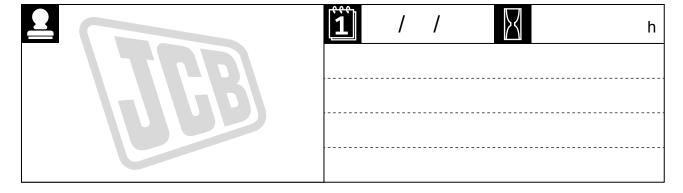




Figure 78. 3000h/36 Month

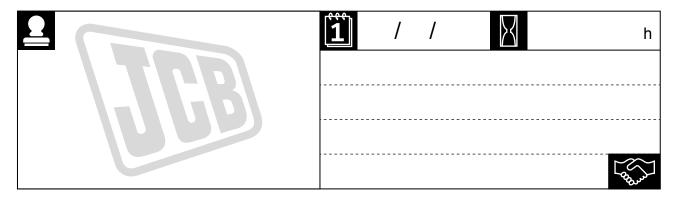


Figure 79. 3500h/42 Month

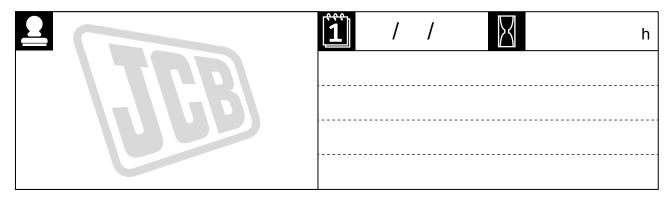


Figure 80. 4000h/48 Month

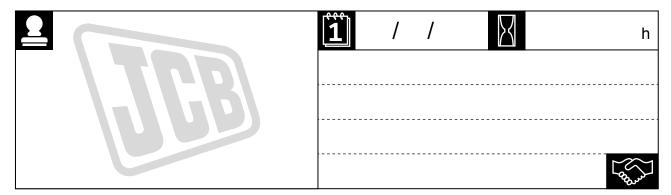


Figure 81. 4500h/54 Month

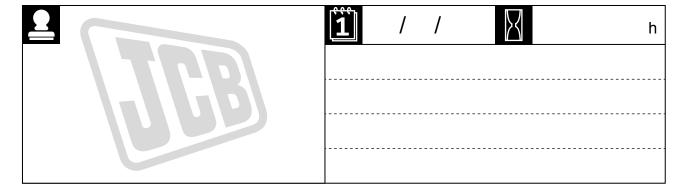




Figure 82. 5000h/60Month

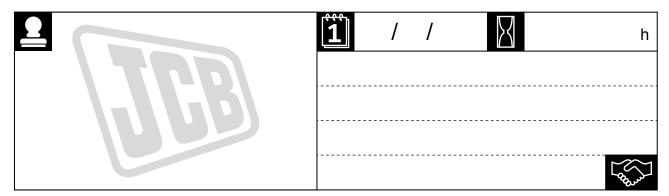


Figure 83. 5500h/66 Month

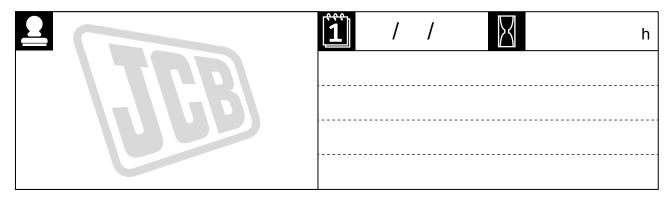


Figure 84. 6000h/72 Month

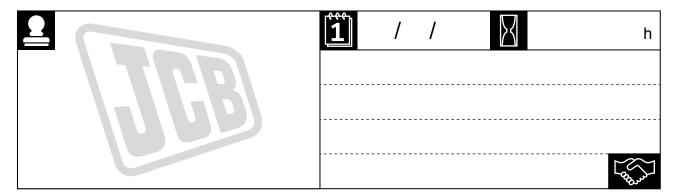


Figure 85. 6500h/78 Month

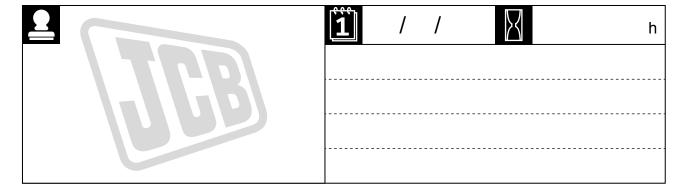




Figure 86. 7000h/84 Month

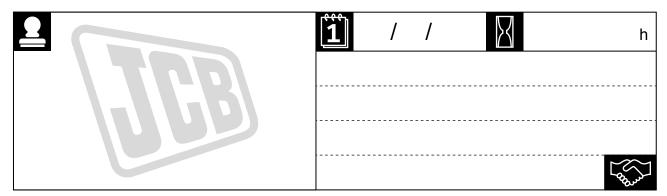


Figure 87. 7500h/90 Month

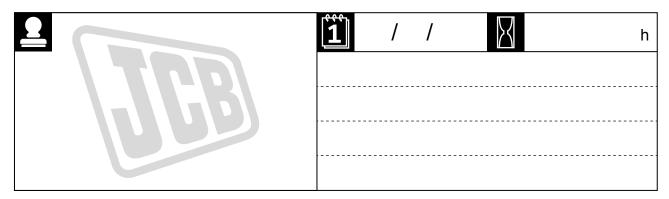


Figure 88. 8000h/96 Month

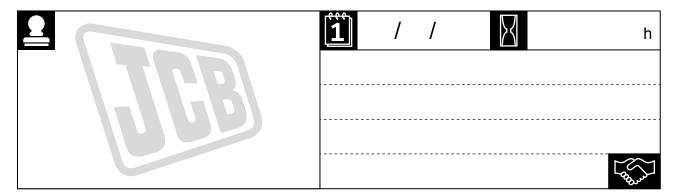


Figure 89. 8500h/102 Month

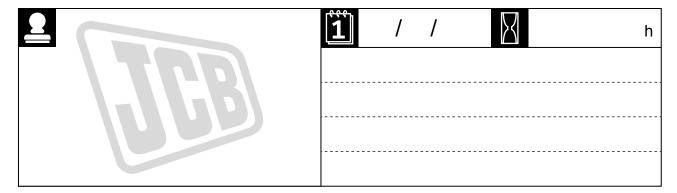




Figure 90. 9000h/108 Month

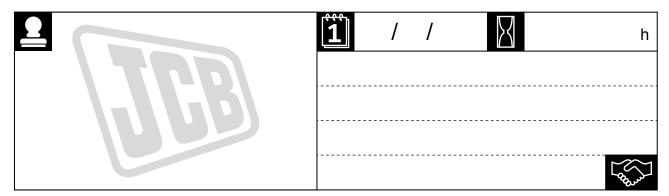


Figure 91. 9500h/114 Month

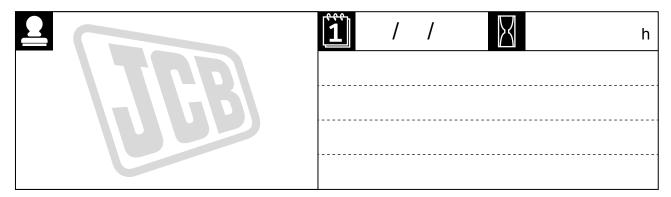


Figure 92. 10000h/120 Month

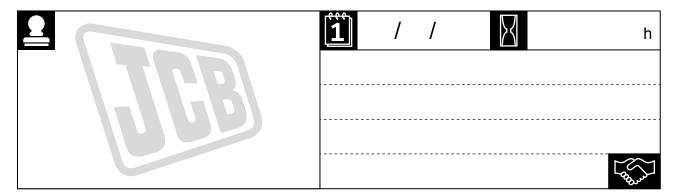


Figure 93. 10500h/126 Month

