



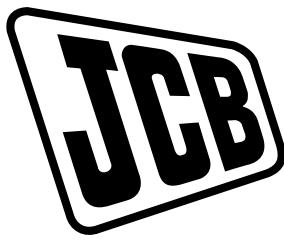
OPERATOR'S MANUAL



LOADALL (ROUGH TERRAIN VARIABLE REACH TRUCK)
540-v140, 540-v180

EN - 9831/4000 ISSUE 2 - 03/2018

THIS MANUAL SHOULD ALWAYS STAY WITH THE MACHINE



OPERATOR'S MANUAL

LOADALL (ROUGH TERRAIN
VARIABLE REACH TRUCK)
540-v140, 540-v180

EN - 9831/4000 - ISSUE 2 - 03/2018

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

Copyright 2016 © 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

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
Introduction	
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
About the Product	
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	8
Product and Component Identification	
Machine	10
Engine	12
Axe	13
Operator Protective Structure	13
Safety Labels	
General	15
Safety Label Identification	15
Operator Station	
Component Locations	17
Interior Switches	
Ignition Switch	18
Multi-Purpose Switch	18
Cab Interior Light	19
Console Switches	
General	21
Road Lights	21
Rear Fog Lights	21
Hazard Warning Lights	21
Work Lights	21
Transmission Mode	22
Transmission Disconnect	22
Information	22

Tilt Lock	22
Beacon	22
Heater	22
Window Heater	22
Inner Boom Extend/Retract	23
Controls Isolation	23
Stabiliser Isolation	23
Chassis Levelling	23
Hydraulic Function	23
Hydraulic Venting	23
Reverse Fan	23
Rear Window Wiper	24
Roof Window Wiper	24
Auxiliary Hydraulic Circuit	24

Operation

Introduction	
General	25
Operating Safety	
General	26
Worksite Safety	28
Risk Assessment	29
Walk-Around Inspection	
General	31
Entering and Leaving the Operator Station	
General	32
Emergency Exit	32
Doors	
Operator Door	34
Windows	
Rear Window	36
Battery Isolator	
General	37
Before Starting the Engine	
General	38
Operator Seat	
General	39
Basic Seat	39
Suspension Seat	40
Heated Seat Controls	43
Seat Belt	
General	44
Inertia Reel Seat Belt	44
Static Seat Belt	45
Mirrors	
General	47
Starting the Engine	
General	48
Immobiliser	49
Stopping and Parking	
General	53

Preparing for Travel	
General	54
Preparing for Road Travel	54
Preparing for Worksite Travel	57
Beacon	59
Safety Equipment	
Control Lock	61
Drive Controls	
Steering Wheel	64
Steering Column	64
Accelerator Pedal	64
Service Brake Pedal	64
Park Brake	65
Transmission Drive Lever	65
Gear Lever	67
Steer Mode Control	68
Instruments	
Instrument Panel	69
Getting the Machine Moving	
General	89
Slopes	
General	91
Driving on Slopes	91
Working on Slopes	93
Driving the Machine	
Steer Modes	95
Limited Slip Differential (LSD)	96
Towing Other Equipment	96
Operating Levers/Pedals	
General	99
Control Layouts	99
Boom Controls	99
Chassis Levelling Controls	102
Stabiliser Controls	103
Auxiliary Circuit Controls	106
Lifting and Loading	
General	110
Load Charts	110
Boom Indicators	116
Inclinometers	116
Interlocks	117
Longitudinal Load Moment Indicator (LLMI)	124
Longitudinal Load Moment Control (LLMC)	127
Working with the Boom	
General	132
Fork Ratings	133
Repositioning the Forks	133
Working with Pallets	134
Working with Bales	136
Working with Irregular Loads	137
Stacking Loads	138

Filling the Shovel	139
Loading a Truck	140
Suspended Loads	140
Adjusting the Boom	141
Heating, Ventilating and Air-Conditioning (HVAC)	
General	143
Air-Conditioning Controls	143
Face Level Fan	144
Fire Extinguisher	
General	145
Moving a Disabled Machine	
Jump-Starting the Engine	146
Recovery Hitch	146
Lifting the Machine	
General	148
Transporting the Machine	
General	149
Loading the Machine onto the Transporting Vehicle/Trailer	149
Operating Environment	
General	152
Operating in Low Temperatures	152
Operating in High Temperatures	153
Refuelling	
General	154
Low Fuel Levels	154
Filling the Tank	154

Attachments

Working with Attachments	
Introduction	157
Attachments for your Machine	157
Connecting/Disconnecting Hydraulic Hoses	158
Quick-fit Carriage	
General	162
Side-Shift Carriage	
General	166
Fork Positioner	
General	171
Jibs	
General	173
Extension Jib	173
Roof Truss Jib	174
Hooks	
Fork-Mounted Hook	177
Work Platforms	
General	179

Preservation and Storage

Cleaning	
General	181
Preparation	182

Checking For Damage	
General	183
Storage	
General	184
Put into Storage	184
During Storage	185
Take out of Storage	185
Security	
General	186
JCB Plantguard	186
Construction Equipment Security and Registration Scheme (CESAR)	186
LiveLink	186
Maintenance	
Introduction	
General	187
Owner/Operator Support	187
Service/Maintenance Agreements	188
Initial Service and Inspection	188
Obtaining Spare Parts	188
Maintenance Safety	
General	189
Fluids and Lubricants	190
Maintenance Schedules	
General	194
How to Use the Maintenance Schedules	194
Maintenance Intervals	194
Pre-start Cold Checks, Service Points and Fluid Levels	194
Functional Tests and Final Inspection	197
Maintenance Positions	
General	200
Maintenance Position - Boom Lowered	200
Maintenance Position - Boom Raised	201
Service Points	
General	203
Access Apertures	
General	208
Battery Cover	208
Engine Compartment Cover	209
Rear Cover	210
Undershield	210
Tools	
General	212
Lubrication	
General	213
Preparation	213
Attachments	
General	214
Body and Framework	
General	215
Pivot Pins	215

Boom	
General	217
Boom Chains	218
Operator Station	
General	222
Operator Protective Structure	222
Seat	222
Seat Belt	222
Controls	223
Engine	
General	224
Oil	225
Drive Belt	227
Emissions Control System	228
Air Filter	
General	231
Outer Element	231
Dust Valve	232
Fuel System	
General	233
Tank	233
Fuel Filter	234
Water Separator	235
Cooling System	
General	236
Coolant	236
Cooling Pack	236
Brakes	
General	238
Park Brake	239
Service Brake	240
Gearbox	
Oil	241
Axles	
General	242
Oil	242
Wheels	
General	244
Tyres	
General	246
Propshafts	
General	248
Hydraulic System	
General	249
Services	250
Oil	250
Cylinders / Rams	251
Hose Burst Check Valves	251
Electrical System	
General	252
Battery	253

Battery Isolator	254
Fuses	254
Relays	256
Window Washer	256
Miscellaneous	
Fire Extinguisher	258
Technical Data	
Static Dimensions	
Dimensions	259
Weights	263
Visibility Diagrams	265
Performance Dimensions	
General	272
Boom Dimensions and Performance	273
Towing Weights	275
Noise Emissions	
General	277
Noise Data	277
Vibration Emissions	
General	278
Vibration Data	279
Fluids, Lubricants and Capacities	
General	282
Fuel	283
Diesel Exhaust Fluid (DEF)	286
Coolant	288
Torque Values	
General	290
Electrical System	
General	291
Fuses	291
Relays	295
Engine	
Exhaust After Treatment (EAT)	298
Wheels and Tyres	
General	302
Tyre Sizes and Pressures	303
Declaration of Conformity	
General	308
Data	308
Warranty Information	
Service Record Sheet	310

Acronyms Glossary

2WD	Two Wheel Drive
CESAR	Construction Equipment Security and Registration
DEF	Diesel Exhaust Fluid
ECU	Electronic Control Unit
FEAD	Front End Accessory Drive
FOPS	Falling Object Protective Structure
HVAC	Heating Ventilation Air Conditioning
ISO	International Organization for Standardization
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LLMC	Longitudinal Load Moment Control
LLMI	Longitudinal Load Moment Indicator
LMI	Load Moment Indicator
LSD	Limited Slip Differential
PIN	Product Identification Number
RMS	Root Mean Square
ROPS	Roll-Over Protective Structure
RPM	Revolutions Per Minute
SCR	Selective Catalytic Reduction
SWL	Safe Working Load

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:
540-v140	2902000	2908741
540-v180	2902000	2908741

Using the Manual

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.

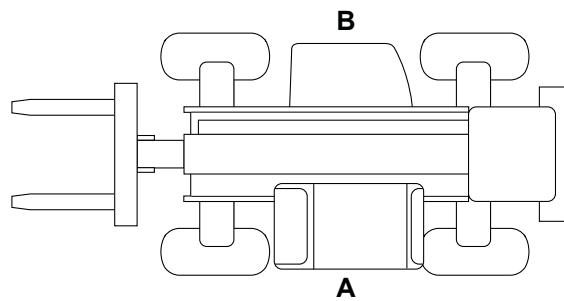
The manufacturer's policy is one of continuous improvement. The right to change the specification of the machine without notice is reserved. No responsibility will be accepted for discrepancies which may occur between specifications of the machine and the descriptions contained in this manual.

All 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.

Figure 1.



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: Cross References \(Page 2\)](#).

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 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. Ensure that you receive the correct training before operating any machinery. Failing to do so will result in incorrect operation of the machine and you will be putting yourself and others at risk. 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 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. 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.



Notes:

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, 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 Excavators Limited, Lakeside Works, Rocester, Uttoxeter, United Kingdom, ST145JP

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

The JCB Loadall is a self propelled, seated operator, wheeled machine for operation on unimproved natural terrain and disturbed terrain.

A main structural support is designed to carry an extending boom with a carriage mounted on the front to which forks or an approved attachment can be fitted.

When used normally the machine lifts and places loads by extending/retracting, raising/lowering the boom.

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.

Make sure you follow the instructions outlined in the operator's manual of the mounted or trailed machinery or trailer. Do not operate the combination tractor-machine or tractor-trailer unless all instructions have been followed.

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

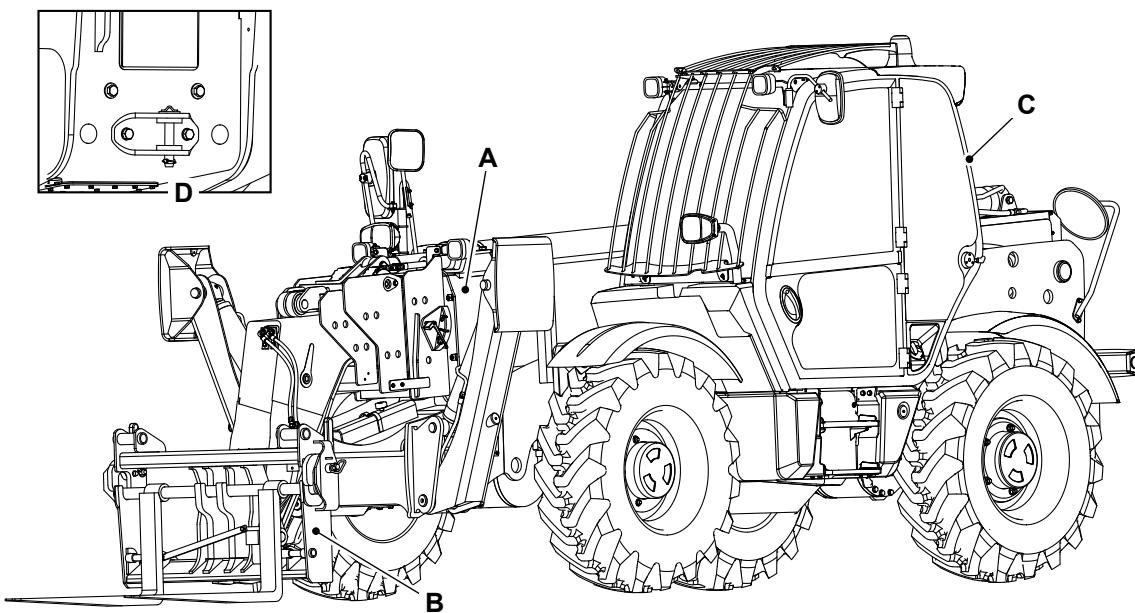
A wide range of optional attachments are available to increase the versatility of your machine. Only the JCB approved attachments are recommended for use with your machine. Contact your JCB dealer for the full list of approved attachments available.

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, stopping operation, isolating the controls and turning off the engine.

Main Component Locations

Figure 3.**A** Lift arm/Boom**C** ROPS (Roll-Over Protective Structure)/FOPS
(Falling Object Protective Structure) cab**B** Carriage**D** Mechanical tow hitch

Product and Component Identification

Machine

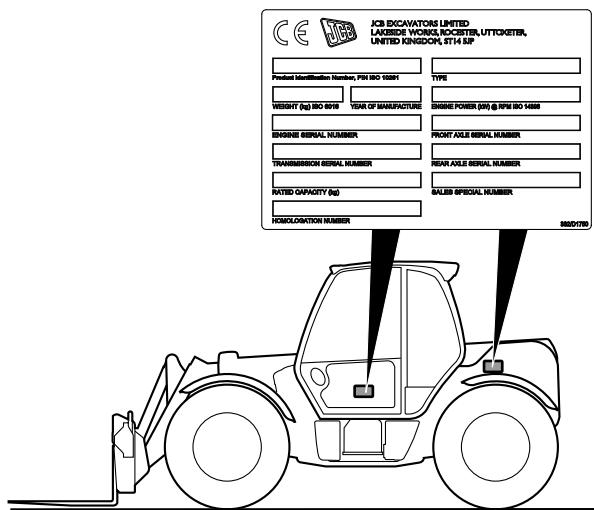
Machine Identification Plate

Your machine has an identification plate mounted in one of two positions as shown. The serial numbers of the machine and its major units are shown on the plate.

The machine model and build specification is indicated by the PIN (Product Identification Number)

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. The machine and engine serial numbers can help identify exactly the type of equipment you have.

Figure 4.



Typical Product Identification Number

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	5AA	7	E	C	G	1234567
-----	-----	---	---	---	---	---------

Table 2.

Digit 1 to 3	World Manufacturer Identification
JCB	United Kingdom
GEO	Georgia, US
HAR	Haryana, India
SOR	Sorocaba, Brazil
GET	Gatersleben, Germany
PUN	Pune, India
SHA	Shanghai, China
JPB	JCB Branded Products

Table 3.

Digit 4 to 6	Machine Model
5AF	540-170
5AL	540-140
5AN	535-125 HiViz
5AP	535-140 HiViz
5AX	540-200
5A8	540-140 HiViz
5AG	550-140
5AM	550-170
5MA	Man basket machines
5MF	Man basket machines
5MX	Man basket machines
5M8	Man basket machines
5MN	Man basket machines
5RA	540-180 HiViz

Table 4.

Digit 7	Engine Type
JCB Dieselmax (Tier 4):	
2 (T4F)	81 kW
3 (T4F)	93 kW
4 (T4F)	108 kW
7 (T4F)	55 kW
8 (T4F)	68 kW
A (T4F)	55 kW
B (UN3/GB3)	68 kW
C (UN3/GB3)	81 kW
D (UN3/GB3)	93 kW
E (UN3/GB3)	108 kW

Table 5.

Digit 8	Gearbox Model
E	3 Speed (PS750)
F	3 Speed (PS760)
G	4 Speed (PS750)
H	4 Speed (PS760)
J	6 Speed (PS760)
M	4 Speed (SS700)
N	4 Speed (PS750)

Table 6.

Digit 9
Random check letter. The check letter is used to verify the authenticity of a machine's PIN

Table 7.

Digit 10
Year of manufacture. G = 2016, H = 2017 etc.

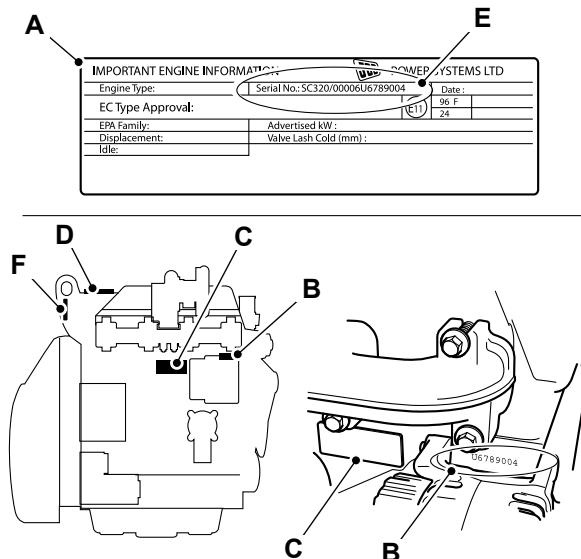
Table 8.

Digit 11 to 17
Machine serial number. Each machine has a unique serial number.

Engine

Engine data labels are located on the cylinder block and rocker cover (if fitted). The data label contains important engine information and includes the engine identification number. Injector codes are on a label on the rocker cover.

Figure 5.



A Engine data label

C Engine data label - cylinder block

E Engine identification number

B Stamp - cylinder block

D Engine data label - rocker cover

F Injector codes label - rocker cover

The data label includes the engine identification number.

Table 9. Example of the engine identification number

	SJ	320/40001	U	00001	04
Digit	1-2	3-10	11	12-16	17-18

Table 10.

Digit 1-2	Engine Type
SJ	4.4 L turbocharged and aftercooled electronic common rail fuel injection (Tier 4F) > 55 kW
DJ	4.8 L turbocharged and aftercooled electronic common rail fuel injection (Tier 4F)
SL	4.4 L turbocharged and aftercooled electronic common rail fuel injection (Tier 4F) 55 kW
FL	3 L turbocharged and aftercooled electronic common rail fuel injection (Tier 4F)

Table 11. Explanation of the engine identification number

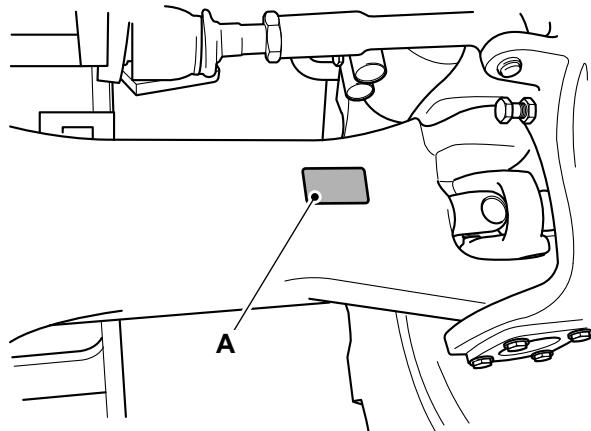
Digit	Explanation
3-10	Engine part number
11	Country of manufacture. U = United Kingdom
12-16	Engine serial number
17-18	Year of manufacture

The country of manufacturer, engine serial number and year of manufacture of the engine are also stamped on the cylinder block. Refer to Figure 5.

Axle

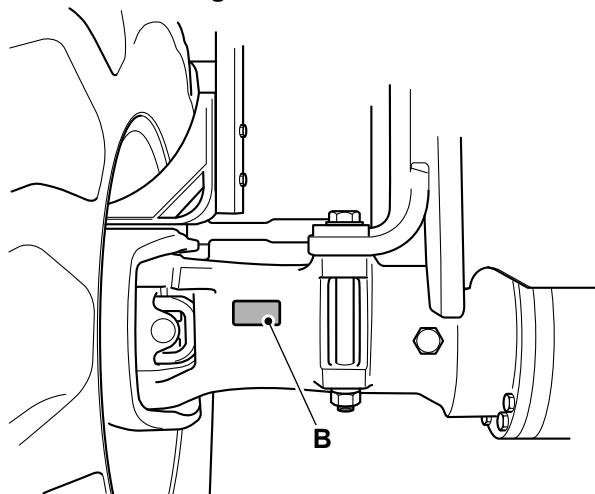
The axles have a serial number stamped on a data plate as shown.

Figure 6. Front axle



A Data plate - front axle

Figure 7. Rear axle



B Data plate - rear axle

Operator Protective Structure

⚠ WARNING You could be killed or seriously injured if you operate a machine with a damaged or missing ROPS/FOPS. If the ROPS/FOPS 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 certification.

WARNING Machines with a ROPS/FOPS are equipped with a seat belt. The ROPS/FOPS 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.

FOPS Data Plate

⚠ 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.

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

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

There are two levels of FOPS:

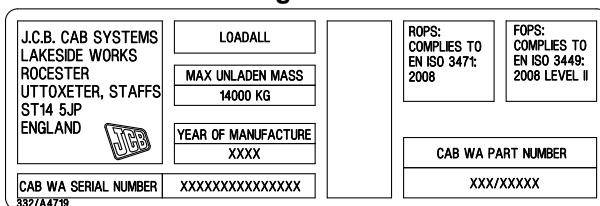
- Level I Impact Protection - impact strength for protection from small falling objects (e.g. bricks, small concrete blocks, hand tools) encountered in operations such as highway maintenance, landscaping and other construction site services.
- Level II Impact Protection - impact strength for protection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

ROPS Data Plate

⚠ WARNING Your machine may be installed with a Roll-Over Protective Structure (ROPS) indicating that the purchaser specified the machine for use in applications where there is risk of roll-over. ROPS is a device to protect the operator in the event of roll-over. Any damage or modification to the structure may invalidate the ROPS certification. If damage has occurred then an authorised JCB dealer should be consulted.

A machine with a ROPS (Roll-Over Protective Structure) can be identified by referring to the cab identification plate. Work place (work site, job site) risk assessment should facilitate the machine selection and the need for an machine with a ROPS.

Figure 8.



Data plate - ROPS/FOPS standards

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 over-stretch 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 9.

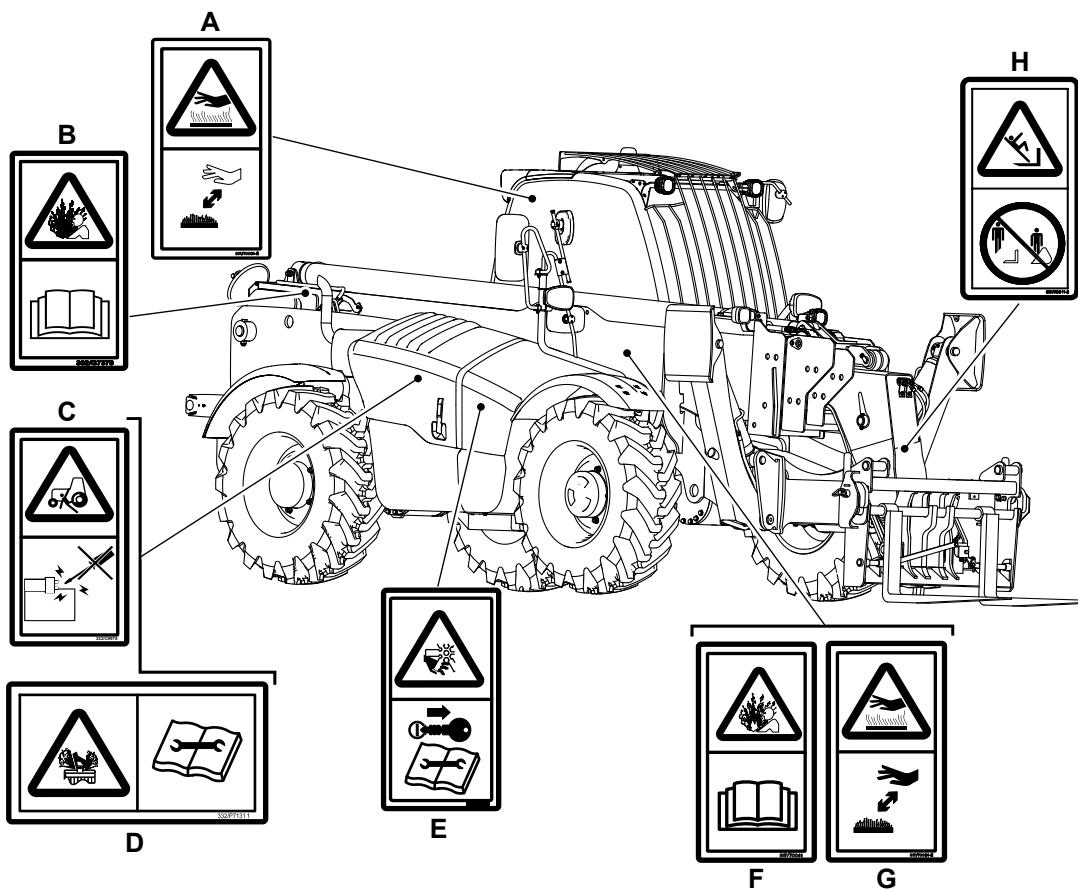


Figure 10.

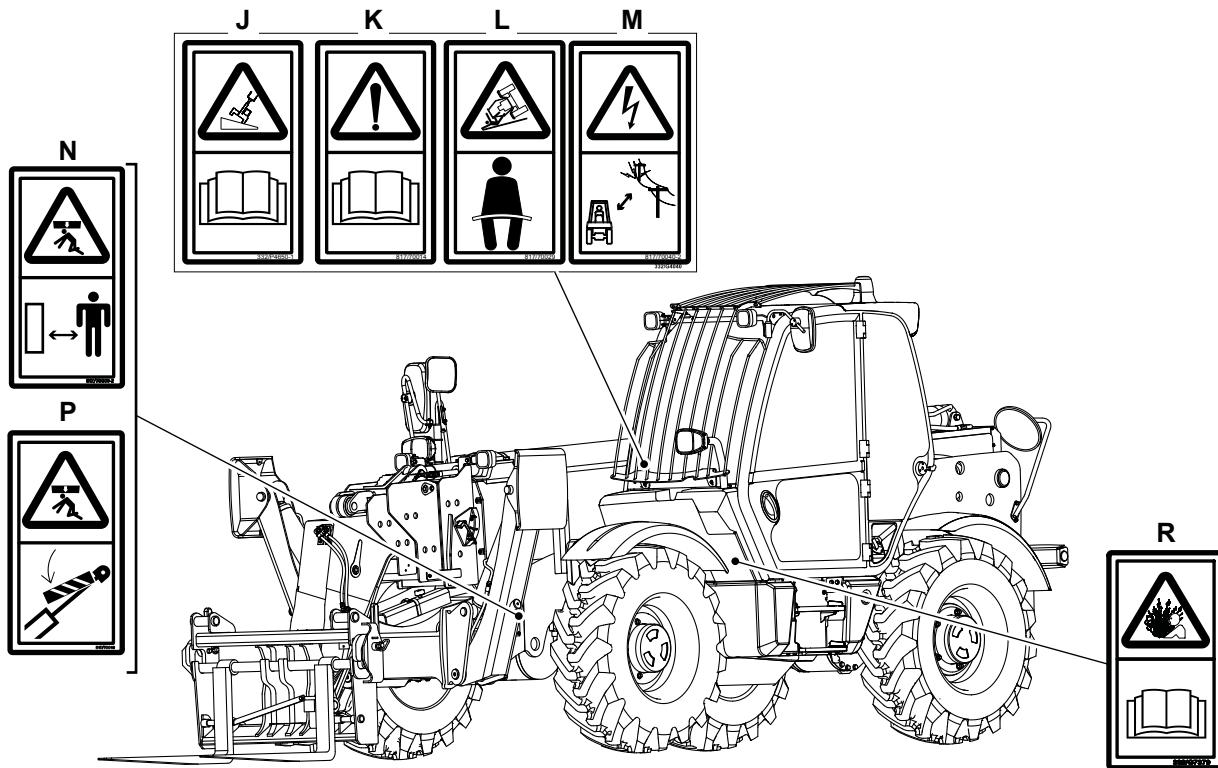


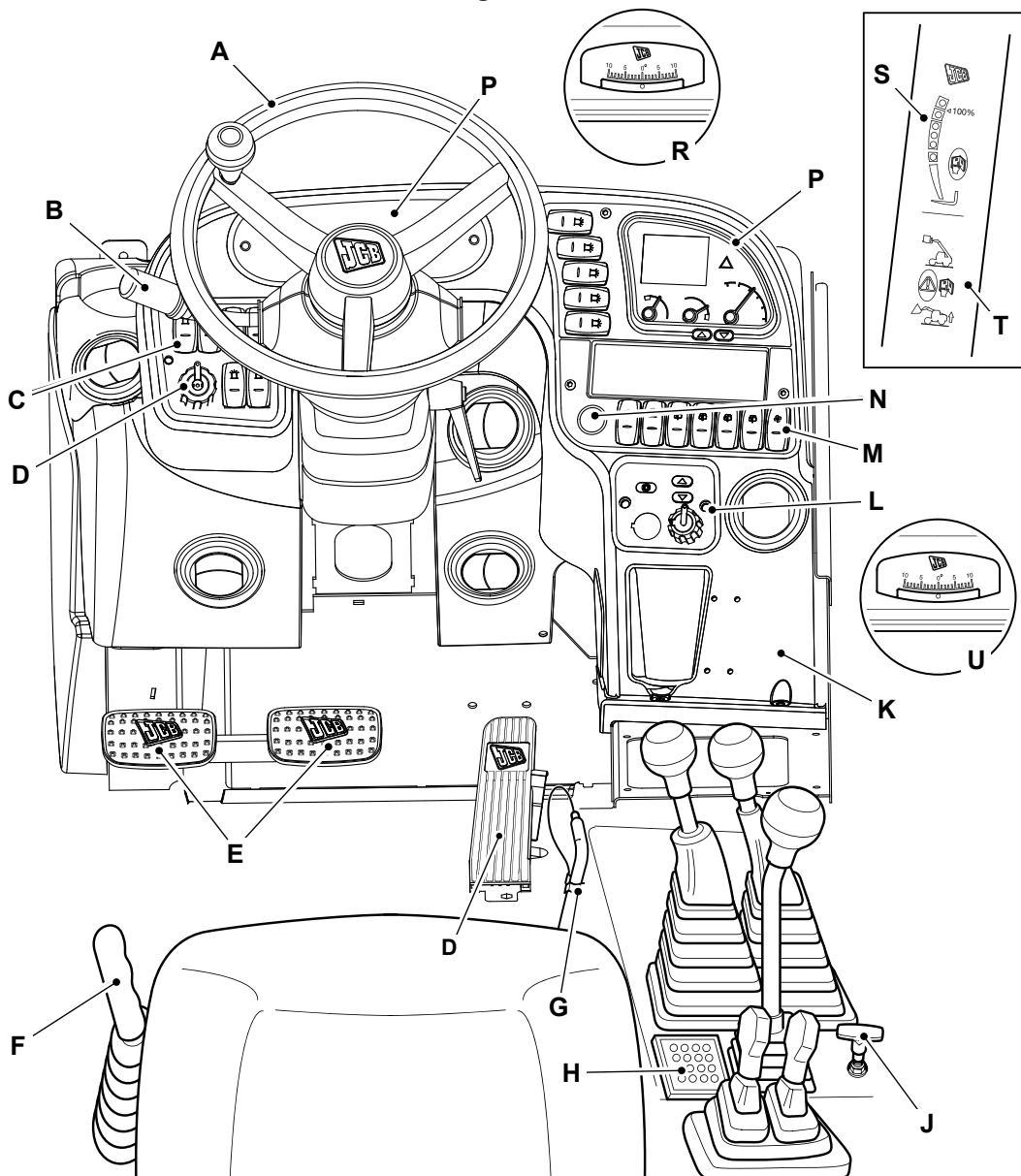
Table 12. Safety Labels

Item	Part No.	Description	Qty.
A	817/70004	Warning. Burns to fingers and hands. Stay a safe distance away.	1
B	332/G7379	Pressure hazard. Read Operator's Manual.	1
C	332/C9978	Run over hazard. Start the engine from the operator's seat only. Do not short across the terminals.	1
D	332/P7131	Pressure hazard. Read the Service Manual.	1
E	333/D0526	Severing of hands or fingers. Keep clear of/do not reach into the moving parts. Stop the engine and remove the starter key before you start maintenance work. Refer to Maintenance Section in the Operator's Manual.	1
F	332/G7379	Pressure hazard. Read Operator's Manual.	1
G	817/70004	Warning. Burns to fingers and hands. Stay a safe distance away.	1
H	817/70011	Fall from raised attachment. Do not stand or ride on the bucket or forks.	1
J	332/P4650	Stability hazard. Read the Operator's Manual.	1
K	817/70014	Warning. Read the Operator's Manual before you operate the machine.	1
L	817/70029	Warning. Crush hazard. Wear seat belt.	1
M	817/70040	Electrical hazard. Stay a safe distance away from power lines.	1
N	817/70008	Crushing of whole body. Keep a safe distance from machine.	1
P	817/70010	Crushing of whole body. Insert the boom support device before you complete any service or maintenance work underneath the boom.	1
R	332/G7379	Pressure hazard. Read Operator's Manual.	1

Operator Station

Component Locations

Figure 11.



- A** Steering wheel [Refer to: Steering Wheel \(Page 64\).](#)
- C** Console switches [Refer to: Introduction \(Page 1\).](#)
- E** Service brake pedal [Refer to: Service Brake Pedal \(Page 64\).](#)
- G** Control locks
- J** Hydraulic tow hitch
- L** HVAC (Heating Ventilation Air Conditioning) [Refer to: Heating, Ventilating and Air-Conditioning \(HVAC\) \(Page 143\).](#)
- N** Ignition switch [Refer to: Ignition Switch \(Page 18\).](#)
- P** Lateral Inclinometer
- R** Load control system
- B** Transmission Lever and Gear Selection [Refer to: Steering Wheel \(Page 64\).](#)
- D** Steer mode selector [Refer to: Steer Mode Control \(Page 68\).](#)
- F** Park brake lever [Refer to: Park Brake \(Page 65\).](#)
- H** Immobiliser
- K** Load charts
- M** Console switches [Refer to: Console Switches \(Page 21\).](#)
- P** Instrument panel [Refer to: Instrument Panel \(Page 69\).](#)
- S** LLMI (Longitudinal Load Moment Indicator)
- U** Longitudinal Inclinometer

Interior Switches

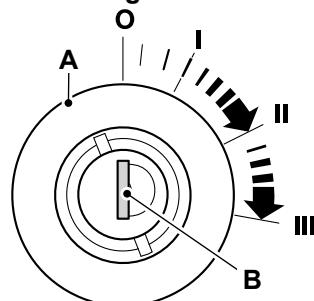
Ignition Switch

The ignition key operates the four-position ignition switch. The ignition key can only be inserted or removed in position 0.

If the engine fails to start, the ignition key must be returned to position 0 before the starter motor is re-engaged.

Do not operate the starter motor for more than 20 s without the engine firing. If the engine fires but does not fully start, let the starter motor cool for at least 2 min between starts.

Figure 12.



A Ignition switch

B Ignition key

Table 13. Switch Positions

Position	Function
0	Off/Stop the Engine: Turn the ignition key to this position to stop the engine. Make sure the controls are in neutral and the boom is lowered before you stop the engine.
I	On: Turn the ignition key to this position to connect the battery to all of the electrical circuits. The ignition key will return to this position when it is released from position II or position III.
II	This position is not used.
III	Start: Turn the ignition key to this position to operate the starter motor and turn the engine. The ignition switch has an inhibitor to stop the ignition switch being turned ON when the engine is running.

Multi-Purpose Switch

Direction Indicators

Push the stalk forwards to indicate a left turn. Pull the stalk backwards to indicate a right turn. Place in central position to cancel.

Windscreen Wiper

Rotate the switch barrel to activate and cancel the windscreen wipers. The wiper speed can vary dependant on machine specification.

Single Speed (Standard)

0 = Off

I = On

Two Speed (Optional)

J = Intermittent Wipe

0 = Off

I = Slow

II = Fast

Windscreen Washer

Push the button to activate the windscreen washer. Allow the stalk to spring back to central position when finished.

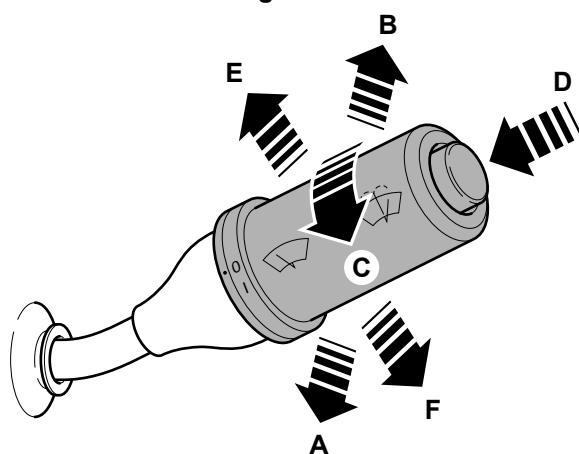
Headlights Flash

Lift the stalk upwards to flash the headlights. Allow the stalk to spring back to central position when finished.

Main Beam

When the road lights are switched on via main switch on console, push the stalk downwards to turn on the main beam. Pull the stalk upwards to the central position to turn off main beam. Switch off main beam for oncoming vehicles.

Figure 13.



A Backwards - Right turn

C Rotate - Wiper on and off or intermittent

E Upwards - Headlights flash

B Forwards - Left Turn

D Push - Washer on

F Downwards - Main beam

Cab Interior Light

Press either end of the light unit to turn on the cab interior light.

Press the other end of the light unit to turn off the cab interior light.

Make sure the cab interior light is turned off when you intend to leave the machine for a long period of time.

This is a preview PDF file from **best-manuals.com**



Download full PDF manual at **best-manuals.com**