

Service Manual

8027Z
8032Z

PUBLISHED BY THE
TECHNICAL PUBLICATIONS DEPARTMENT
OF JCB SERVICE: © WORLD PARTS CENTRE,
WATERLOO PARK, UTTOXETER, ST14 5PA,
ENGLAND

Tel. ROCESTER (01889) 590312

PRINTED IN ENGLAND

Publication No. 9803/9300 Issue 1

General Information	1
Care & Safety	2
Routine Maintenance	3
Optional Equipment	A
Body & Framework	B
Electrics	C
Controls	D
Hydraulics	E
Transmission	F
Track & Running Gear	J
Engine	K

Introduction

This publication is designed for the benefit of JCB Distributor Service Engineers who are receiving, or have received, training by JCB Technical Training Department.

It is assumed that these personnel have a sound knowledge of workshop practice, safety procedures and general techniques associated with the maintenance and repair of hydraulic earthmoving equipment. Therefore, these basic subjects generally are omitted from this manual, the intention being to convey only more specialised information concerning particular aspects of a machine or component.

For example, renewal of oil seals, gaskets etc., and any component showing obvious signs of wear or damage is expected as a matter of course and, therefore, information of this nature is included only in the context of specialised procedures or where a range of wear tolerances is required. Similarly, it is expected that components will be cleaned and lubricated where appropriate, also that any opened hose or pipe connections will be blanked to prevent excessive loss of hydraulic fluid and ingress of dirt. Finally, please remember above all **SAFETY MUST COME FIRST!**

The manual is compiled in sections, the first three are numbered and contain information as follows:

- 1 = General Information** - includes torque settings and service tools.
- 2 = Care & Safety** - includes warnings and cautions pertinent to aspects of workshop procedures etc.
- 3 = Routine Maintenance** - includes service schedules and recommended lubricants for the machine.

The remaining sections are alphabetically coded and deal with Dismantling, Overhaul etc. of specific components, for example:

- A = Optional Equipment**
- B = Body & Framework ...etc**

The page numbering in each alphabetically coded section is not continuous. This allows for the insertion of new items in later issues of the manual.

Section contents, technical data, circuit descriptions, operation descriptions etc. are inserted at the beginning of each alphabetically coded section.

All sections are listed on the front cover; tabbed divider cards align directly with individual sections on the front cover for rapid reference.

Illustrations which show a dismantled component are numbered as a guide to the dismantling sequence, which generally can be reversed for assembly.

Torque settings are given as a 'mean' figure which may be varied by plus or minus 3%. Torque figures indicated are for dry threads, hence for lubricated threads may be reduced by one third.

'Left Hand' and 'Right Hand' are as viewed from the rear of the machine.

References to alternative servicing intervals are to be treated on a 'whichever occurs first' basis.

Contents	Page No.
Identifying your Machine	1 - 1
Preparation for Storage	1 - 2
Preparation after Storage	1 - 2
* Operation	
Introduction	2 - 1
Before Entering the Cab	2 - 2
Machine Walk Round Inspection	2 - 2
Entering/Exiting the Cab	2 - 3
Cab	2 - 4
Opening and Closing the Door	2 - 4
Opening the Windscreen	2 - 5
Opening the Side Window	2 - 5
Heater Controls	2 - 6
Seat Control	2 - 7
Seat Belt	2 - 7
Engine and Track Controls, Switches and Instruments	3 - 1
Track Controls	3 - 2
Engine Controls	3 - 3
Switches	3 - 3
Instrument Cluster	3 - 5
Digital LCD Fuel Gauge	3 - 5
Dozer Controls	4 - 1
Excavator Controls	4 - 2
Slew Controls	4 - 3
Swing Boom	4 - 4
Raise / Lower Boom	4 - 4
Dipper	4 - 5
Bucket	4 - 5
Refuelling the Machine	5 - 1
Before Starting the Engine	5 - 2
Starting the Engine	5 - 3
Jump Starting the Engine	5 - 4
Cold Climate Warm Up	5 - 5
Operating in High Temperatures	5 - 6
Operating in Low Temperatures	5 - 6
Stopping and Parking the Machine	6 - 1
Preparing for Site Travel	6 - 2
Getting the Machine Moving	6 - 2
Working with the Dozer	7 - 1
Working with the Excavator	7 - 2
Installing a Bucket - non Quickhitch Models	7 - 2
Replacing Bucket Teeth	7 - 2
Bucket Selection	7 - 3
Removing a Bucket - non Quickhitch Models	7 - 3
Installing a Bucket on a Quickhitch	7 - 4
Removing a Bucket from a Quickhitch	7 - 5
Working on Slopes	7 - 5
Digging	7 - 6
Moving the Machine while Digging on the Level	7 - 7
Digging Near Walls	7 - 7
Digging up against Obstructions	7 - 7
Lifting (Craning) Regulations and Safe Working Loads	8 - 1

Contents	Page No.
Using the Attachments and Site Safety	8 - 2
Using the Attachments	9 - 1
Removing a Quickhitch Rockbreaker	9 - 2
Using Hand Held Tools	9 - 2
Moving a Disabled Machine	10 - 1
Transporting the Machine	10 - 2
Before Using the Trailer	10 - 3
Securing the Machine	10 - 3
* Service Tools Numerical List	11 - 1
* Sealing and Retaining Compounds	12 - 1
* Service Tools	
Section B - Body and Framework	13 - 1
Section C - Electrics	13 - 3
Section E - Hydraulics	14 - 1
Section K - Engine	14 - 2

The machine has a Data Plate attached to the left hand front face of the machine.

The serial numbers of the machine, engine and gearboxes are stamped on this plate.

If the engine is replaced, stamp the new serial number in place of the old one.

Explanation of Vehicle Identification Number (VIN)


Code	A	B	C	D	E
Example	SLP	0803	X	E	0765001

- A World Manufacturer Identification SLP = JCB
- B Machine Model 0803 = 803
- C Year of Manufacture
 - R = 1994 W = 1998 2 = 2002
 - S = 1995 X = 1999 3 = 2003
 - T = 1996 Y = 2000 4 = 2004
 - V = 1997 1 = 2001 5 = 2005
- D Manufacturers Location E = England
- E Machine Serial Number 0765001

Explanation of Engine Identification Number


Code	A	B	C	D	E
Example	KE	50390	J	000001	y

- A Engine Type
- B Engine Parts List
- C Country of Manufacture
- D Engine Serial Number
- E Year of Manufacture



J C BAMFORD EXCAVATORS LTD
ROCESTER, STAFFS, ENGLAND
CONSTRUCTOR

OS EN ISO9001



FM 14063

VIN Vehicle Identification Number	Product Identification Number
ENGINE SERIAL NUMBER	LH TRACK GEARBOX SERIAL NUMBER
SLEW GEARBOX SERIAL NUMBER	RH TRACK GEARBOX SERIAL NUMBER
WEIGHT kg	ENGINE POWER kW @ RPM
YEAR OF MANUFACTURE	

H04343

Preparation for Storage

The operations to place a machine into storage (-15 °C [5 °F] to 44 °C [111 °F]) are given below.

- 1 Park the machine safely with the bucket and dipper rams retracted and the dig end outstretched. Lower the boom until the bucket rests on the ground. Lower the dozer to the ground.
- 2 Switch off the engine. Operate controls to release pressure from the rams.
- 3 Disconnect the battery to prevent discharge.
- 4 Ensure that the fuel tank is filled to a maximum, leaving no air space.
- 5 Ensure that the hydraulic tank is filled to maximum on the sight gauge.
- 6 Spray exposed ram rods with Waxoyl.
- 7 Slacken off rubber tracks until no visible spring tension exists.

Preparation after Storage

The operations to remove a machine into storage (-15 °C [5 °F] to 44 °C [111 °F]) are given below.

- 1 Lower the fuel level to ensure that sufficient air space exists in the tank.
- 2 Check all oil and water levels, adjust contents to correct levels as necessary.
- 3 Ensure that the battery is fully charged.
- 4 Reconnect the battery.
- 5 Remove the electrical supply from the fuel injection pump solenoid.
- 6 Crank the engine for 20 seconds or until the oil pressure warning light goes out.
- 7 Reconnect the electrical supply to the fuel injection pump solenoid.
- 8 Start the engine. If the engine fails to start after several attempts, bleed the fuel system.
- 9 Adjust track tensions.
- 10 Grease all lubrication points.

Introduction

This chapter is arranged to guide you step-by-step through the task of learning how to use the machine. Read it through from beginning to end. By the end of the chapter you should have a good understanding of the machine and how to operate it.

Pay particular attention to all safety messages. They are there to warn you of possible hazards. Do not just read them-think about what they mean. Understand the hazards and how to avoid them.

If there is anything you do not understand, ask your JCB dealer, he will be pleased to advise you.

When you have learned where the driving controls are and what they do, practise using them. Practise driving the machine in a safe, open space clear of other people.

Get to know the "feel" of the machine and its driving controls.

Move on to the attachment controls only when you can drive the machine confidently and safely.

Take great care when practising with the attachment controls. Practise in an open space, keep people clear. Do not jerk the controls: operate them slowly until you understand the effect they have on the machine.

Finally, do not rush the job of learning. Take your time and take it safely.

Remember

**BE CAREFUL
BE ALERT
BE SAFE**

Before Entering the Cab

WARNING

Walking or working under raised attachments can be hazardous. You could be crushed by the attachments or get caught in the linkages.

Lower the attachments to the ground before doing these checks. If you are new to this machine, get an experienced operator to lower them for you.

If there is nobody to help you, study this handbook until you have learned how to lower the attachments. Also make sure that the slew lock is engaged before doing these checks.

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

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

Machine Walk Round Inspection

- 1 Check for cleanliness:**
 - a** Clean the windows and light lenses.
 - b** Remove dirt and debris, especially from around the linkages, rams, pivot points and radiator.
 - c** Make sure the cab and handrails are clean and dry.
 - d** Clean all safety decals. Replace any that are missing or cannot be read.
- 2 Check for damage:**
 - a** Inspect the machine generally for damaged and missing parts.
 - b** Make sure that the bucket teeth are secure and in good condition
 - c** Make sure that all the pivot pins are secured correctly in place
 - d** Inspect the windows for cracks and damage
 - e** Check for oil, fuel and coolant leakages beneath the machine.

WARNING

You could be killed or injured with damaged tracks. Do not use the machine with damaged or excessively worn tracks.

HOP27

- 3 Check the Tracks (Rubber)**
Check for cut rubber and penetration by sharp objects. Do not use a machine with damaged tracks.
- 4 Check the engine cover/panels and fuel filler cap**
 - a** Make sure the engine cover / panels are fitted and securely locked.
 - b** Make sure the fuel filler cap is tightly closed (we also recommend that you lock it).

Entering/Exiting the Cab

⚠ WARNING

Do not enter or exit the cab unless the arm rest or lever lock is fully engaged (raised position).

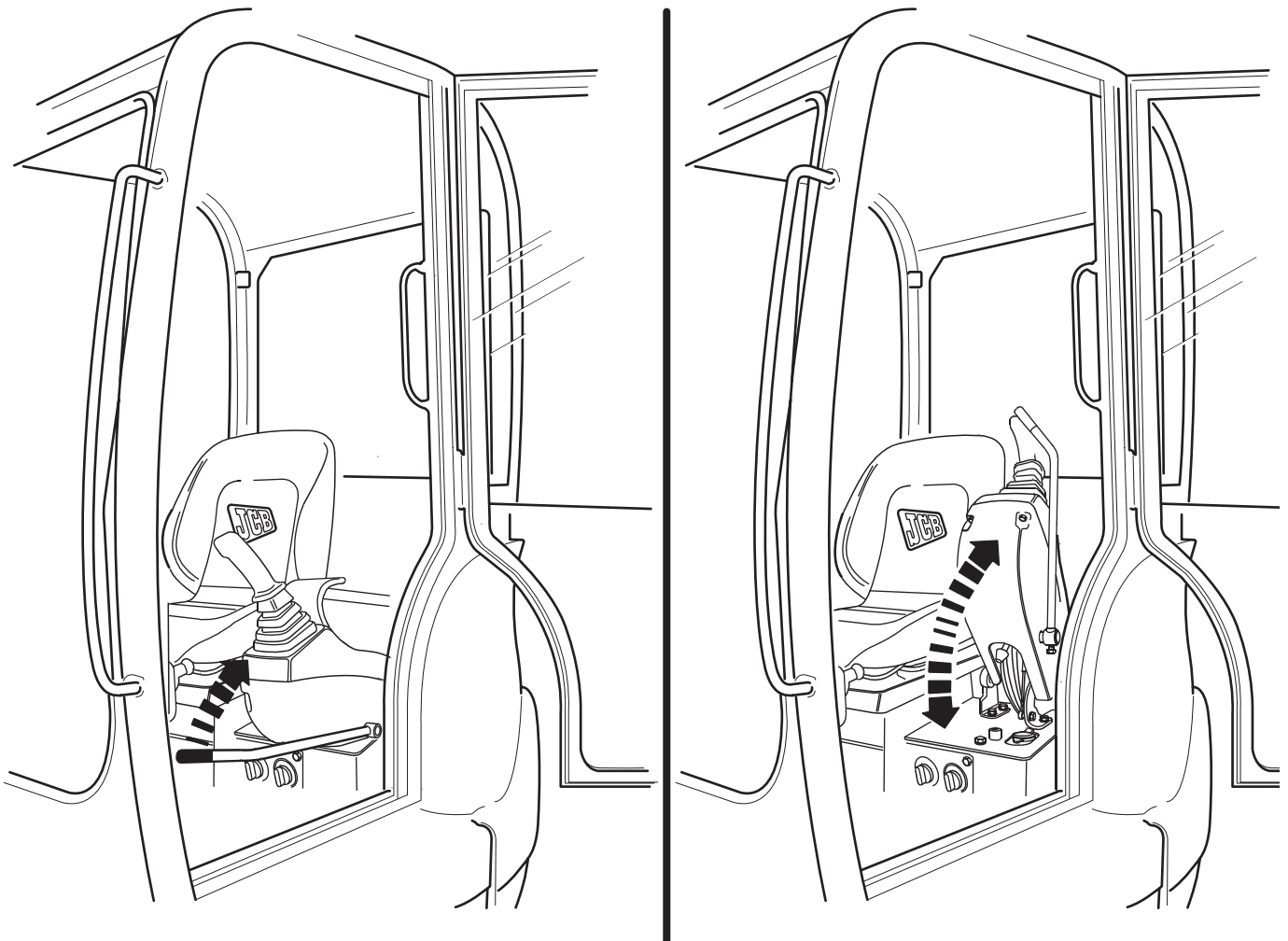
To give sufficient clearance to enter or leave the cab, the left lever lock must be raised.

When the lever lock and control pod are in the raised position the excavator controls cannot be operated. Lowering the lever lock to the normal position connects the excavator controls and allows normal operation.

It is recommended that the engine is switched off before exiting the machine.

⚠ WARNING

Always face the machine when entering or leaving the cab. Use the step(s) and handrails. Make sure the step(s), handrails and your boot soles are clean and dry. Do not jump from the machine. Do not use the machine controls or lever locks as handholds, use the handrails. Failure to follow these instructions could result in unexpected movement of the machine.



Cab

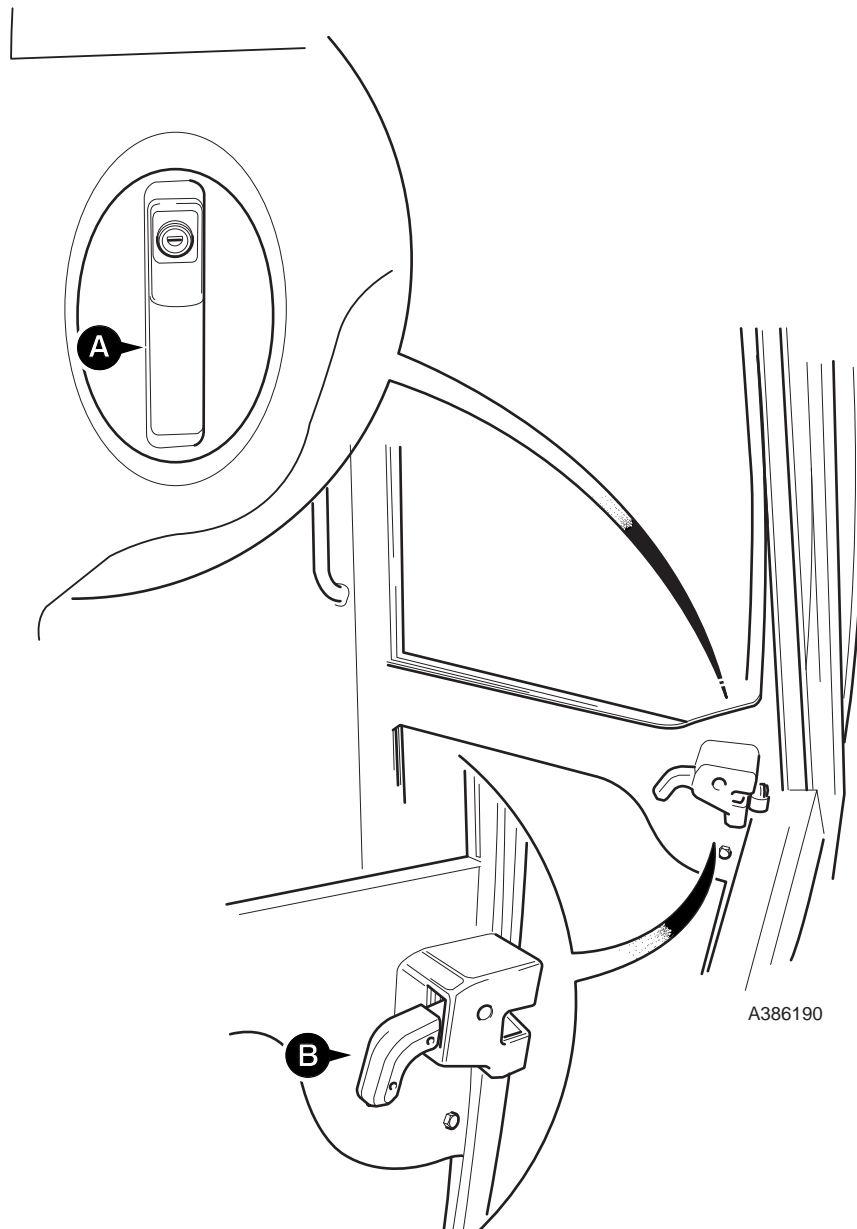
The cab is bolted on top of the mainframe and is a welded steel construction. The cab has a sliding windows on the right side, a hinged door also containing an opening window and an up and over windscreen. All windows are of toughened glass. The cab is fitted with a windscreen wash/wipe, heater fan, seat and all operating controls and instruments.

CAUTION

Do not drive the machine with the door unlatched. It must be correctly closed when operating the machine.

Opening and Closing the Door

To open a door from the outside, unlock it with the key provided to release the catch. To open a door from inside, push lever **B**. Close the door from the inside by pulling it firmly using the handle, it will latch itself. The door must be in the closed position when operating the machine.



Opening the Windscreen

To open the up and over window, hold handles **A**, press and hold down securing levers **B**. Lift the screen into a position parallel with the roof using handles **A**, secure in position by releasing levers **B**.

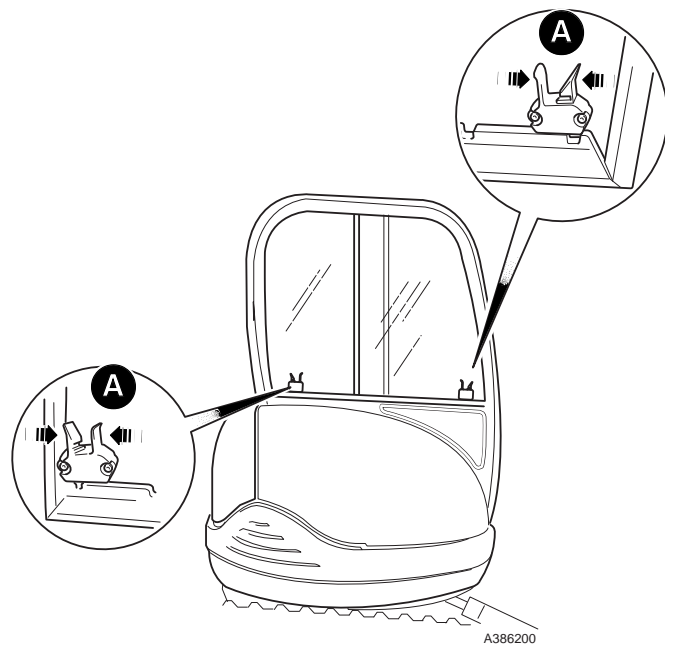
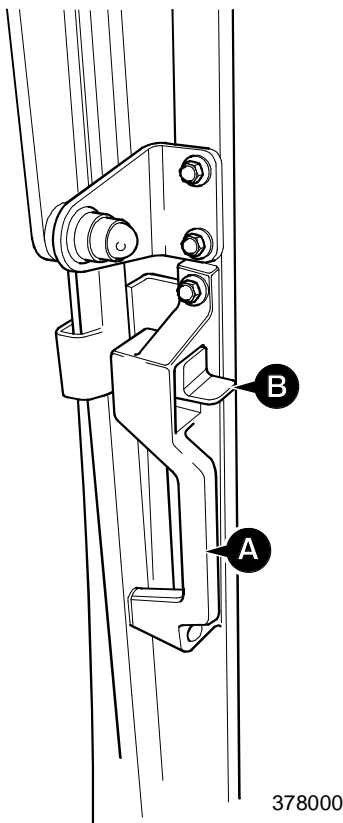
Note: Care must be taken when lowering the window not to bump the top edge of the lower front window.

Opening the Side Windows and Door Window

The side windows are held closed by catches **A** operated from inside the cab.

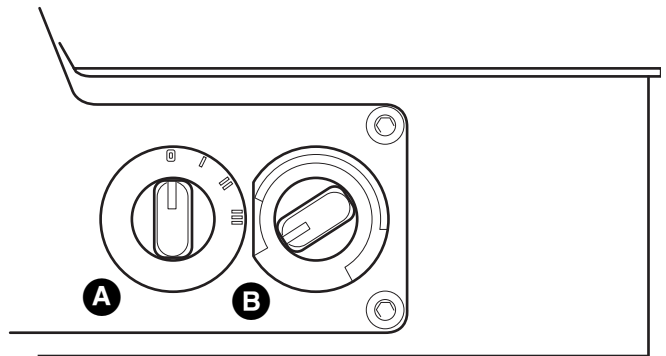
To open the windows, operate the catches **A** and slide the windows to the desired position.

To close a window, slide the window fully shut and check that the catch **A** has located on the frame.



Heater Controls

Air can be directed into the cab by selecting the required fan speed using switch **A**. Temperature can be selected by means of rotary dial **B**.



A395200

Seat Control

⚠ WARNING

Do not adjust the seat with the engine running otherwise your legs could knock the control levers.

HOP31

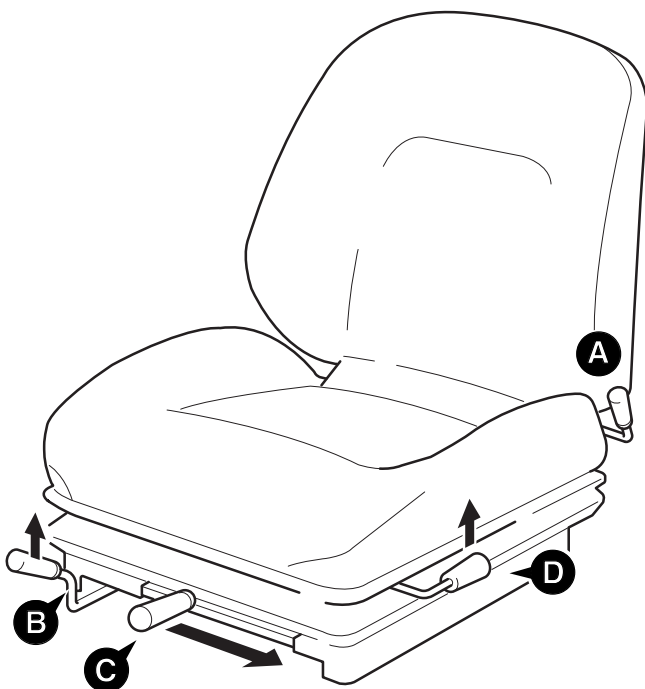
Depending on the type of machine various adjustments can be made to the positions of the control levers and the seat consoles/armrests.

The operators seat can be adjusted for your comfort. A correctly adjusted seat will reduce operator fatigue. Position the seat so that you can comfortably reach the controls with your feet on the cab floor. The seat is adjustable for height and reach.

⚠ CAUTION

Having adjusted the seat position, ensure the seat locking lever has engaged fully.

- A Backrest angle adjustment
- B Horizontal adjustment
- C Weight adjustment (50 - 120 kg [110 - 243 lb])
- D Seat cushion tilt control



A386520

Seat Belt

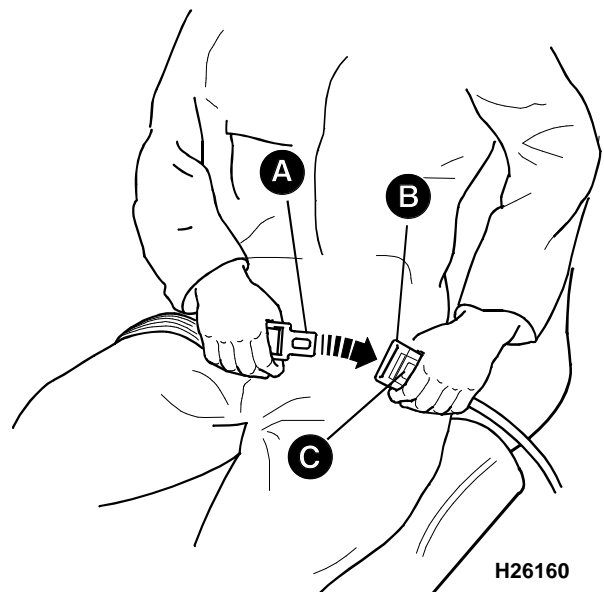
Fasten the seat belt

Sit correctly in the seat. Make sure the belt is not twisted. Push the male fitting **A** into the buckle **B** until it latches.

Release the seat belt

Press button **C** and pull the recoil side of the belt outwards.

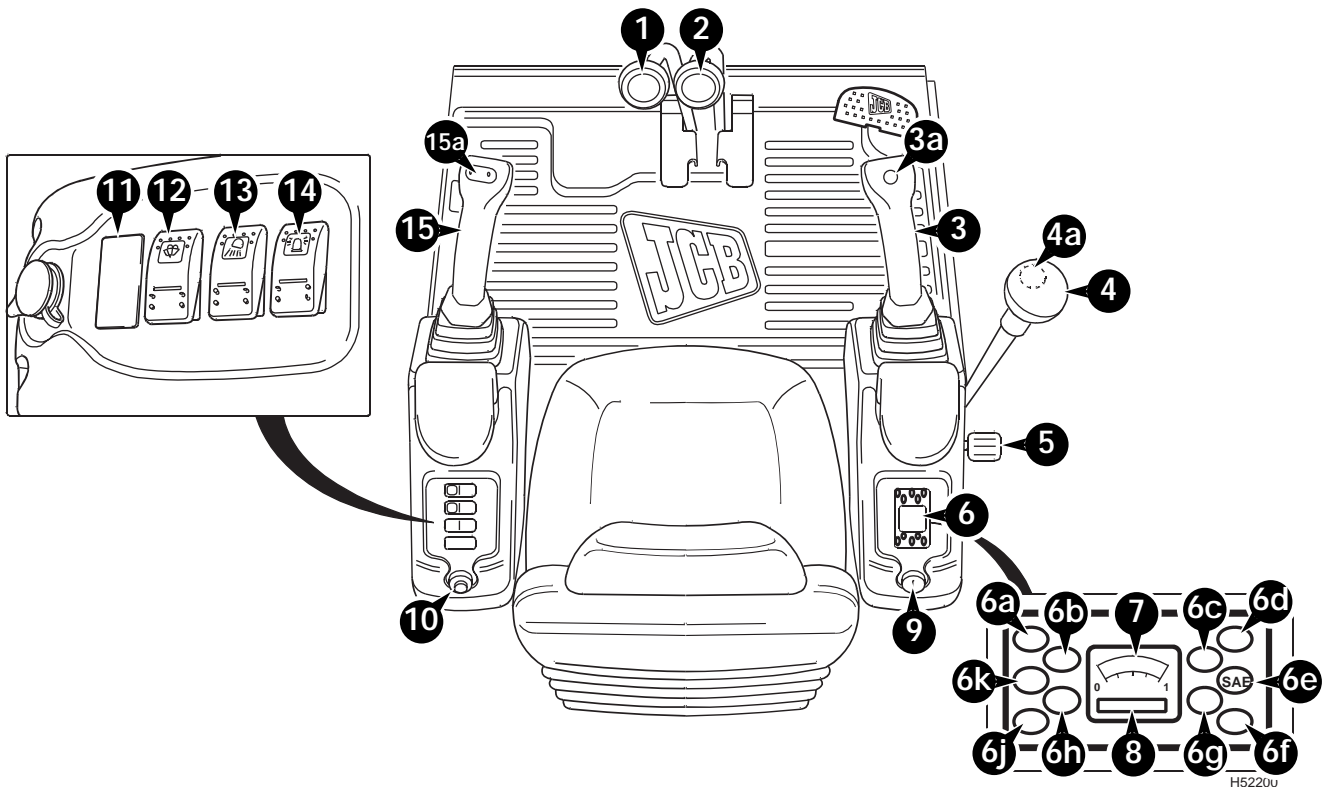
Note: Your machine is fitted with a seat belt, USE IT!



H26160

Engine and Track Controls, Switches and Instruments

- 1 Left Track Control Lever
- 2 Right Track Control Lever
- 3 Right Hand Controller
- 3a Horn Button
- 4 Dozer Lever
- 4a Two speed Tracking Switch
- 5 Hand Throttle Lever
- 6 Instrument Cluster
- 6a Charge (Fault) Indicator
- 6b Coolant Temperature (High) Indicator
- 6c Not operational on this machine
- 6d Two Speed (High Engaged) indicator
- 6e SAE Controls (selected) indicator
- 6f Glow Plugs (On) indicator
- 6g Air Filter (Blocked) indicator
- 6h Not operational on this machine
- 6j Not operational on this machine
- 6k Engine Oil pressure (Low) indicator
- 7 Fuel Gauge
- 8 Hourmeter
- 9 Ignition Switch
- 10 Accessory Power Socket (Beacon etc.)
- 11 Blank
- 12 Windscreen Wash/Wipe Switch
- 13 Work Lights Switch
- 14 Rotating Beacon Switch
- 15 Left Hand Controller
- 15a Slew / Swing Selector Switch



Engine and Track Controls, Switches and Instruments (continued)

Track Controls

The two tracks are controlled by a pair of control levers **A** in front of the seat. Each lever controls one track and is spring loaded to a central position. In this position the track does not operate. The left side lever controls the left track. The right side lever controls the right track. The two levers can be operated individually or together as necessary to move the machine as required. This can be done using one hand or both, or by using the spring-loaded pedals **D**. An increase in speed can be achieved by operating the push button switch **B** located in the dozer lever. When high speed is selected indicator **C** will illuminate.

⚠ WARNING

Make sure that all persons are clear before moving.

⚠ WARNING

The track controls operate as described when the dozer is located in front of the windscreen. If the dozer is positioned behind the cab, the lever operation will be reversed. It is advisable when tracking to always position the dozer to the front of the machine.

Forward

To move the machine forward, push both levers forward. Release the levers to stop.

Reverse

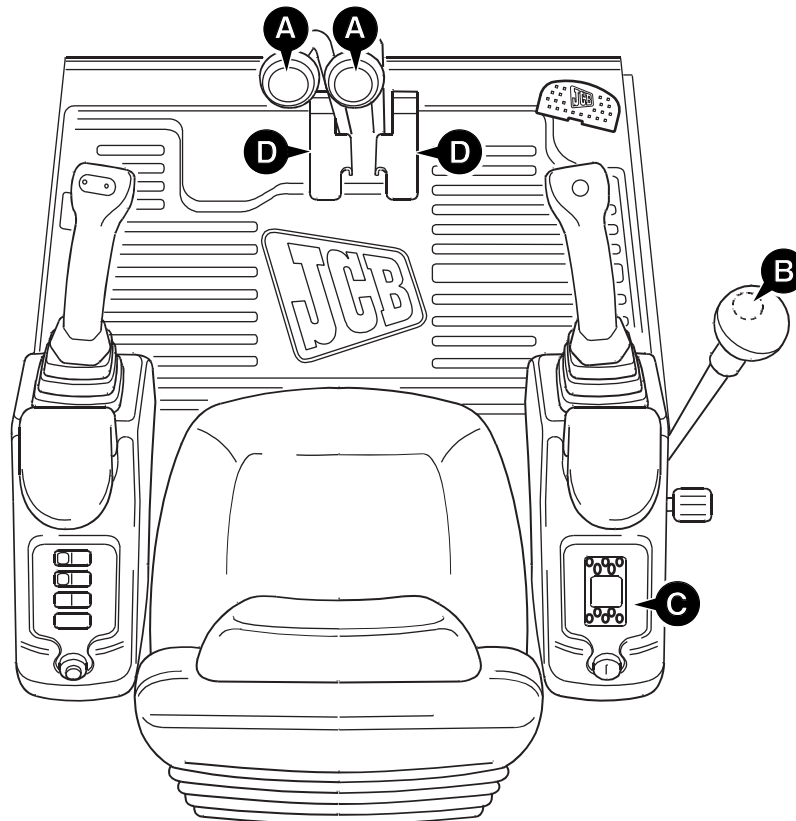
To move the machine backward, pull both levers backward. Release the levers to stop.

Turn

To turn the machine whilst travelling, move the lever back towards the central position on the side towards which you want to go e.g. move the left lever back to turn left. This causes one of the tracks to move slower than the other. The faster moving track will push the machine around. Release the lever to stop.

Spin

To spin the machine around though 360°, without moving it, operate one lever, in a forward position and the other in a reverse position. This will cause the tracks to drive in opposite directions and hence push the machine around.



H52240

Engine and Track Controls, Switches and Instruments (continued)

Engine Controls

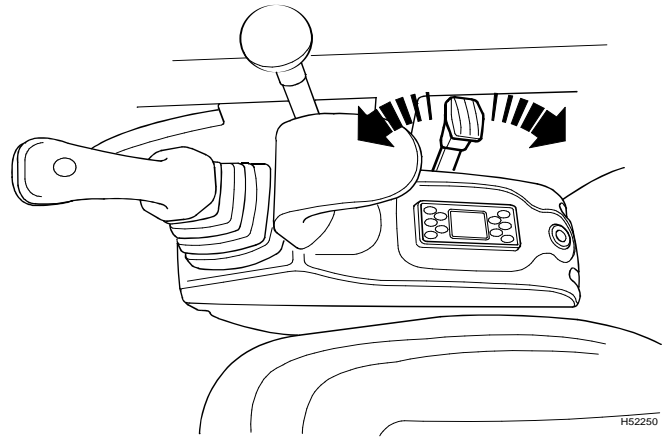
Engine Speed

A hand operated throttle lever in the cab, controls the speed of the engine.

Move the lever to increase or decrease the engine speed. The lever can be left in any position between idle and maximum as required.

Engine Start / Stop

To start and stop the engine use the starter switch, see Switches on the following page.



Switches

Starter Switch

This is operated by the starter key. It has four positions. The key can only be removed when in the 'O' position.

O Off/Stop Engine

Turn the key to this position to stop the engine. Make sure the controls are in neutral and the excavator and dozer are lowered before stopping the engine.

I On

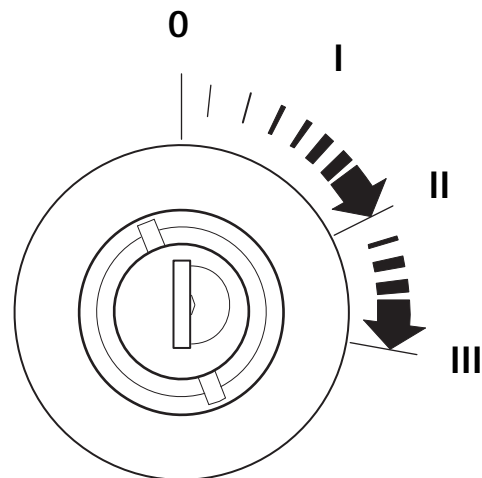
Turning the key in this position connects the battery to the electrical circuits. The key will spring back to this position when released from II.

II Heat Position

Holding the key in this position switches on the glow plugs. The glow plugs warm the engine combustion chambers for cold weather starting. Do not hold in this position for more than 15 seconds. The key will spring back to I when released.

III Start

Operates the starter motor to turn the engine.



H04432

Note: Do not operate the starter for more than 20 seconds at one time.

Engine and Track Controls, Switches and Instruments (continued)

Switches - continued

Work Light Switch B

On/Off Switch

Windscreen Wash/Wipe Switch C

Press the switch down once to switch the windscreen wiper On.

Put the switch to the off position to switch off the windscreen wiper, which will then self park.

To operate the Wash function, press the switch past the wipe position.

Functions only with the starter switch at I.

Horn Button D (not illustrated)

This is a push button switch located in the R.H. excavator control lever.

Press the switch to activate the horn.

Cab Light E (not illustrated)

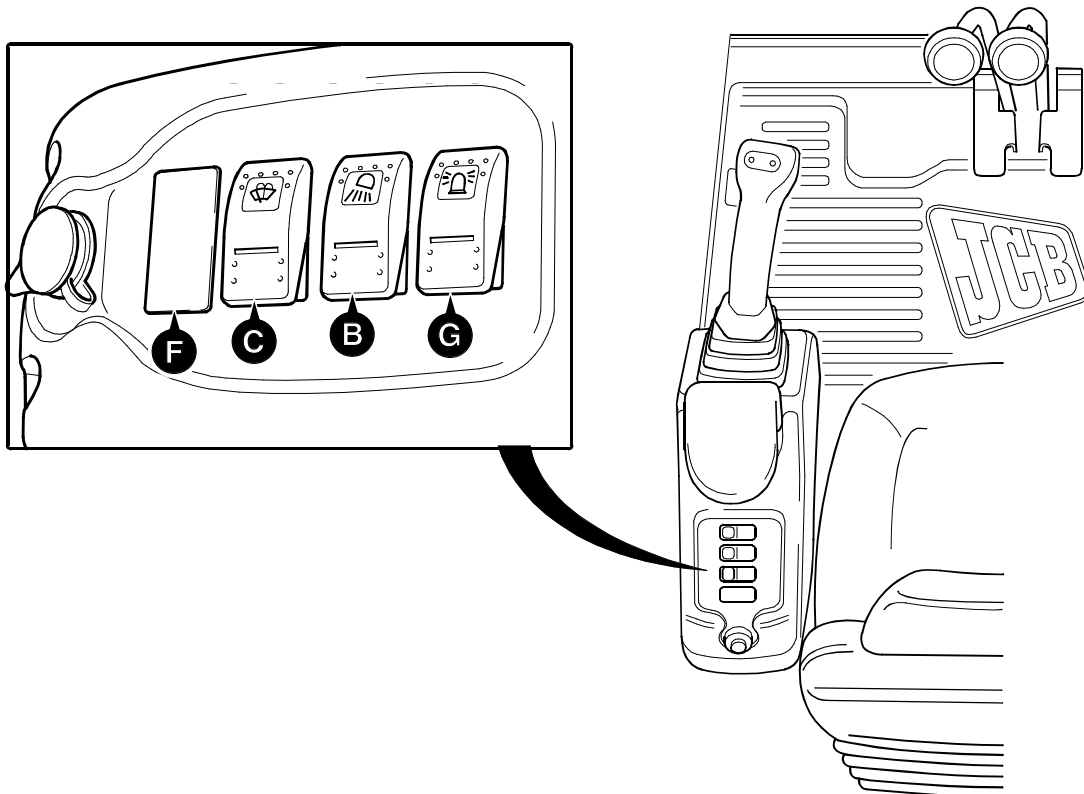
A cab light is situated on the left side of the cab, above the door. It is operated by pressing either end of the light lens.

Blank position F

Flashing Beacon Switch G

On/Off Switch

Functions with ignition On or Off

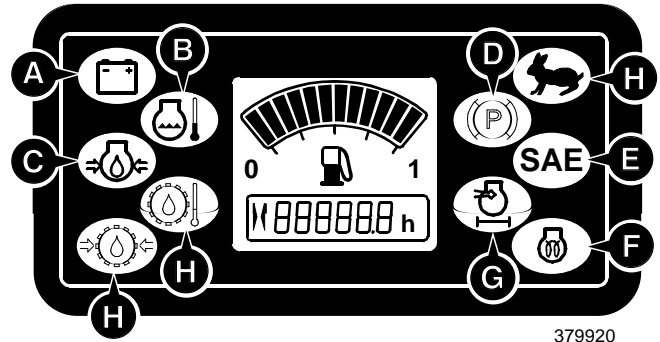


Engine and Track Controls, Switches and Instruments (continued)

Instrument Cluster

Indicators for the engine and related systems are mounted in the instrument cluster in the R.H. console.

- A Charge (Fault) Indicator.**
Indicates Alternator operation, illuminates RED when a Fault occurs.
- B Coolant Temperature (High) Indicator.**
Illuminates RED when coolant temperature is too high.
- C Engine Oil (Low) Indicator.**
Illuminates RED when engine oil pressure is too low.
- D Two Speed (High Engaged) Indicator.**
Illuminates GREEN when high speed is engaged.
- E SAE Controls (Selected) Indicator.**
Illuminates Green when SAE control pattern is selected.
- F Glow Plugs (On) indicator.**
Illuminates YELLOW when the Glow Plugs are energised.
- G Air Filter (Blocked) indicator**
Illuminates YELLOW when the Air Filter is blocked.
- H Indicators not fitted on this machine.**



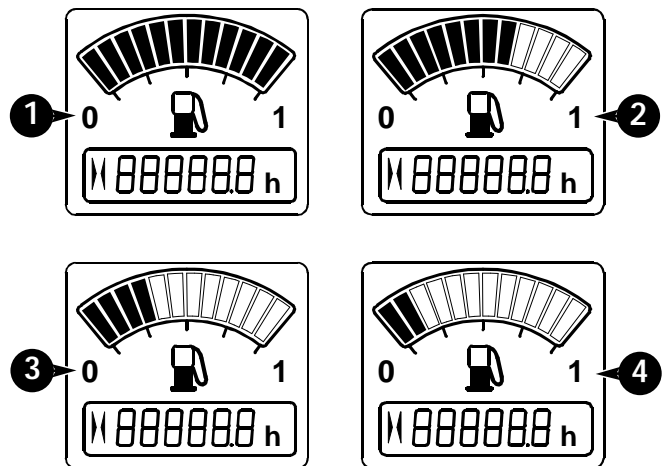
379920

Digital LCD Fuel Gauge

Fuel Tank Level Indication

- Full Tank** All bars illuminated.
Filler symbol illuminated.
- 4 bars to Full** Filler symbol illuminated.
All bars illuminated and reducing as level drops ie. 11 bars, 10 bars, 9 bars etc.
- 4 bar to 3 bar** Buzzer gives 3 short beeps.
Pump symbol starts to flash.
- 3 bar to 1 bar** Pump symbol remains flashing
1 bar illuminated (nearly empty)
0 bars illuminated (tank empty).

Note: The flashing of all fuel level bars and the filler pump symbol, indicates a fault in the fuel sender circuit. Contact your JCB dealer.



379930

Audible Warnings

A buzzer will sound if any of the following display a machine fault.

- Charge indicator
- Coolant indicator
- Engine oil pressure indicator
- Air Filter indicator (see instrument cluster illustration)

If the fault is ignored the buzzer will sound continuously for 180 seconds, after which it will sound intermittently, 1 second on, 2 seconds off.

Switch the ignition off, to reset all operations.

Dozer Controls

The dozer is operated by a single control lever on the right side of the cab. This lever is spring loaded to the central position. In this position the dozer will not move.

⚠ CAUTION

Before operating the dozer, make sure that large rocks or other objects are not between it and the tracks that can jam the mechanism.

HOP34

⚠ CAUTION

Before stopping the engine lower the dozer blade to the ground.

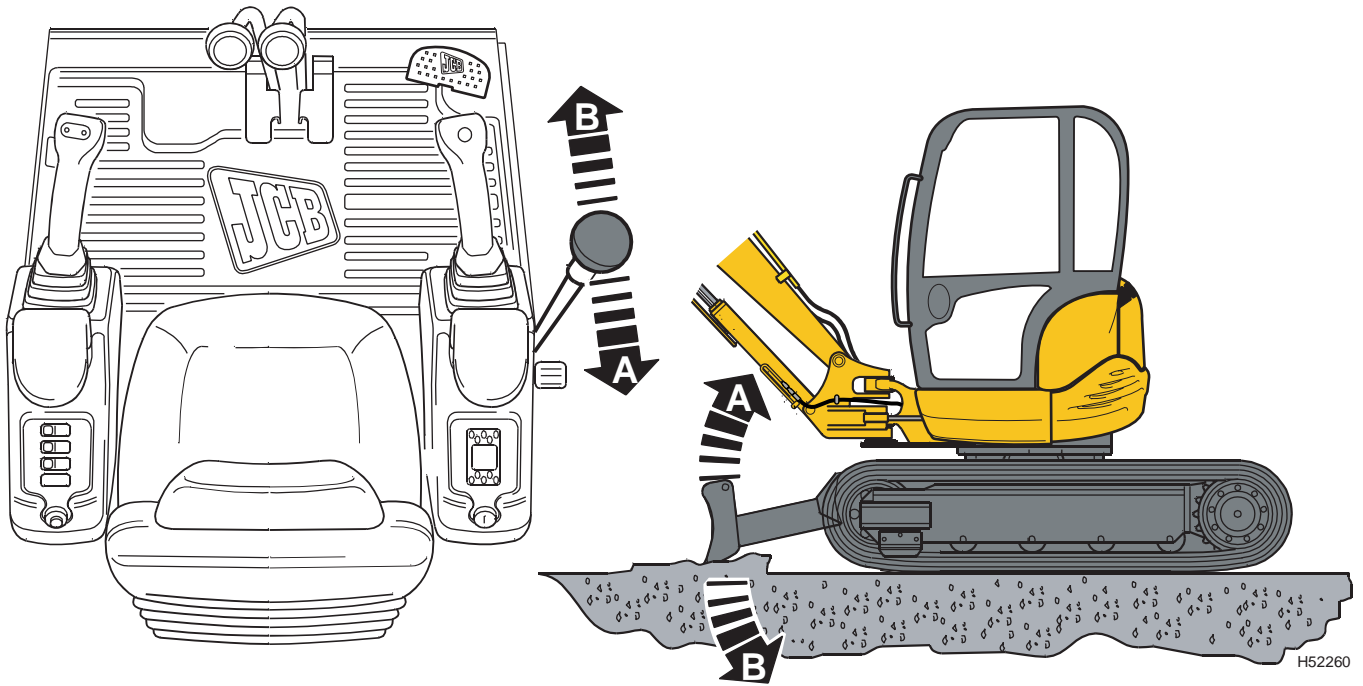
HOP35

Raise dozer 'A'

To raise the dozer pull the lever backward. At the required position release the lever.

Lower dozer 'B'

To lower the dozer push the lever forward until an increased resistance is felt and the blade moves. At the required position release the lever.



H52260

Excavator Controls

The slew lock is situated in the seat base. Lift and turn it through 90° to unlock. Ensure it is UNLOCKED before operating the excavator controls.

The excavator controls consist of those levers which operate the boom, dipper and bucket and swing the machine.

There are two excavator controllers **A** and **B** which control all the functions. The controls are situated in the operators seat armrests. Raising the left armrest when leaving the cab prevents the services operating. When re-entering the cab, ensure the armrest is replaced firmly to ensure correct operation.

The left side controller **A** controls excavator swing and cab slew, via a selector switch **C** in the controller, it also controls dipper functions.

The right side controller **B** controls boom and bucket functions as standard.

It is possible to specify SAE style operating functions i.e. left controller **A** controlling swing/slew and boom. The right hand controller **B** controlling dipper and bucket operation. Both controllers are spring loaded to the central position. In this position related services will not operate.

Most excavating movements are achieved using a combination of both controllers at the same time. Practise such movements until you are familiar with the operations that can be achieved safely.

⚠ WARNING

When using the boom and dipper fully extended, take the following precautions, otherwise the machine could get damaged or become unstable and a danger to you and other people.

Make sure you do not exceed the working capacity of the boom at maximum reach.

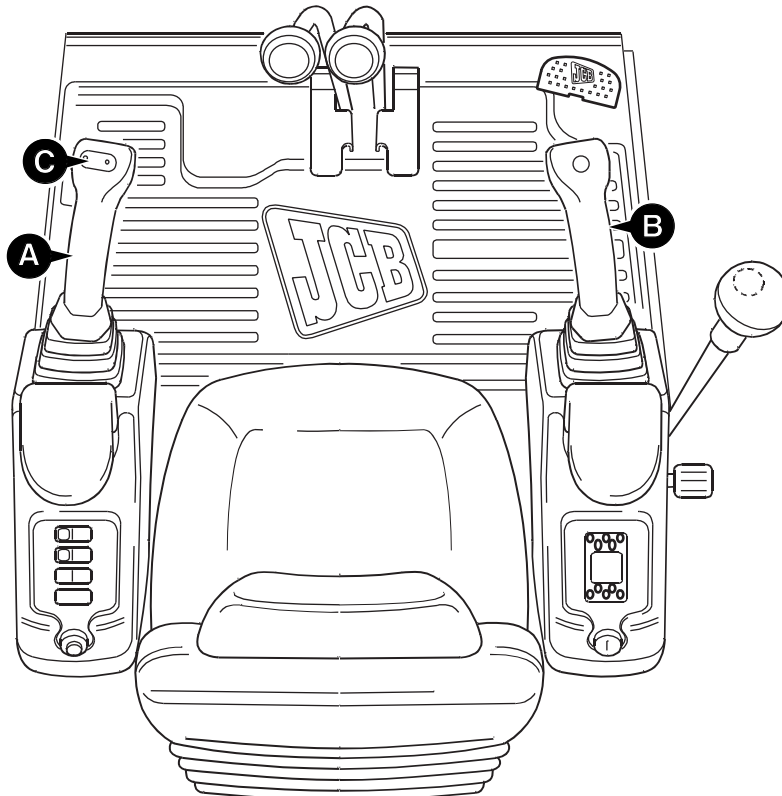
Swing the boom slowly to prevent any chance of the machine becoming unstable. For the same reason avoid dumping downhill if possible.

HOP36

⚠ CAUTION

Do not excavate on hard or rocky ground with the boom set diagonally across the undercarriage. This induces a rocking motion that can cause damage to the track gearbox sprockets and tracks.

HOP37



H52240

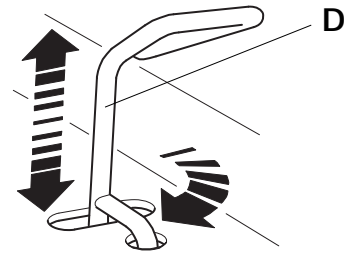
Excavator Controls (continued)

Before slewing the mainframe ensure the slew lock **D** is disengaged, (the up position).

The slew/swing function is selected by operation of a single switch in the left hand controller.

The control will always default to slew function when the ignition is switched off.

The machine should be set for slew operation. Ensure you are in slew mode by operating the left hand control lever and noting the movement.

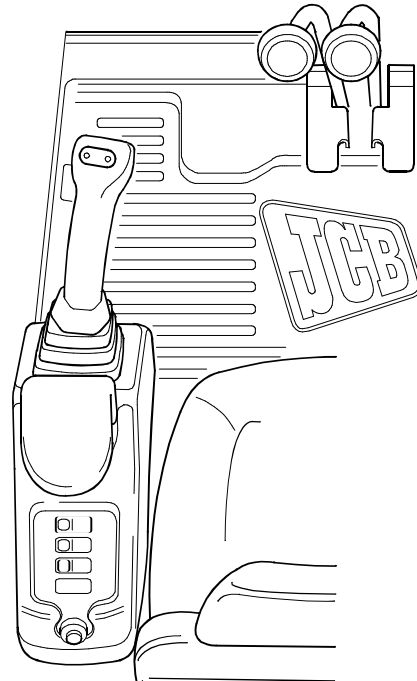


Slew mainframe left

To slew the cab to your left, move the left controller to the left. Release the controller when you have moved to the desired position.

Slew mainframe right

To slew the cab to your right, move the left controller to the right. Release the controller when you have moved to the desired position.



To select swing press button on left hand controller once.

Swing boom left

To swing the boom to your left, move the left controller to the left. Release the controller when you have reached the desired position.

Swing boom right

To swing the boom to your right, move the left controller to the right. Release the controller when you have reached the desired position.

⚠ CAUTION

When the requirement for boom swing has finished, position boom to the straight ahead configuration and reset machine to 360° slew by pressing the button on the left hand controller once.

Excavator Controls (continued)

⚠ WARNING

Thoroughly warm the hydraulic oil before operating the excavator services. To ensure smooth boom operation damping is incorporated into the boom lift circuit, this means when boom raise is released, the boom may continue to rise for a fraction of a second if the oil is not at the correct operating temperature. Before selecting boom up, check there are no overhead obstructions or electric power cables.

⚠ CAUTION

The boom service is operated by the R.H. controller on standard ISO control machines or by the L.H. controller on the optional SAE control pattern machines.

HOP41

Raise boom

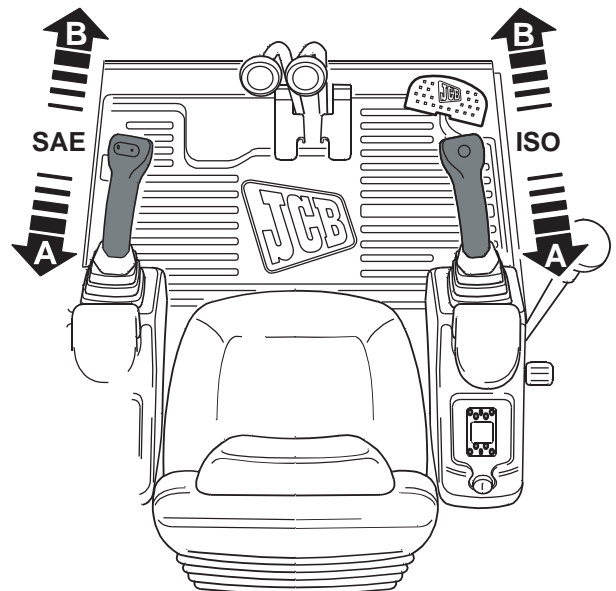
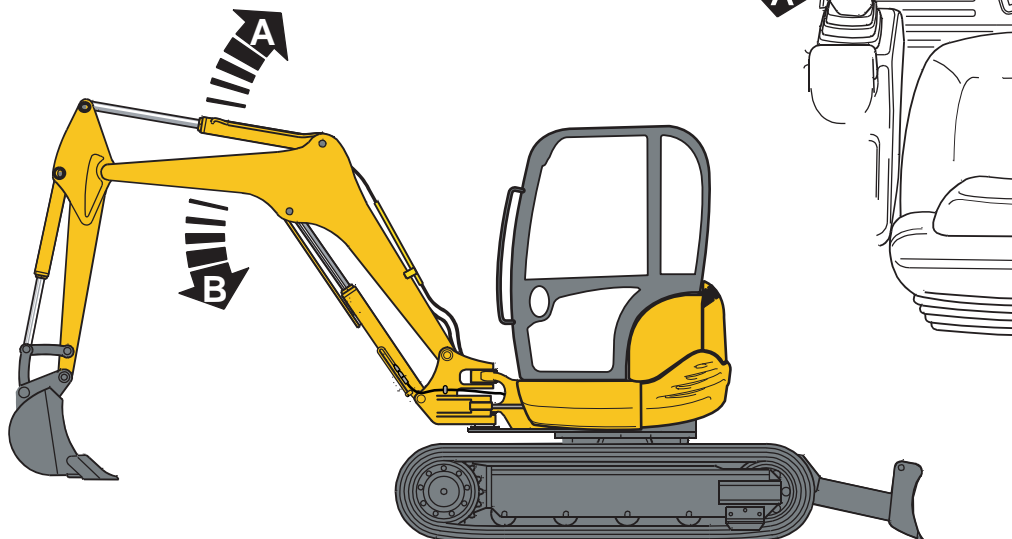
To raise the boom pull the respective controller backwards **A**. Release the controller when the boom has reached the desired position. The boom ram incorporates damping at the limit of boom raise, reducing the speed of the ram, eliminating shock loadings.

Boom boost

Partial selection of the controller will limit the speed of boom raise. Boom Boost is automatically engaged when controller is fully selected.

Lower boom

To lower the boom, push the respective controller forwards **B**. Release the controller when the boom has reached the desired position.



379310

Excavator Controls (continued)

⚠ CAUTION

The dipper service is operated by the L.H. controller on standard ISO control machines or by the R.H. controller on the optional SAE control pattern machines.

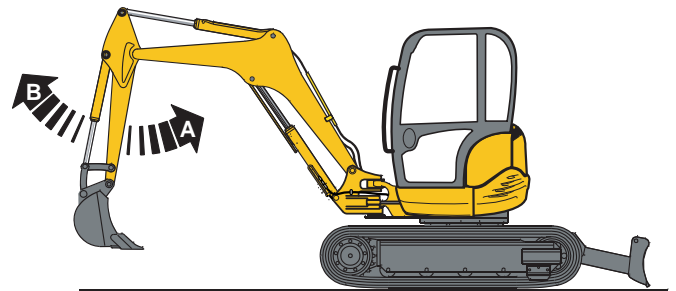
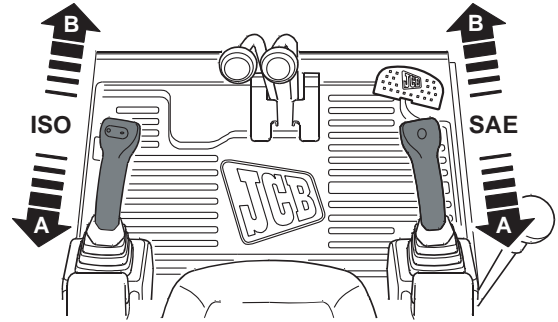
HOP42

Dipper In

To bring the dipper in, pull the respective controller backward **A**. Release the controller when the dipper is at the desired position.

Dipper Out

To push the dipper out, push the respective controller forward **B**. Release the controller when the dipper is at the desired position.



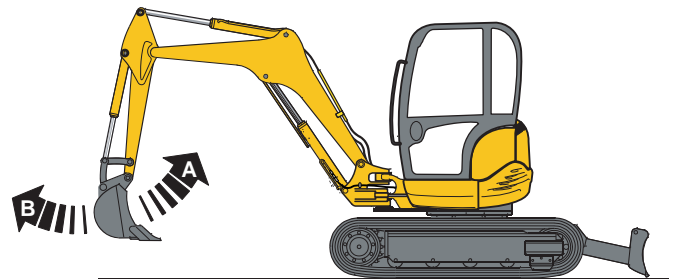
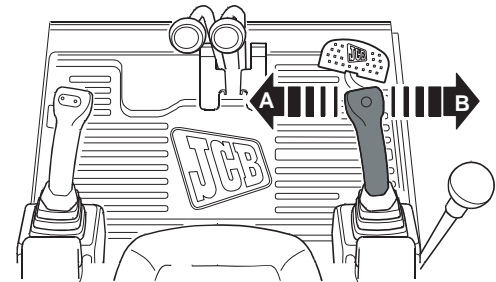
379320

Close bucket

To close the bucket (to gather a load), move the right controller to the left **A**. Release the controller when the bucket is closed sufficiently.

Open bucket

To open the bucket (to dump a load), move the right controller to the right **B**. Release the controller when the bucket is open far enough.



379330



Download the full PDF manual instantly.

Our customer service e-mail:

aservicemanualpdf@yahoo.com