

OPERATOR'S MANUAL



COMPACT EXCAVATOR

15C-1, 16C-1, 18Z-1, 19C-1, 19C-1 PC

EN - 9831/2900 ISSUE 4 - 03/2018

THIS MANUAL SHOULD ALWAYS STAY WITH THE MACHINE



OPERATOR'S MANUAL

COMPACT EXCAVATOR 15C-1, 16C-1, 18Z-1, 19C-1, 19C-1 PC

EN - 9831/2900 - ISSUE 4 - 03/2018

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

Copyright 2017 © 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

Ω

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.

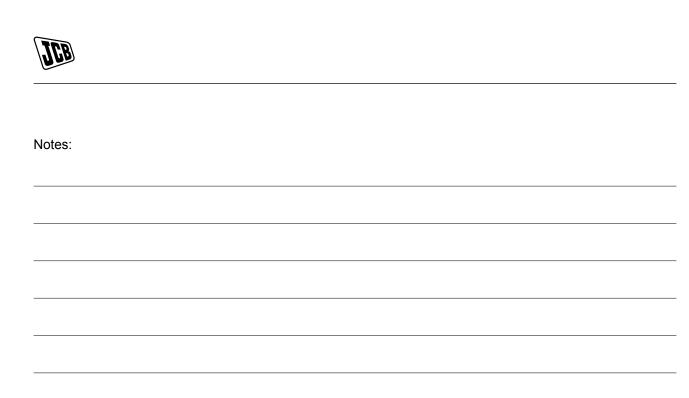
Machine Delivery and Installation

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	





Contents	Page No.
Acronyms Glossary	vii
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
Location of Manual	2
Safety	
Safety - Yours and Others	3
Safety Warnings	3
General Safety	4
Clothing and Personal Protective Equipment (PPE)	5
About the Product	
Introduction	7
General	
Name and Address of the Manufacturer	
Product Compliance	
Description	
General	
Intended Use	
Log Moving/Object Handling	
Optional Equipment and Attachments	
Danger Zone	8
Main Component Locations	9
Product and Component Identification	
Machine	10
Engine	10
Operator Protective Structure	11
Safety Labels	
General	14
Safety Label Identification	14
Operator Station	
Component Locations	21
Interior Switches	
Ignition Switch	23
Cab Interior Light	23
Control Pattern Selector	24
Console Switches	
General	25
Work Lights	
Beacon	
Controls Isolation	
Window Wipers	
Bi-Directional and Hammer Mode Selector	



Operation Introduction	
General	29
Operating Safety	
General	30
Worksite Safety	32
Risk Assessment	. 33
Walk-Around Inspection	
General	35
Entering and Leaving the Operator Station	
General	36
Emergency Exit	
Doors	
Operator Door	42
Windows	
Front Window	44
Side Window	
Sun Visor/Sunblind	. 44
	46
Sunblind	. 40
Battery Isolator	4-
General	47
Before Starting the Engine	
General	48
Operator Seat	
General	
Basic Seat	50
Suspension Seat	50
Seat Belt	
General	52
Static Seat Belt	. 52
Mirrors	
General	54
Starting the Engine	
General	56
Warming Up	. 58
Immobiliser	
Stopping and Parking	. 00
General	64
Preparing for Travel	0-1
General	65
Preparing for Worksite Travel	
·	
Beacon	. 00
Safety Equipment	07
General	
Control Lock	67
Drive Controls	
Track Controls	
Hand Throttle Control	. 69
Instruments	
General	
Instrument Panel	70



Getting the Machine Moving	
General	. 74
Slopes	
General	
Driving on Slopes	
Working on Slopes	. 75
Driving the Machine	
General	. 76
Operating Levers/Pedals	
General	
Control Layouts	
Excavator End Controls	
Dozer Blade Controls	
Extending Undercarriage Controls	
Auxiliary Circuit Controls	82
Lifting and Loading	
General	. 84
Load Charts	. 84
Overload Warning System	. 85
Working with the Excavator End	
General	. 86
Preparing to Use the Excavator End	. 86
Lifting With the Excavator End	. 86
Digging	. 88
Working with the Dozer Blade	
General	. 90
Dozing and Grading	. 90
Scraping and Cutting	. 90
Backfilling	. 91
Heating, Ventilating and Air-Conditioning (HVAC)	
General	. 92
Cab Heater Controls	. 92
Power Sockets	
Auxiliary Power Socket	. 93
Fire Extinguisher	
General	. 94
Moving a Disabled Machine	
General	. 95
Getting the Machine Unstuck	. 95
Jump-Starting the Engine	. 95
Retrieval	. 96
Excavator End (Emergency Operation)	. 97
Lifting the Machine	
General	. 98
Transporting the Machine	
General	100
Loading the Machine onto the Transporting Vehicle/Trailer	100
Unloading the Machine from the Transporting Vehicle/Trailer	105
Operating Environment	
General	106
Operating in Low Temperatures	106



Operating in High Temperatures	106
Refuelling	
General	
Low Fuel Levels	
Filling the Tank	108
Attachments	
Working with Attachments	
Introduction	109
Attachments for your Machine	109
Connecting/Disconnecting Hydraulic Hoses	111
Impact Protection	114
Direct-Mounted Attachments	
General	115
Quickhitch	
Excavator End Quickhitch	116
Buckets	
General	124
Bucket Teeth	124
Rockbreaker	
General	127
Preservation and Storage Cleaning	
General	131
Preparation	
Checking For Damage	132
General	123
Storage	130
General	13/
Put into Storage	
During Storage	
Take out of Storage	
· · · · · · · · · · · · · · · · · · ·	130
Security General	126
JCB Plantguard	
Construction Equipment Security and Registration Scheme (CESAR)	
Construction Equipment Security and Registration Scheme (CESAR)	130
Maintenance	
Introduction	
General	
Owner/Operator Support	
Service/Maintenance Agreements	
Obtaining Spare Parts	138
Maintenance Safety	
General	
Fluids and Lubricants	140
Maintenance Schedules	
General	
How to Use the Maintenance Schedules	
Maintenance Intervals	144
Pre-start Cold Checks, Service Points and Fluid Levels	
Functional Tests and Final Inspection	146



Maintenance Positions	
General	
Maintenance Position (Excavator End Lowered)	. 148
Service Points	
General	. 149
Access Apertures	
General	
Engine Compartment Cover	. 151
Hydraulic Compartment Cover	. 157
Tools	
General	. 158
Toolbox	. 158
Lubrication	
General	. 160
Preparation	. 160
Attachments	
General	. 161
Body and Framework	
General	. 162
Slew Ring Bearings	. 162
Pivot Pins	. 163
Operator Station	
General	. 165
Operator Protective Structure	. 165
Seat	. 165
Seat Belt	. 165
Controls	. 166
Engine	
General	. 167
Oil	. 167
Drive Belt	. 169
Air Filter	
General	. 171
Outer Element	. 171
Dust Valve	172
Fuel System	
General	. 173
Pre-Filter Element	
Fuel Filter	
Water Separator	
Cooling System	
General	. 177
Coolant	
Cooling Pack	
Tracks	
General	. 179
Steel	
Rubber	
Track Gearbox	
Oil	. 182
÷	

٧



Hydraulic System	
General	183
Services	185
Oil	
Cylinders / Rams	
Electrical System	
General	187
Battery	
Battery Isolator	
Fuses	
Relays	
Window Washer	
Miscellaneous	
Fire Extinguisher	192
Technical Data	
Static Dimensions	
Dimensions	193
Weights	
Visibility Diagrams	
Performance Dimensions	200
Excavator End Dimensions and Performance	201
Noise Emissions	201
General	211
Noise Data	
Vibration Emissions	ZII
General	213
Vibration Data	
Fluids, Lubricants and Capacities	
General	21/
Fuel	
Coolant	
	216
Torque Values General	219
Electrical System	
General	210
Fuses	
Relays	
Engine	220
General Hydraulic System	
,	220
Auxiliary Circuits	
Tracks	220
General	230
Warranty Information	004
Service Record Sheet	231



Acronyms Glossary

CAN Controller Area Network

CESAR Construction Equipment Security and Registration

ECM Engine Control Module
ECU Electronic Control Unit
ESOS Engine Shut-Off Solenoid
FOGS Falling Object Guard System

FOPS Falling Object Protective Structure

HBCV Hose Burst Check Valve
HTC Hydraulic Tool Carrier

HVAC Heating Ventilation Air Conditioning

ISO International Organization for Standardization

LCD Liquid Crystal Display
LED Light Emitting Diode

MECU Machine Electronic Control Unit
PIN Product Identification Number
PPE Personal Protective Equipment

RMS Root Mean Square

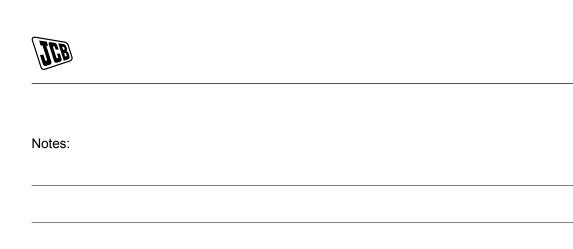
ROPS Roll-Over Protective Structure

RPM Revolutions Per Minute

SAE Society of Automotive Engineers

SWL Safe Working Load

TOPS Tip-Over Protective Structure





Introduction About this Manual

Model and Serial Number

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

Model	From:	То:
15C-1	2700721	2701320
16C-1	2701321	2702320
18Z-1	2493516	2493975
19C-1	2492571	2493515
19C-1 PC	2493976	2494335

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.

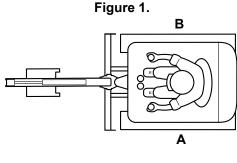
The illustrations in this manual are for guidance only. Where the machines are different, the text and or the illustration will specify.

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.



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).

Location of Manual

For:	18Z-1 [T3]		Page	2
For:	15C-1 IT31.	16C-1 [T3], 19C-1 PC [T3], 19C-1 [T3]	Page	2

(For: 18Z-1 [T3])

Operator's manual located in a vinyl document pouch in the toolbox compartment behind the operators seat.

(For: 15C-1 [T3], 16C-1 [T3], 19C-1 PC [T3], 19C-1 [T3])

Operator's manual located in a vinyl document pouch in the tool box compartment under the seat.



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 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

JCB Compact excavators are self-propelled tracked excavators with an upper structure capable of 360° rotation. They excavate, elevate, swing and discharge material by the action of a bucket fitted to the boom and dipper, without moving the undercarriage during any part of the working cycle of the machine.

Intended Use

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

When used normally with a bucket fitted to the machine the work cycle consists of, digging, elevating, slewing and the discharging of material without movement of the undercarriage.

Applications include earthmoving, road construction, building and construction, landscaping and similar applications.

An excavator can also be used for object handling if it is suitably equipped with relevant parts and systems. Refer to: Lifting and Loading (Page 84).

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.

The machine must not be used in the following scenarios because of the risk of overturning; used for forestry, used with attachments of unknown weight, used on surfaces of unknown stability. This list is not exhaustive.

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.

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.

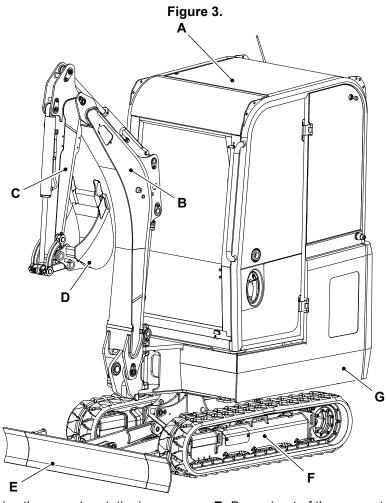
Danger Zone

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



- A Cab/canopy (contains the operator station)
 C Dipper (part of the excavator arm)
 E Dozer blade
 G Upper structure

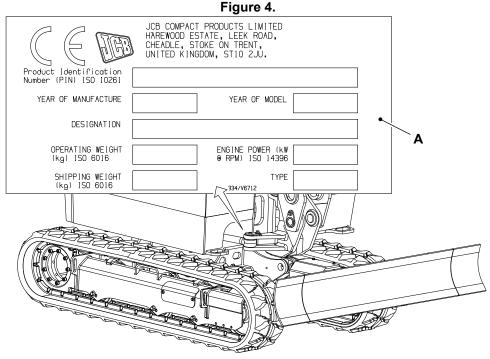
- B Boom (part of the excavator arm)D BucketF Undercarriage



Product and Component Identification

Machine

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



A Identification plate

The machine model and build specification are indicated by the PIN. The PIN has 17 digits and must be read from left to right. For example, JCB08085L01226500.

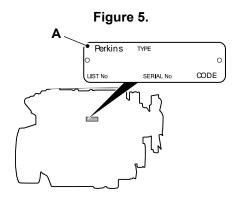
DigitDescription1 to 3World manufacturer identification. For example, JCB = UK Build.4 to 8Machine type and model.9Random check Letter. The check letter is used to verify the authenticity of a machine's PIN.10 to 17Machine serial number.

Table 1. Explanation of the PIN

Engine

The engine data label is located on the cylinder block as shown.





A Engine data label

The data label includes the engine identification number. The engine identification number has 15 digits and must be read from left to right. For example, GN82691U969759B.

Table 2. Explanation of the engine identification number

Digit	Description
1 to 2	Engine family and type code.
3 to 7	Build list number.
8	Country of manufacture code.
9 to 14	Engine serial number.
15	Year of manufacture code.

Operator Protective Structure

▲ 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.

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 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.

ROPS and TOPS Data Plate

Machines built to the ROPS (Roll-Over Protective Structure) and TOPS (Tip-Over Protective Structure) standards have an identification label attached to the cab/canopy. Refer to Figure 6.

Figure 6. Plate MINI EXCAVATOR OECD A PROVAL NUMBER J.C.B. CAB SYSTEMS LAKESIDE WORKS ROCESTER TOPS MAX UNLADEN MAT UTTOXETER, STAFFS MPLIANCE COMPLIANCE 2350 ST14 5JP ISO 12117:1997 12117-2:2008 ENGLAND EN 13531:2001 Y'AR OF LAND ACTUE WA PART NUMBER WA SERIAL I JMBER 400/E4966_1

A ROPS and TOPS identification label



FOPS Data Plate

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.

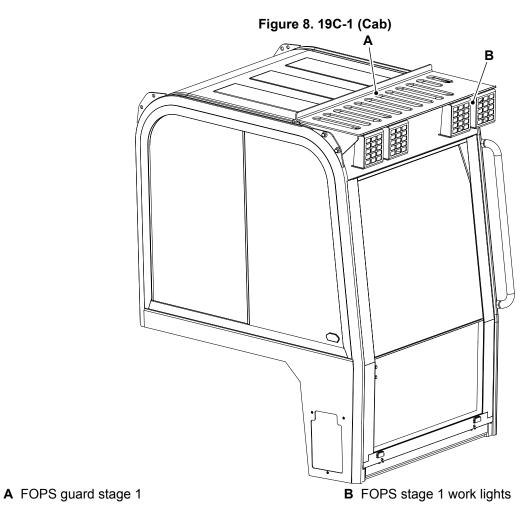
Figure 7. J.C.B. CAB SYSTEMS MINI EXCAVATOR OECD APPROVAL NUMBER 19C-1 LAKESIDE WORKS 18Z-1 ROCESTER FOPS: MAX UNLADEN MASS UTTOXETER, STAFFS COMPLIES TO ST14 5JP IS0 **ENGLAND** 10262 :1998 YEAR OF MANUFACTURE LEVEL I WA PART NUMBER WA SERIAL NUMBER 400/G0238_1

A FOPS identification label

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.





Machine fitted with canopy, FOPS guard is integrated into canopy roof plate.

Figure 9. 18Z-1, and 19C-1 (Canopy)

Level I FOPS guard only available with these machine.



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: 18Z-1 [T3]	Page	15
For: 15C-1 [T3], 16C-1 [T3], 19C-1 PC [T3], 19C-1 [T3]	Page	18



(For: 18Z-1 [T3])

Figure 10. M G Н



Figure 11.

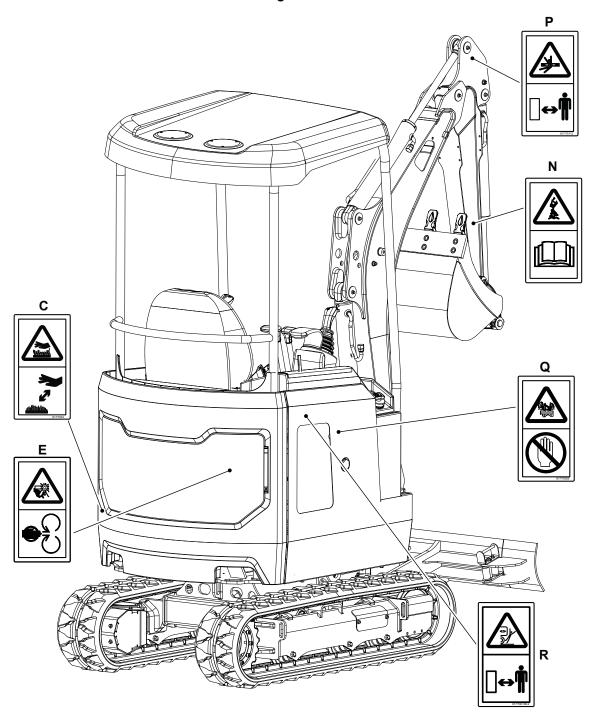


Table 3. Safety Labels

ltem	Part No.	Description	Qty.
Α	817/70012	Run over hazard. Start the engine from the operator's seat only. Do not short across the terminals.	1
В	817/70023	Entanglement hazard. Do not touch.	1
С	817/70004	Warning. Burns to fingers and hands. Stay a safe distance away.	2
D	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
Е	332/P4581	Warning. Severing of hands and fingers. Keep clear of/do not reach into rotating parts.	1



ltem	Part No.	Description	Qty.
F	817/70018	Warning. Crushing of whole body. Do not operate the controls from outside of the machine.	1
G	332/F0279	Stability hazard. Ensure the load is within the capability of the machine. Read the Operator's Manual.	1
Н	817/70014	Warning. Read the Operator's Manual before you operate the machine.	1
J	332/T9356	Falling hazard. Lift the lever lock.	1
K	817/70029	Warning. Crush hazard. Wear seat belt.	1
L	332/V3761	Flying debris warning. Read the Operator's Manual.	1
М	817/70006	Unexpected machine movement due to accidental contact with the controls when the hydraulics are not isolated.	1
N	332/A0768	Crushing of whole body. Quickhitch – Read the Operator's Manual.	2
Р	817/70112	Warning. Crushing of whole body. Keep a safe distance.	2
Q	817/70005	Hot fluid under pressure. Do not touch, consult operator's manual.	1
R	817/70106	Strike to whole body (machine swing). Keep a safe distance from the machine.	2



(For: 15C-1 [T3], 16C-1 [T3], 19C-1 PC [T3], 19C-1 [T3])

Figure 12.

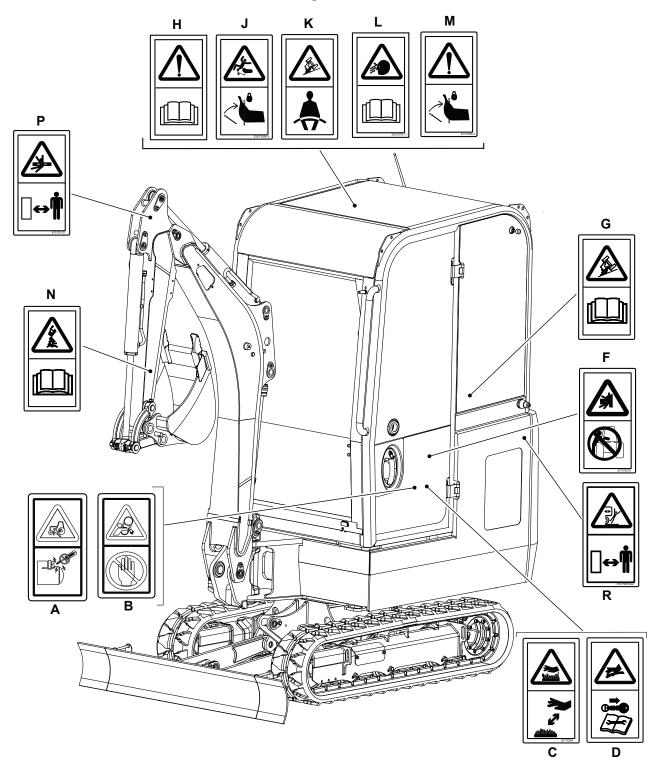




Figure 13.

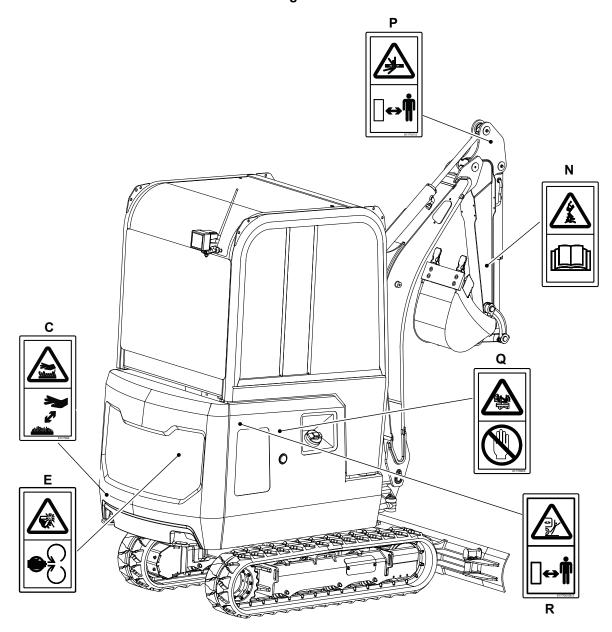


Table 4. Safety Labels

Item	Part No.	Description	Qty.
Α	817/70012	Run over hazard. Start the engine from the operator's seat only. Do not short across the terminals.	1
В	817/70023	Entanglement hazard. Do not touch.	1
С	817/70004	Warning. Burns to fingers and hands. Stay a safe distance away.	2
D	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
E	332/P4581	Warning. Severing of hands and fingers. Keep clear of/do not reach into rotating parts.	1
F	817/70018	Warning. Crushing of whole body. Do not operate the controls from outside of the machine.	1
G	332/F0279	Stability hazard. Ensure the load is within the capability of the machine. Read the Operator's Manual.	1

This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com