



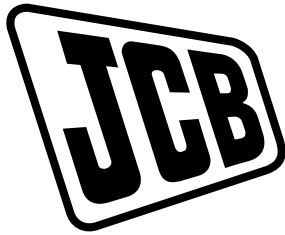
## OPERATOR'S MANUAL



**418S**

EN - 9821/9150  
ISSUE 5 - 07/2015

THIS MANUAL SHOULD ALWAYS STAY WITH THE MACHINE



# OPERATOR'S MANUAL

**418S**

EN - 9821/9150 - ISSUE 5 - 07/2015

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

Copyright 2015 © JCB SERVICE  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB SERVICE.

[www.jcb.com](http://www.jcb.com)

## Foreword

### The Operator's Manual



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.

### 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



---

Notes:

---

---

---

---

---

---

---

---

---

---

---

---



| Contents   | Page No. |
|--|----------|
| Acronyms Glossary .....                                | viii     |
| <b>Introduction</b>                                    |          |
| About this Manual                                      |          |
| Model and Serial Number .....                          | 1        |
| Using the Manual .....                                 | 1        |
| Left-Hand Side, Right-Hand Side .....                  | 1        |
| Cab/Canopy .....                                       | 1        |
| Cross References .....                                 | 2        |
| Safety   |          |
| Safety - Yours and Others .....                        | 3        |
| Safety Warnings .....                                  | 3        |
| General Safety .....                                   | 4        |
| Clothing and Personal Protective Equipment (PPE) ..... | 5        |
| <b>About the Product</b>                               |          |
| Introduction   |          |
| General .....  | 7        |
| Name and Address of the Manufacturer .....             | 7        |
| Product Compliance .....                               | 7        |
| Description  |          |
| General .....  | 8        |
| Intended Use .....                                     | 8        |
| Log Moving/Object Handling .....                       | 8        |
| Optional Equipment and Attachments .....               | 8        |
| Danger Zone .....                                      | 8        |
| Main Component Locations .....                         | 9        |
| Product and Component Identification                   |          |
| Machine .....  | 11       |
| Engine .....   | 11       |
| Operator Protective Structure .....                    | 12       |
| Safety Labels  |          |
| General .....  | 14       |
| Safety Label Identification .....                      | 15       |
| Operator Station                                       |          |
| Component Locations .....                              | 17       |
| Console Switches                                       |          |
| General .....  | 19       |
| Road Lights .....                                      | 19       |
| Rear Fog Lights .....                                  | 19       |
| Hazard Warning Lights .....                            | 19       |
| Work Lights .....                                      | 20       |
| Transmission Mode .....                                | 20       |
| Smooth Ride System (SRS) .....                         | 20       |
| Beacon .....   | 20       |
| Seat Heater .....                                      | 20       |
| Heated Mirrors .....                                   | 20       |
| Lift Arm Quickhitch .....                              | 20       |
| Controls Isolation .....                               | 21       |
| Up/Down Divert .....                                   | 21       |



|   |    |
|---|----|
| Rotate .....                              | 21 |
| Rear Window Wiper .....                   | 21 |
| Auxiliary Hydraulic Circuit .....         | 21 |
| Secondary Steer Pump System .....         | 21 |
| Constant Flow .....                       | 22 |
| ECO Mode .....                            | 22 |
| Lock Up Converter .....                   | 22 |
| Detent .....                              | 22 |
| Interior Switches                         |    |
| Ignition Switch .....                     | 23 |
| Multi-Purpose Switch .....                | 23 |
| Cab Interior Light .....                  | 24 |
| <b>Operation</b>                          |    |
| Introduction                              |    |
| General .....                             | 27 |
| Operating Safety                          |    |
| General .....                             | 28 |
| Worksite Safety .....                     | 30 |
| Risk Assessment .....                     | 31 |
| Walk-Around Inspection                    |    |
| General .....                             | 33 |
| Entering and Leaving the Operator Station |    |
| General .....                             | 34 |
| Emergency Exit .....                      | 34 |
| Doors                                     |    |
| Operator Door .....                       | 37 |
| Windows                                   |    |
| Side Window .....                         | 38 |
| Before Starting the Engine                |    |
| General .....                             | 40 |
| Operator Seat                             |    |
| General .....                             | 42 |
| Basic Seat .....                          | 42 |
| Suspension Seat .....                     | 43 |
| Armrest .....                             | 47 |
| Seat Belt                                 |    |
| General .....                             | 49 |
| Inertia Reel Seat Belt .....              | 49 |
| Mirrors                                   |    |
| General .....                             | 51 |
| Starting the Engine                       |    |
| General .....                             | 55 |
| Stopping and Parking                      |    |
| General .....                             | 56 |
| Preparing for Travel                      |    |
| General .....                             | 57 |
| Preparing for Road Travel .....           | 57 |
| Preparing for Worksite Travel .....       | 58 |
| Smooth Ride System (SRS) .....            | 59 |
| Beacon .....                              | 60 |



Locks  
    Articulation Lock ..... 61  
    Control Lock ..... 62

Drive Controls  
    General ..... 63  
    Steering Wheel ..... 64  
    Steering Column ..... 64  
    Accelerator Pedal ..... 65  
    Forward, Neutral and Reverse Switch ..... 65  
    Service Brake Pedal ..... 67  
    Park Brake ..... 67  
    Transmission Kickdown Switch ..... 67  
    Transmission Dump Switch ..... 68  
    Transmission Mode ..... 69

Instruments  
    Instrument Panel ..... 71

Getting the Machine Moving  
    General ..... 81

Driving the Machine  
    Towing Other Equipment ..... 82

Operating Levers/Pedals  
    General ..... 83  
    Control Layouts ..... 83  
    Lift Arm Controls ..... 83  
    Auxiliary Circuit Controls ..... 87

Lifting and Loading  
    General ..... 90

Working with the Lift Arm  
    General ..... 91  
    Filling the Shovel ..... 92  
    Loading a Truck ..... 92  
    Adjusting the Lift Arm ..... 93

Slopes  
    General ..... 96  
    Driving on Slopes ..... 96  
    Working on Slopes ..... 97

Heating, Ventilating and Air-Conditioning (HVAC)  
    General ..... 98  
    Air-Conditioning Controls ..... 98  
    Cab Heater Controls ..... 100

Power Sockets  
    Auxiliary Power Socket ..... 102

Battery Isolator  
    General ..... 103

Fire Extinguisher  
    General ..... 104

Moving a Disabled Machine  
    General ..... 105  
    Getting the Machine Unstuck ..... 105  
    Jump-Starting the Engine ..... 105  
    Retrieval ..... 106



|   |     |
|---|-----|
| Recovery Hitch .....  | 109 |
| Loader Arm (Emergency Operation) .....                                | 110 |
| Lifting the Machine   |     |
| General .....   | 111 |
| Transporting the Machine  |     |
| General .....   | 113 |
| Operating Environment   |     |
| General .....   | 115 |
| Operating in Low Temperatures .....                                   | 115 |
| Operating in High Temperatures .....                                  | 116 |
| Cab Filters .....   | 116 |
| Refuelling  |     |
| General .....   | 117 |
| Low Fuel Levels .....   | 117 |
| Filling the Tank .....  | 117 |
| <b>Attachments</b>  |     |
| Working with Attachments  |     |
| Introduction .....  | 119 |
| Attachments for your Machine .....                                    | 119 |
| Connecting/Disconnecting Hydraulic Hoses .....                        | 120 |
| Quickhitch  |     |
| General .....   | 124 |
| Lift Arm Quickhitch Carriage .....                                    | 124 |
| Tow Hitches   |     |
| Hydraulic Tow Hitch .....   | 129 |
| Work Platforms  |     |
| General .....   | 134 |
| <b>Preservation and Storage</b>                                       |     |
| Cleaning  |     |
| General .....   | 135 |
| Preparation .....   | 135 |
| Checking For Damage   |     |
| General .....   | 137 |
| Storage   |     |
| General .....   | 138 |
| Put into Storage .....  | 138 |
| During Storage .....  | 138 |
| Take out of Storage .....   | 139 |
| Security  |     |
| General .....   | 140 |
| JCB Plantguard .....  | 140 |
| Construction Equipment Security and Registration Scheme (CESAR) ..... | 140 |
| LiveLink .....  | 140 |
| <b>Maintenance</b>  |     |
| Introduction  |     |
| General .....   | 141 |
| Owner/Operator Support .....  | 141 |
| Service/Maintenance Agreements .....                                  | 141 |
| Initial Service and Inspection .....                                  | 142 |
| Obtaining Spare Parts .....   | 142 |



Maintenance Safety  
    General ..... 143  
    Fluids and Lubricants ..... 144  
Maintenance Schedules  
    General ..... 148  
    How to Use the Maintenance Schedules ..... 148  
    Maintenance Intervals ..... 148  
    Pre-start Cold Checks, Service Points and Fluid Levels ..... 149  
    Functional Tests and Final Inspection ..... 151  
Maintenance Positions  
    General ..... 153  
    Maintenance Position (Lift Arm Lowered) ..... 153  
    Maintenance Position (Lift Arm Raised) ..... 154  
Service Points  
    General ..... 156  
Access Apertures  
    General ..... 160  
    Battery Cover ..... 160  
    Engine Compartment Cover ..... 160  
    Cab Heater Door ..... 161  
Tools  
    General ..... 163  
    Toolbox ..... 163  
Lubrication  
    General ..... 164  
    Preparation ..... 164  
    Automatic Greasing System ..... 164  
Attachments  
    General ..... 166  
Body and Framework  
    General ..... 167  
Operator Station  
    General ..... 168  
    Operator Protective Structure ..... 168  
    Seat ..... 168  
    Seat Belt ..... 168  
    Controls ..... 169  
Heating, Ventilating and Air-Conditioning (HVAC)  
    Air-Conditioning ..... 170  
    Heater ..... 170  
Engine  
    General ..... 172  
    Oil ..... 172  
    Drive Belt ..... 174  
    Crankcase Ventilation ..... 174  
    Exhaust ..... 175  
Air Filter  
    General ..... 176  
    Pre-Cleaner ..... 176  
Fuel System  
    General ..... 177



---

|   |     |
|---|-----|
| Fuel Filter .....                         | 177 |
| Water Separator .....                     | 179 |
| Cooling System                            |     |
| General .....                             | 180 |
| Coolant .....                             | 180 |
| Cooling Pack .....                        | 180 |
| Brakes                                    |     |
| General .....                             | 182 |
| Park Brake .....                          | 182 |
| Service Brake .....                       | 183 |
| Gearbox                                   |     |
| Oil .....                                 | 184 |
| Wheels                                    |     |
| General .....                             | 185 |
| Tyres                                     |     |
| General .....                             | 187 |
| Hydraulic System                          |     |
| General .....                             | 189 |
| Services .....                            | 190 |
| Oil .....                                 | 190 |
| Cylinder Rams .....                       | 191 |
| Hose Burst Check Valves .....             | 191 |
| Electrical System                         |     |
| General .....                             | 192 |
| Battery .....                             | 192 |
| Battery Isolator .....                    | 193 |
| Fuses .....                               | 194 |
| Relays .....                              | 195 |
| Window Washer .....                       | 197 |
| Miscellaneous                             |     |
| Fire Extinguisher .....                   | 198 |
| <b>Technical Data</b>                     |     |
| Static Dimensions                         |     |
| Dimensions .....                          | 199 |
| Weights .....                             | 200 |
| Performance Dimensions                    |     |
| Lift Arm Dimensions and Performance ..... | 201 |
| Driving Performance .....                 | 202 |
| Towing Weights .....                      | 203 |
| Noise Emissions                           |     |
| General .....                             | 204 |
| Noise Data .....                          | 204 |
| Vibration Emissions                       |     |
| General .....                             | 205 |
| Vibration Data .....                      | 206 |
| Fluids, Lubricants and Capacities         |     |
| General .....                             | 207 |
| Fuel .....                                | 207 |
| Coolant .....                             | 208 |
| Torque Values                             |     |
| General .....                             | 210 |



|                                |     |
|--------------------------------|-----|
| Electrical System              |     |
| General .....                  | 211 |
| Bulbs .....                    | 211 |
| Fuses .....                    | 211 |
| Relays .....                   | 215 |
| Wheels and Tyres               |     |
| General .....                  | 217 |
| Tyre Sizes and Pressures ..... | 217 |
| Declaration of Conformity      |     |
| General .....                  | 219 |
| Data .....                     | 220 |
| Warranty Information           |     |
| Service Record Sheet .....     | 222 |

**Acronyms Glossary**

|       |  |
|-------|--|
| CESAR | Construction Equipment Security and Registration |
| DEF   | Diesel Exhaust Fluid                             |
| ECU   | Electronic Control Unit                          |
| EMS   | Electronic Monitoring System                     |
| ETRTO | European Tyre and Rim Technical Organisation     |
| FOPS  | Falling Object Protective Structure              |
| HVAC  | Heating Ventilation Air Conditioning             |
| LCD   | Liquid Crystal Display                           |
| PIN   | Product Identification Number                    |
| PPE   | Personal Protective Equipment                    |
| RMS   | Root Mean Square                                 |
| ROPS  | Roll-Over Protective Structure                   |
| SRS   | Smooth Ride System                               |

# Introduction

## About this Manual

### Model and Serial Number

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

| Model | From:    | To: |
|-------|----------|-----|
| 418S  | 02335673 |     |

### Using the Manual

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

Read this manual from the front to the back before you use the product 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 product.

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.

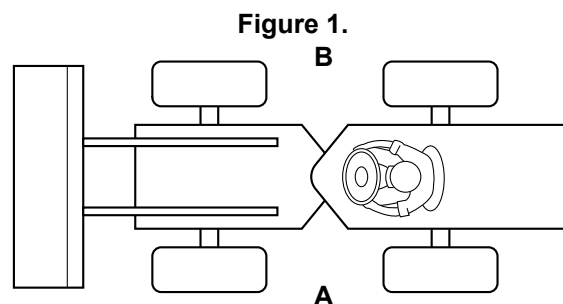
The illustrations in this manual are for guidance only. Where the machines are different, the text and or the illustration will specify.

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

All of 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 seated correctly in the machine.



- A**    Left
- B**    Right

### Cab/Canopy

This manual frequently makes references to the cab. For example, 'do not operate the machine without an operator's manual in the cab'. These statements also apply to canopy build machines.

## **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: Introduction > About this Manual > Cross References \(Page 2\)](#).

## Safety

### Safety - Yours and Others

All machinery can be hazardous. When a product is correctly operated and maintained, it is a safe product 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 product you will find warning messages, 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 product you must be thinking of what hazards there might be and how to avoid them.

Do not work with the product 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 product or the work, ask someone who knows. Do not assume anything.

Remember:

- Be careful
- Be alert
- Be safe.

### Safety Warnings

In this manual and on the product, 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 product damage.

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

**Figure 2. The safety alert system**



## General Safety

### Training

To operate the machine safely you must know the machine and have the skill to use it. You must abide by all relevant laws, health and safety regulations that apply to the country you are operating in. The operator's manual instructs you on the machine, its controls and its safe operation; it is not a training manual. If you are a new operator, get yourself trained in the skills of using a machine before trying to work with it. If you don't, you will not do your job well, and you will be a danger to yourself and others. In some markets and for work on certain jobsites you may be required to have been trained and assessed in accordance with an operator competence scheme. Make sure that you and your machine complies 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. Always be careful. Always be alert for hazards.

### 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 jewellery.

### 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.

### Mobile Phones

Switch off your mobile 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.

Switch off and do not use your mobile phone when refuelling the machine.

### 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 Equipment

Never walk or work under raised equipment unless it is supported by a mechanical device. Equipment which is supported only by a hydraulic device can drop and injure you if the hydraulic system fails or if the control is operated (even with the engine stopped).

Make sure that no-one goes near the machine while you install or remove the mechanical device.

### Raised Machine

Never position yourself or any part of your body under a raised machine 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 jewellery 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 product, you must know how the product operates. Use this part of the manual to identify each control lever, switch, gauge, 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 Compact Products Limited, Harewood Estate, Leek Road, Cheadle, Stoke On Trent, United Kingdom, ST10 2JU

### 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 marking's, and may have been supplied with a Declaration/Certificate of Conformity. These marking's 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 marking's 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

A self-propelled wheeled machine with an integral front mounted shovel-supporting structure and linkage.

The machine can load or excavate through the forward motion of the machine, and can lift, transport and discharge material.

### Intended Use

The machine is intended to be used in normal conditions for the applications described in this manual.

If the machine is used for other applications or in dangerous environments, for example in a flammable atmosphere or in areas with dust containing asbestos, special safety regulations must be obeyed and the machine must be equipped for use in these environments.

### Log Moving/Object Handling

Do not use the machine to move or handle logs unless sufficient log protection is installed. You could cause serious injury to yourself and damage to the machine. For more information, contact your JCB dealer.

### Optional Equipment and Attachments

A wide range of optional attachments are available to increase the versatility of your machine. Only the JCB approved attachments are recommended for use with your machine. Contact your JCB dealer for the full list of approved attachments available.

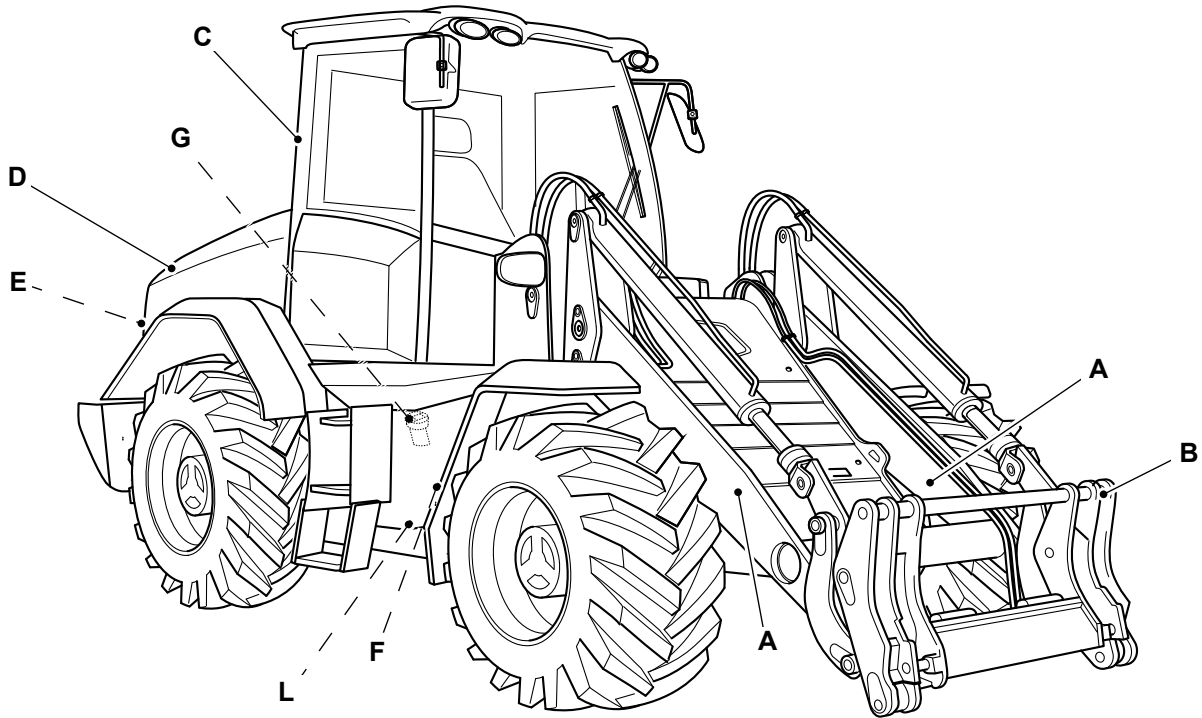
### Danger Zone

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. The danger zone includes the area in immediate proximity to any hazardous moving parts, areas into which working equipment and attachments can be moved to quickly, the machine normal stopping distances and also areas into which the machine can quickly turn under normal conditions of use. Depending on the application at the time, the danger zone could also include the area into which debris, from use of an attachment or working tool, could be projected and any area into which debris could fall from the machine. During the 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.

## Main Component Locations

Figure 3.



- A Loader arms
- B Quickhitch
- C ROPS (Roll-Over Protective Structure)/FOPS (Falling Object Protective Structure) Cab



- D** Engine cover
- E** Hydraulic fluid filler point
- F** Hydraulic fluid tank sight glass
- G** Diesel filler point
- H** Articulation lock
- J** Battery
- K** Battery isolator switch
- L** Maintenance struts (option)

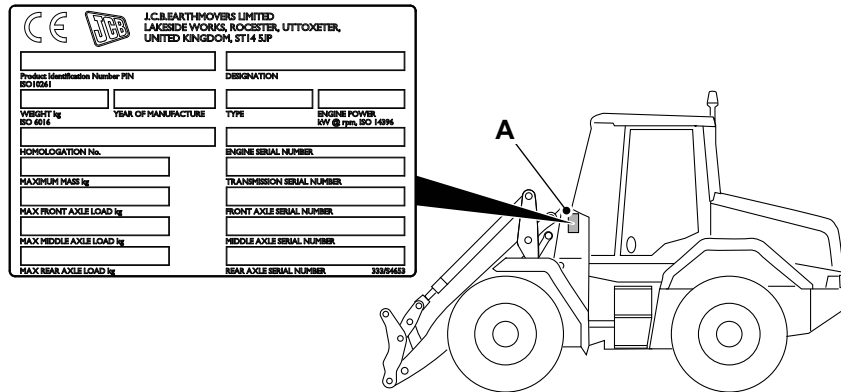
## Product and Component Identification

### Machine

Your machine has an identification plate. The PIN (Product Identification Number), weight, engine power, year of manufacture and serial number of the machine are shown on the identification plate.

The serial number of each major unit is also shown on the unit itself. If a major unit is replaced by a new one, the serial number on the identification plate will be wrong. Either get a replacement identification plate from your JCB dealer or simply remove the old number. This will prevent the wrong unit number being quoted when replacement parts are ordered.

**Figure 4.**



**A** Identification plate (location)

The machine model and build specification are indicated by the PIN. The PIN has 17 digits and must be read from left to right.

**Table 1. Typical PIN**

|     |     |   |   |   |          |
|-----|-----|---|---|---|----------|
| JCB | 416 | Z | S | D | 01323456 |
|-----|-----|---|---|---|----------|

**Table 2. Explanation of the PIN**

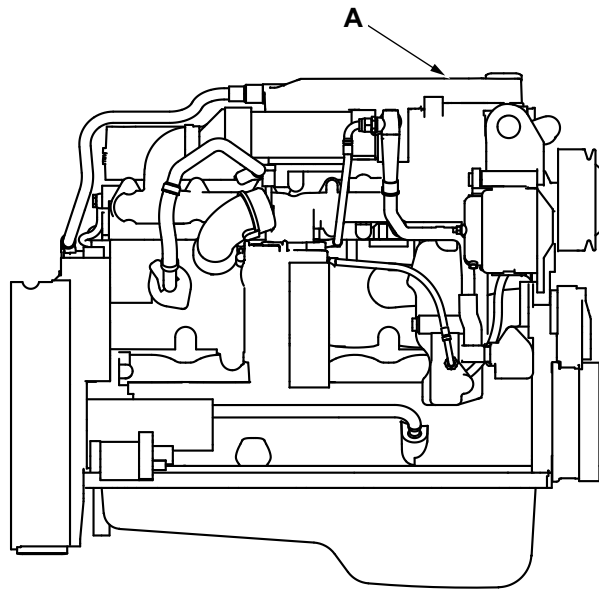
| Digit    | Description  |
|----------|--|
| 1 to 3   | World manufacturer identification. For example, JCB = UK Build.                              |
| 4 to 6   | Machine type and model   |
| 7        | O = HT Loader End, Z = ZX Loader End   |
| 8        | Designation: O = Non-Farmmaster, S = Farmmaster, I = India                                   |
| 9        | Random check letter. The check letter is used to verify the authenticity of a machine's PIN. |
| 10 to 17 | Machine serial number  |

### Engine

The engine data label is attached to the rocker cover as shown.

The data label includes the engine identification number.

Figure 5.



A Engine data label - rocker cover

## Operator Protective Structure

### ROPS and FOPS Data Plate

**▲ WARNING** You could be killed or seriously injured if you operate a machine with a damaged or missing ROPS/FOPS/FOGS. If the ROPS/FOPS/FOGS has been in an accident, do not use the machine until the structure has been renewed. Modifications and repairs that are not approved by the manufacturer may be dangerous and will invalidate the ROPS/FOPS/FOGS certification.

**WARNING** Do not use the machine if the falling objects protection level provided by the structure is not sufficient for the application. Falling objects can cause serious injury.

**WARNING** Machines with a ROPS, FOPS,FOGS or TOPS are equipped with a seat belt. The ROPS, FOPS,FOGS or TOPS is designed to give you protection in an accident. If you do not wear the seat belt you could be thrown off the machine and crushed. You must wear a seat belt when using the machine. Fasten the seat belt before starting the engine.

A machine built to the ROPS (Roll-Over Protective Structure)/FOPS (Falling Object Protective Structure) standard has a data plate attached to the inside of the cab.

Figure 6.

|   |                     |  |                      |
|---|---------------------|--|----------------------|
| J.C.B. CAB SYSTEMS<br>LAKESIDE WORKS<br>ROCHESTER<br>UTTOXETER, STAFFS<br>ST14 5JP<br>ENGLAND<br> | LOADING SHOVEL      |  | OECD APPROVAL NUMBER |
|   | WHEELED             |  |                      |
|   | MAX UNLADEN MASS    |  | ROPS COMPLIANCE      |
|   | XXXX KG             |  | EN ISO 3471:2008     |
|   | YEAR OF MANUFACTURE |  | FOPS COMPLIANCE      |
|   | XXXX                |  | EN ISO 3449:2008     |
|   |                     |  | LEVEL 2              |
| WA SERIAL NUMBER  | XXXXXXXXXXXXXXXX    |  | WA PART NUMBER       |
|   |                     |  | XXX/XXXX             |

If the machine is used in any application where there is a risk of falling objects then a FOPS must be installed. For further information, contact your JCB dealer.

The FOPS has a data plate attached. The data plate indicates what level protection the structure provides.

There are two levels of FOPS:



- Level I Impact Protection - impact strength for protection from small falling objects (e.g. bricks, small concrete blocks, hand tools) encountered in operations such as highway maintenance, landscaping and other construction site services.
- Level II Impact Protection - impact strength for protection from heavy falling objects (e.g. trees, rocks) for machines involved in site clearing, overhead demolition or forestry.



---

## 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 product 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

Figure 7.

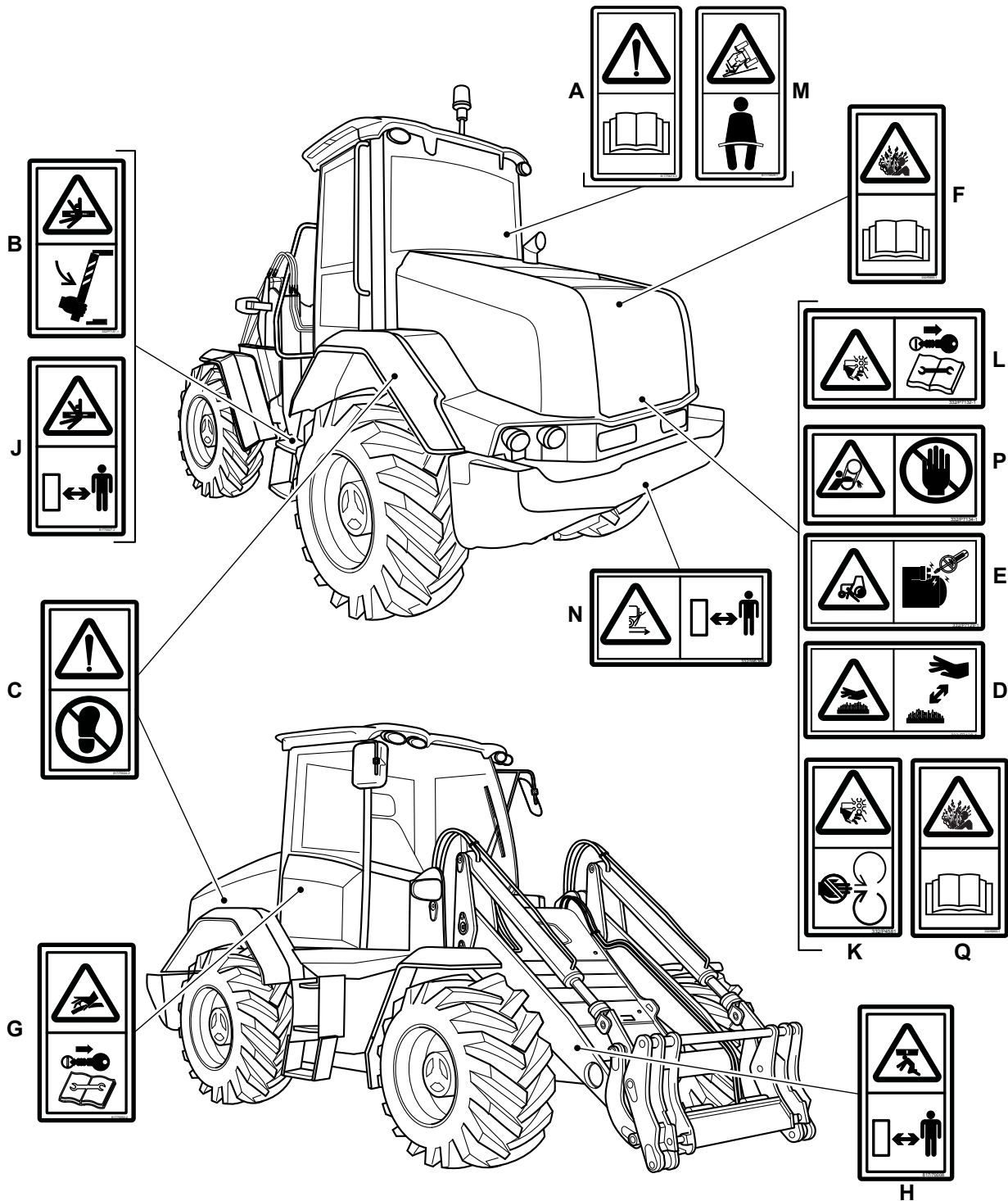


Table 3. Safety Labels

| Item | Part No.  | Description   | Qty. |
|------|-----------|---|------|
| A    | 817/70014 | Warning. Read the Operator's Manual before you operate the machine.                                       | 1    |
| B    | 332/P7181 | Crushing of whole body. Attach/use the support or prop to lockout for service, maintenance or any access. | 1    |
| C    | 817/70024 | Warning. Do not use as a step.  | 2    |

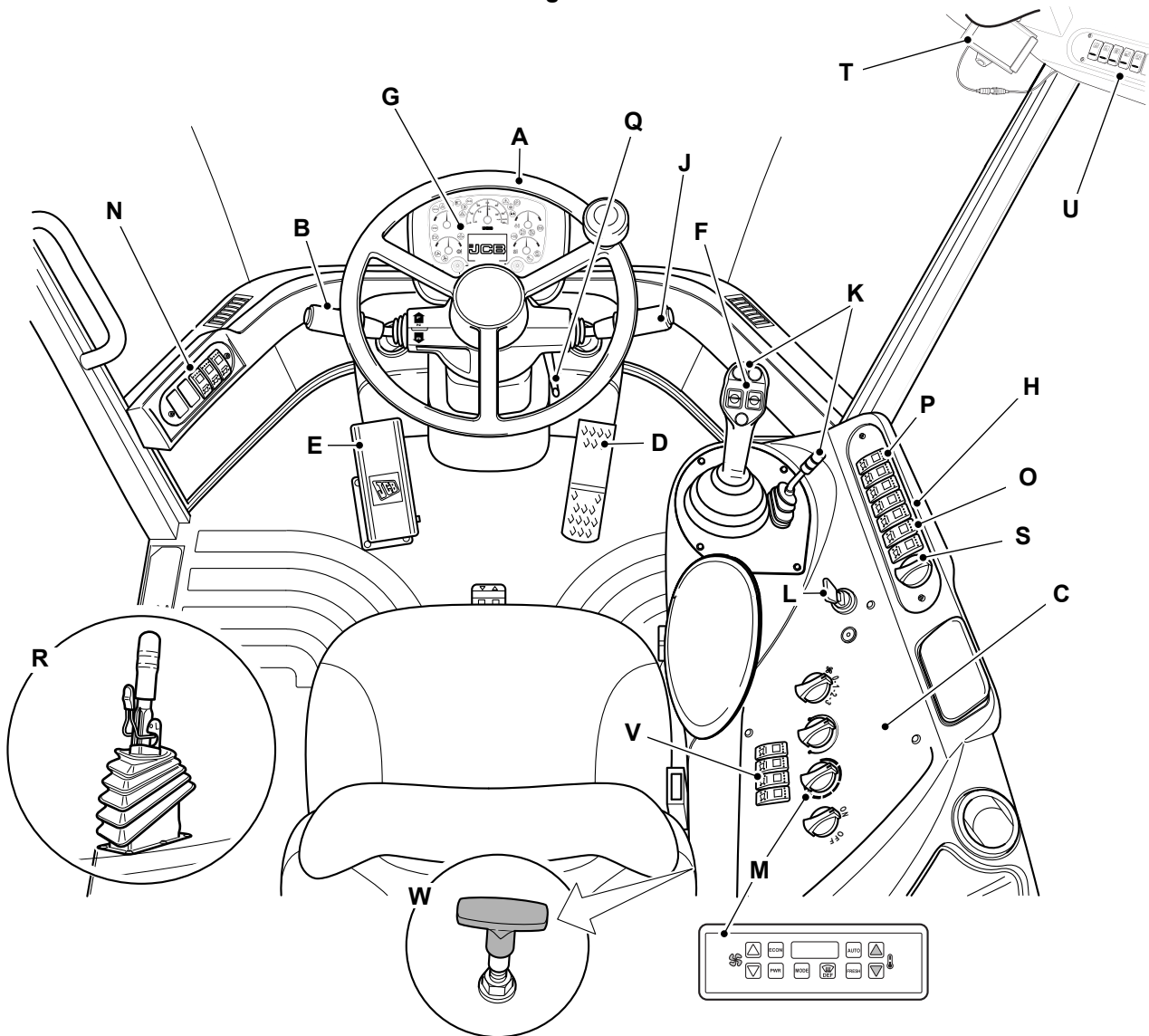


| <b>Item</b> | <b>Part No.</b> | <b>Description</b>   | <b>Qty.</b> |
|-------------|-----------------|--|-------------|
| D           | 332/P7128       | Burns to fingers and hands. Stay a safe distance away.   | 1           |
| E           | 332/P7129       | Run over hazard. Start the engine from the operator's seat only. Do not short across the terminals.  | 1           |
| F           | 332/F5855       | Pressure hazard. Read the Operator's Manual.   | 1           |
| G           | 817/70002       | Pressure hazard. Stop the engine, remove the starter key and consult the Service Manual before you complete any service or maintenance work. | 1           |
| H           | 817/70008       | Crushing of whole body. Keep a safe distance from machine.   | 1           |
| J           | 817/70027       | Crushing of whole body. Keep a safe distance.  | 1           |
| K           | 332/P4581       | Severing of hands and fingers. Keep clear of/do not reach into rotating parts.   | 1           |
| L           | 332/P7132       | Severing of hands and fingers. Keep clear of/do not reach into rotating parts. Read the Service Manual.                                      | 1           |
| M           | 817/70029       | Crush hazard. Wear seat belt.  | 1           |
| N           | 332/W6368       | Strike. Keep clear of the reversing machine.   | 1           |
| P           | 332/P7134       | Entanglement hazard. Do not touch.   | 1           |
| Q           | 332/F5855       | Pressure hazard. Read the Operator's Manual.   | 1           |

# Operator Station

## Component Locations

Figure 8.



- A** Steering wheel Refer to: [Operation > Drive Controls > Steering Wheel \(Page 64\)](#).
- B** Transmission Refer to: [Operation > Drive Controls > Forward, Neutral and Reverse Switch \(Page 65\)](#).
- C** Power outlet Refer to: [Operation > Power Sockets > Auxiliary Power Socket \(Page 102\)](#).
- D** Accelerator pedal Refer to: [Operation > Drive Controls > Accelerator Pedal \(Page 65\)](#).
- E** Service brake pedal Refer to: [Operation > Drive Controls > Service Brake Pedal \(Page 67\)](#).
- F** Drive controls, switches and instruments (Depending on machine specification) Refer to: [Operation > Drive Controls \(Page 63\)](#).
- G** Instrument cluster Refer to: [Operation > Instruments \(Page 71\)](#).
- H** Right console switches Refer to: [About the Product > Console Switches \(Page 19\)](#).
- J** Multi purpose steering column switch Refer to: [Operation > Drive Controls > Steering Column \(Page 64\)](#).
- K** Operating levers Refer to: [Operation > Operating Levers/Pedals \(Page 83\)](#).
- L** Starter switch Refer to: [About the Product > Interior Switches > Ignition Switch \(Page 23\)](#).
- M** Heater / Air conditioning operation Refer to: [Operation > Heating, Ventilating and Air-Conditioning \(HVAC\) \(Page 98\)](#).
- N** Left console switches Refer to: [About the Product > Console Switches \(Page 19\)](#).
- O** Loader arm control isolation switch Refer to: [About the Product > Console Switches > Controls Isolation \(Page 21\)](#).

- P** Hazard warning light switch [Refer to: About the Product > Console Switches \(Page 19\).](#)
- Q** Steering column adjustment [Refer to: Operation > Drive Controls > Steering Column \(Page 64\).](#)
- R** Park brake lever [Refer to: Operation > Drive Controls > Park Brake \(Page 67\).](#)
- S** Machines with constant flow control (optional)
- T** Rear view camera display (If fitted)
- U** Roof panel switches [Refer to: About the Product \(Page 7\).](#)
- V** Right console switches - Tow hitch control (if fitted)
- W** Tow hitch lever

## Console Switches

### General

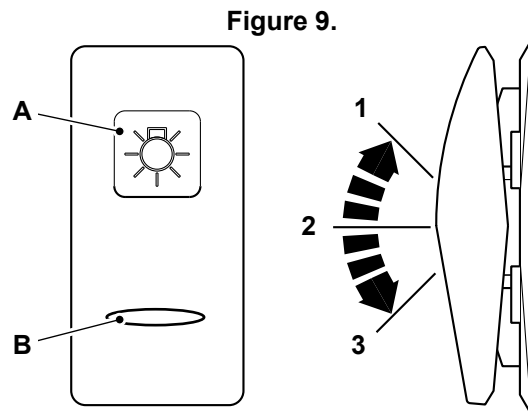
The installed switches and their positions can change according to the specification of the machine.

Each switch has a graphic symbol to show the function of the switch. Before you operate a switch, make sure that you understand its function.

The rocker switches have two or three positions (as shown).

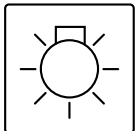
If the switch has a backlight, then the graphic symbol illuminates when the ignition switch or side lights are in the on position.

The light bar illuminates to show that the switch function is active.



- A Graphic symbol
- B Light bar

### Road Lights



Three position rocker switch. The switch functions operate when the ignition switch is in the on and off positions.

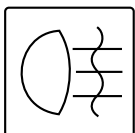
Position : 1 = Off

Position : 3 = Side lights on

Position : 2 = Ignition switch in the on position: Headlights on

Position : 2 = Ignition switch in the off position: Side lights on.

### Rear Fog Lights



Three position self-centring rocker switch. The switch functions only operate when the ignition switch and the side lights and headlights are in the on position.

Position : 1 = Off

Position : 3 = Default

Position : 2 = On.

### Hazard Warning Lights



Two position rocker switch. The switch functions operate when the ignition switch is in the on and off positions.

Position : 1 = Off

Position : 2 = On. A light on the instrument panel flashes with the outside lights.

This as a preview PDF file from [best-manuals.com](http://best-manuals.com)



Download full PDF manual at [best-manuals.com](http://best-manuals.com)