

# Service Manual

## 8052 8060

Published by the  
TECHNICAL PUBLICATIONS DEPARTMENT  
of  
JCB COMPACT PRODUCTS LTD;  
Harewood Estate  
Leek Road, Cheadle  
Stoke-on Trent  
Staffordshire, England  
ST10 2JU  
Tel: 01538 757500, Fax: 01538 757590

Publication No. 9806/2100 1152074 pages at:

<https://www.arepairmanual.com/downloads/jcb-8052-8060-midi-excavator-service-repair-manual/>

<b>General Information</b>	<b>1</b>
<b>Care &amp; Safety</b>	<b>2</b>
<b>Routine Maintenance</b>	<b>3</b>
<b>Optional Equipment</b>	<b>A</b>
<b>Body &amp; Framework</b>	<b>B</b>
<b>Electrics</b>	<b>C</b>
<b>Controls</b>	<b>D</b>
<b>Hydraulics</b>	<b>E</b>
<b>Gearboxes</b>	<b>F</b>
<b>Track &amp; Running Gear</b>	<b>J</b>
<b>Engine</b>	<b>L</b>

(Service Manuals available from JCB Service, quote publication 9806/2100)

## 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 may not be 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.

<b>Contents</b>	<b>Page No.</b>
Identification	1 - 1
Storing your machine	1 - 2
Preparation after Storage	1 - 2
TOPS and FOGS	1 - 3
<b>Operation</b>	
Introduction	2 - 1
Before entering the cab	2 - 1
Machine walk round inspection	2 - 2
Cab	2 - 2
Opening and closing the cab door	2 - 3
Securing the door open	2 - 3
Entering and exiting the cab	2 - 4
Opening the windscreen	2 - 5
Opening the side window	2 - 5
Adjusting the seat	2 - 6
Heater controls	2 - 7
Fastening the seat belt	2 - 8
Cab radio (optional)	2 - 8
Engine and track controls, Switches and instruments	3 - 1
Track controls	3 - 3
Engine controls	3 - 4
Switches	3 - 5
Instruments	3 - 7
Dozer controls	4 - 1
Excavator controls	4 - 2
Changing the Control Pattern (ISO/SAE)	4 - 3
Slew cab	4 - 4
Swing boom	4 - 5
Raise / Lower boom	4 - 6
Dipper	4 - 7
Bucket	4 - 8
Refuelling the machine	4 - 9
Before starting the engine	5 - 1
Starting the engine	5 - 2
Jump Starting the Engine	5 - 3
Cold climate warm up	5 - 4
Operating in high / low temperatures	5 - 5
Stopping and parking the machine	6 - 1
Preparing for road / site travel	6 - 2
Getting the machine moving	6 - 3
Working with the dozer	7 - 1
Working with the excavator	7 - 2
Working on a slope	7 - 2
Digging	7 - 3
Moving the machine while digging on the level	7 - 4
Digging near walls	7 - 5
Lifting Regulations and Safe Working Loads	7 - 5

<b>Contents</b>	<b>Page No.</b>
Using the attachments and site safety	8 - 1
Moving a disabled machine	10 - 1
Transporting the machine	10 - 2
Preparing the transporter for loading	10 - 2
Loading onto the transporter	10 - 3
Securing the machine	10 - 4
Unloading the machine	10 - 5
Service Tools	11 - 1
Sealing and Retaining Compounds	13 - 1

**Identifying your machine**

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	T	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	KR	50677	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**

OSEN ISO9001



FM 14063

VIN Vehicle Identification Number

ENGINE SERIAL NUMBER

SLEW GEARBOX SERIAL NUMBER

WEIGHT kg

Product Identification Number

LH TRACK GEARBOX SERIAL NUMBER

RH TRACK GEARBOX SERIAL NUMBER

ENGINE POWER kW @ RPM

YEAR OF MANUFACTURE

H04343

## Storage

### Preparation for Storage

The operations to place a machine into storage (-15°C to 44° C) 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 battery to prevent discharge.
- 4** Ensure the fuel tank is filled to a maximum, leaving no air space.
- 5** Ensure 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 from storage (-15°C to 44°C) and prepare it for use 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 the battery is fully charged.
- 4** Reconnect battery.
- 5** Remove electrical contact from fuel injection pump solenoid.
- \*6** Crank engine for 15 seconds or until oil pressure warning light goes out.
- 7** Reconnect 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.

**ROPS, TOPS and FOGS**

**⚠ WARNING**

Modified and incorrectly repaired ROPS, TOPS & FOGS Structures are dangerous. Do not modify the ROPS, TOPS & FOGS Structure. Do not attempt to repair the ROPS, TOPS & FOGS Structure. If the ROPS, TOPS & FOGS Structure has been in an accident, do not use the machine until the structure has been inspected and repaired. This must be done by a qualified person. For assistance, contact your JCB dealer. Failure to take precautions could result in death or injury to the operator.

5-3-1-7

Machine built to TOPS and FOGS standards have an identification label fitted to the cab.

**⚠ WARNING**

The TOPS & FOGS cab is designed to give you protection in an accident. If you do not wear the seat belt you could be thrown about inside the cab, or thrown out of the machine and crushed. You must wear a seat belt when using the machine. Fasten the seat belt before starting the engine.

2-2-1-9

**FOGS**

A bolt on falling object guard is available which also carries a certified label. This label certifies the cab to FOGS standard.

	J C BAMFORD EXCAVATORS LTD ROCESTER, STAFFS, ENGLAND	
○	JCB MINI EXCAVATOR MODEL <input type="text"/>	MAXIMUM WEIGHT <input type="text"/> Kg. ○
MEETS TOPS TO ISO 12117 TESTED TO ROPS TO ISO 3471 AND SAE 1040		
PART No.	<input type="text"/>	SERIAL No. <input type="text"/>

447040

## 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.

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**

INT-1-2-1/1

---

## Before entering the cab

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.

### **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 his 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 fitted before doing these checks.**

HOP26

## 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, radiator/oil cooler, fuel and hydraulic filler caps.
- 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/hydraulic covers and fuel filler cap

- a Make sure the engine/hydraulic covers are fitted and securely locked.
- b Make sure the fuel filler cap is tightly closed (we also recommend that you lock it).

**Cab**

The cab is bolted on top of the mainframe and is a welded steel construction. The cab has sliding windows on the right hand side which may be secured in any position with a locking knob, a hinged door and an up and over windscreen. All windows are of toughened glass. The cab is fitted with a windscreen wiper, heater fan, seat and all operating controls and instruments.

**⚠ CAUTION**

**Do not drive the machine with the door unlatched. It must be correctly closed or secured fully open.**

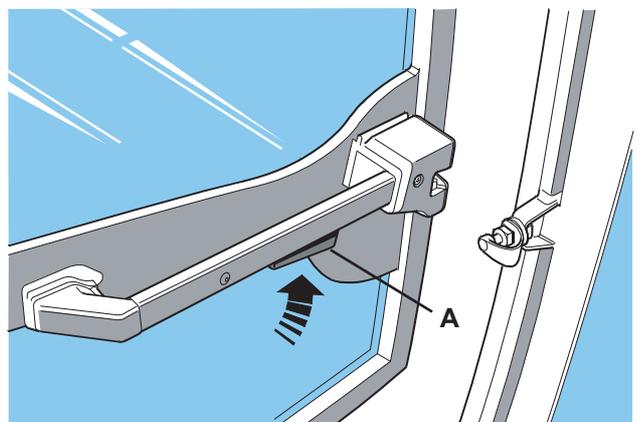
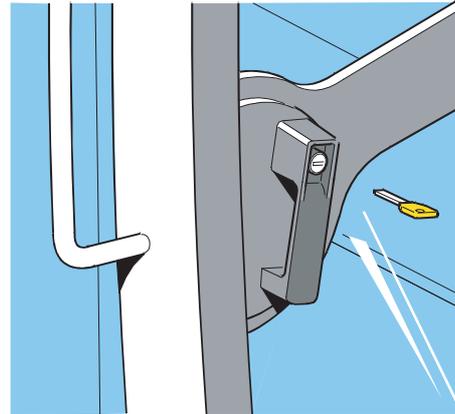
HOP29

**Opening and Closing the Door**

**8052** upto Serial No.803370

**8060** from Serial No.883000

To open the door from the outside, unlock it with the key provided and press the lock barrel to release the catch. To open a door from inside, depress lever **A** upwards. Close the door from the inside by pulling it firmly, it will latch itself.

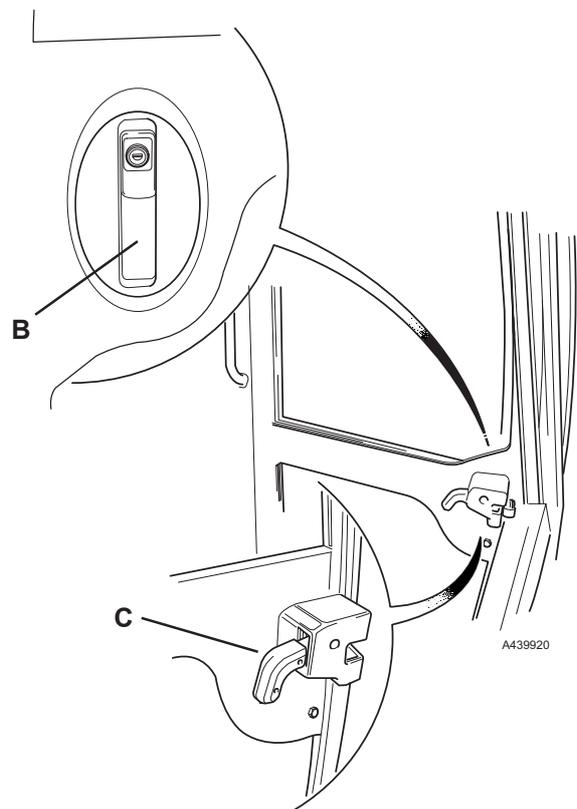


A439790

**Opening and Closing the Door**

**8052** from Serial No. 803371

To open from the outside, unlock it with the key provided and pull on the handle **B** to release the catch. To open the door from inside, push lever **C**. 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.



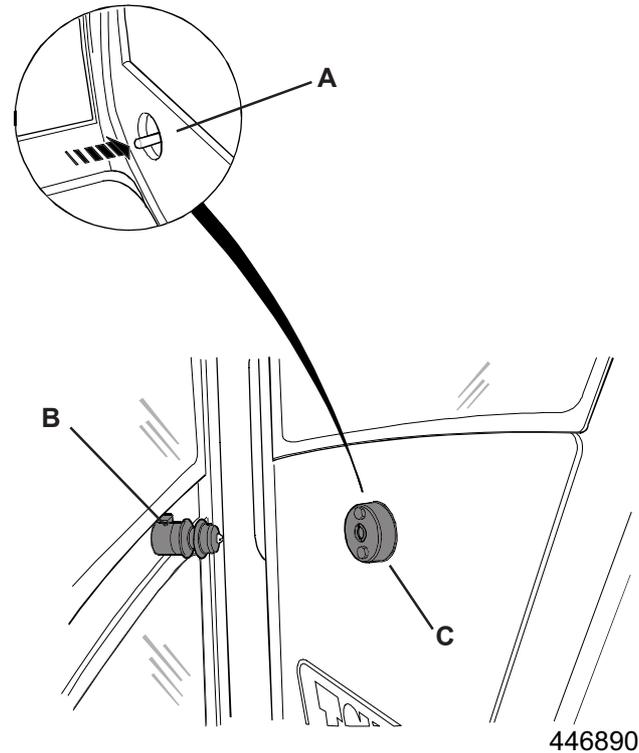
A439920

## Securing the Door in the Open Position

The door can be secured in the fully open position.

Swing the door fully open until the spigot **B** on the door locates securely in the socket **C** on the side of the cab.

To release the door when it is secured fully open, operate the button **A** on the inside of the cab or the button **D** on the outside of the cab.



446890

## Entering/Exiting the cab

### WARNING

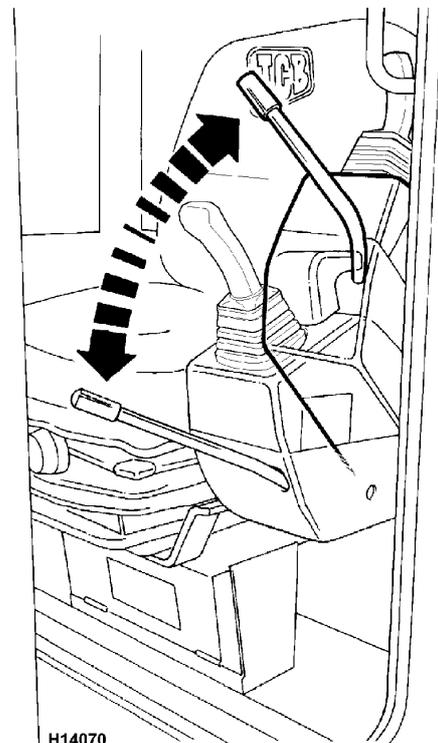
Do not enter or exit the cab unless the arm rest/lever lock is fully raised.

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

When the lock is in the raised position the excavator controls cannot be operated. Lowering the lock to the normal position connects the excavator controls and allows the normal operation of the levers.

### 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.



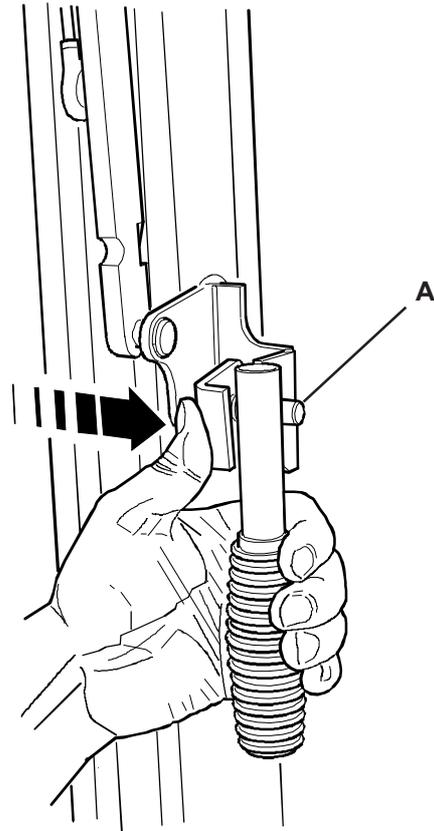
H14070

**Note:** The illustration shows a typical model; your machine may look different from the model shown.

### Opening the windscreen

To open the up and over window, disengage the latch pins **A** on both handles and lift the screen to a position parallel with the roof. Secure in place with the latch pins **A**.

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



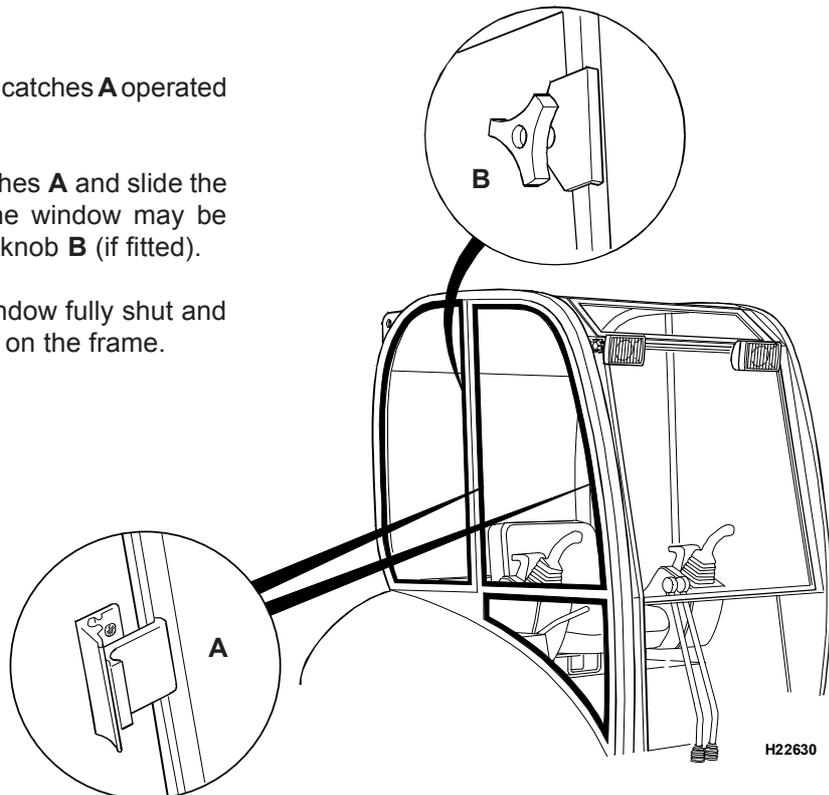
H14080

### Opening the side window

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

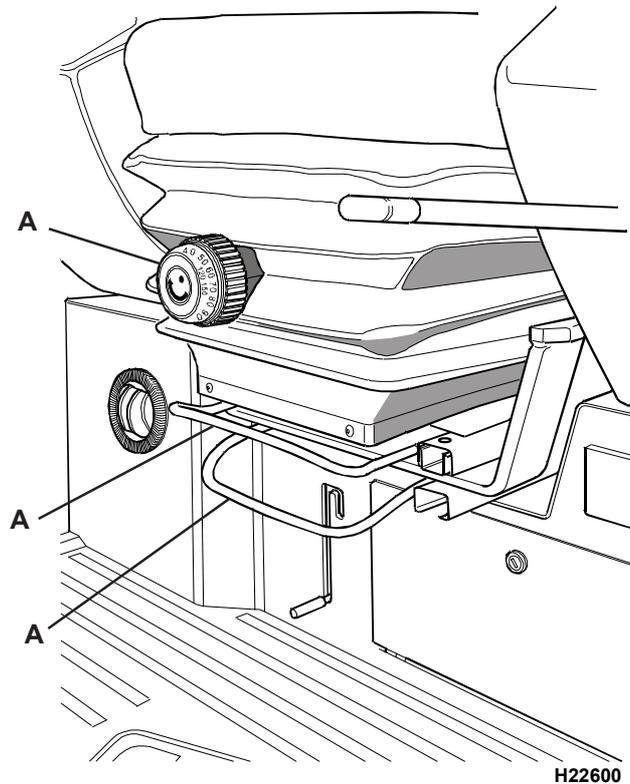
To open the windows, operate catches **A** and slide the window to the desired position, the window may be secured in position with the use of knob **B** (if fitted).

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



H22630

## Adjusting the seat



### 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 at points **A** 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.

### Suspension seat - when fitted

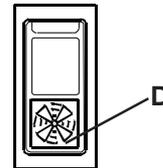
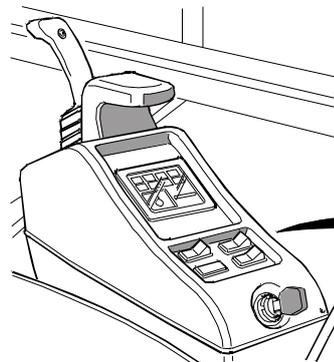
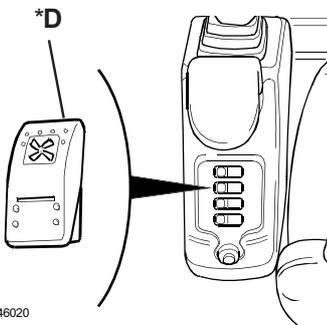
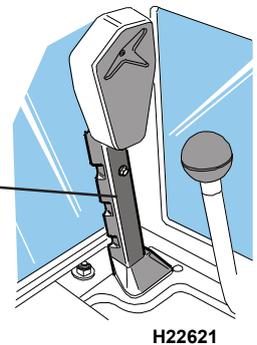
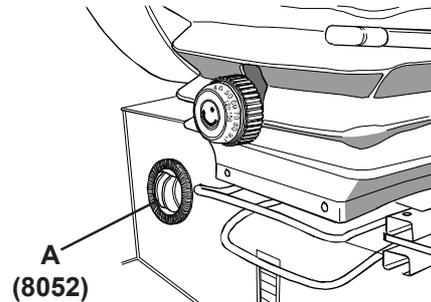
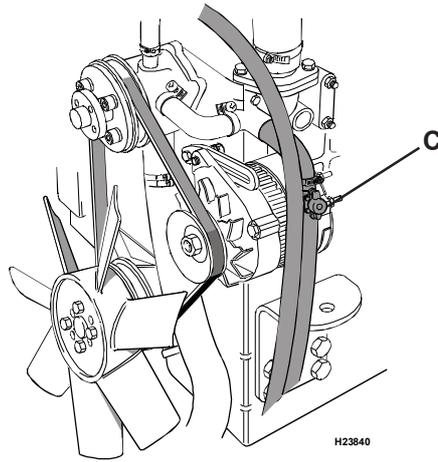
#### **⚠ WARNING**

Whilst seated, adjust the dial on the front of the seat to your weight. Failure to set the weight adjustment dial will reduce the beneficial isolation effect of the seat suspension and may result in personal discomfort or injury.

#### **⚠ CAUTION**

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

Heater controls



**\*8052 machines from 803371**

Hot air can be directed to the cab floor by closing / opening vent **A**. Hot air is directed to the windscreen via a fixed vent system **B**.

For summer use, the **8052** heater element can be turned off at the water valve **C** on the engine.

The **8060** machine has a rotary temperature control knob.

**⚠ WARNING**

Stop the engine before lifting the engine cover to operate valve **C**. HOP30

**8052 machines upto 803370**

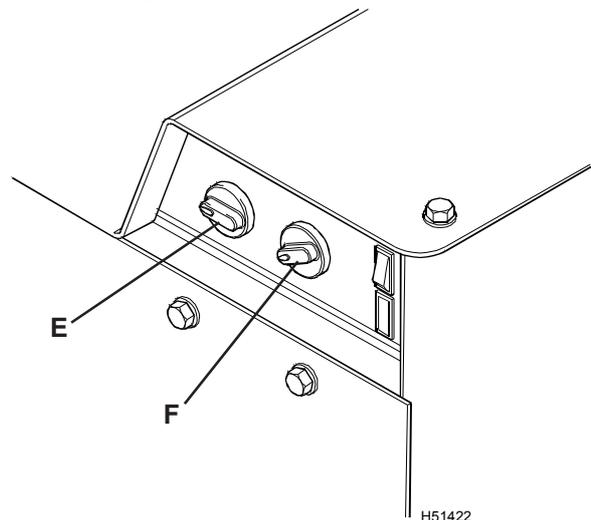
**Heater Fan**

**8052 Two speed fan**

Press the rocker switch **D** located on the right hand instrument console or on the left hand instrument panel on later machines, down, to select the speed required. Return the switch to the first position to turn the fan off.

**8060 Three speed fan**

The 8060 machine has a three speed control **E** located on the left side of the seat bulkhead and a temperature control **F** adjacent to it.



**Fasten the Seat Belt**

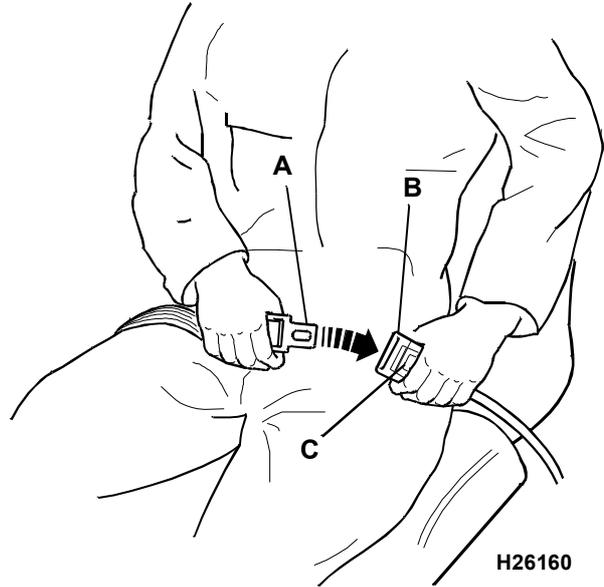
Sit correctly in the seat. Make sure the belt is not twisted. Push the male fitting **A** into the buckle **B** until it latches.

**Release the Seat Belt**

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

**⚠ WARNING**

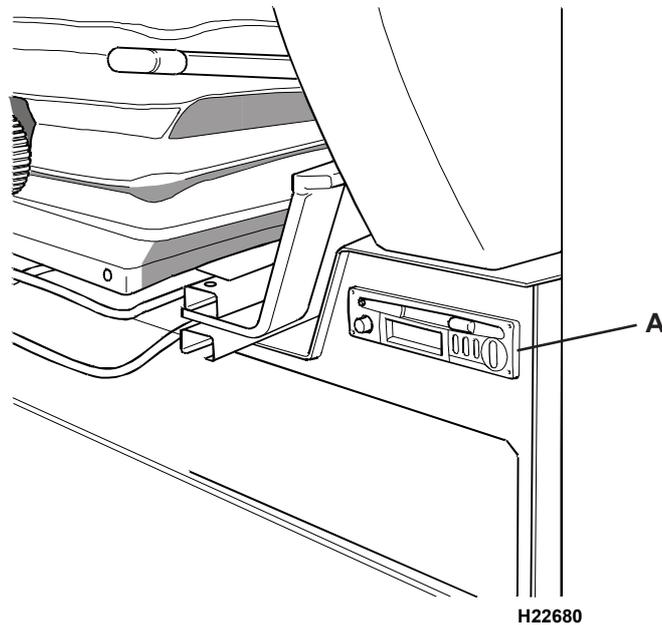
The ROPS and TOPS cab is designed to give you protection in an accident. If you do not wear the seat belt you could be thrown about inside the cab, or thrown out of the machine and crushed. You must wear a seat belt when using the machine. Fasten the seat belt before starting the engine. 2-2-1-9



**Cab radio (optional)**

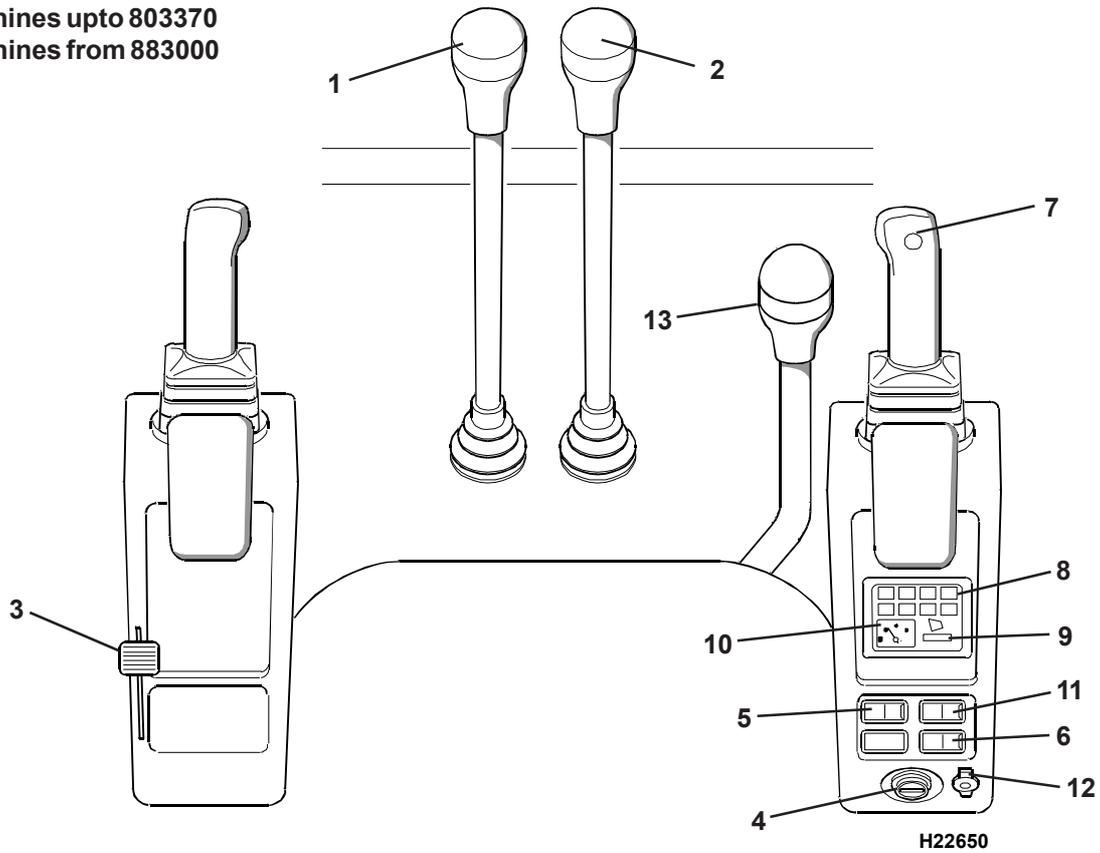
The radio **A** is fitted on the left side of the seat bulkhead, adjacent to the operators left leg on 8052 machines. On 8060 machines it is fitted to the RH side of the seat bulkhead.

Operating instructions are provided in the manufacturers booklet provided.

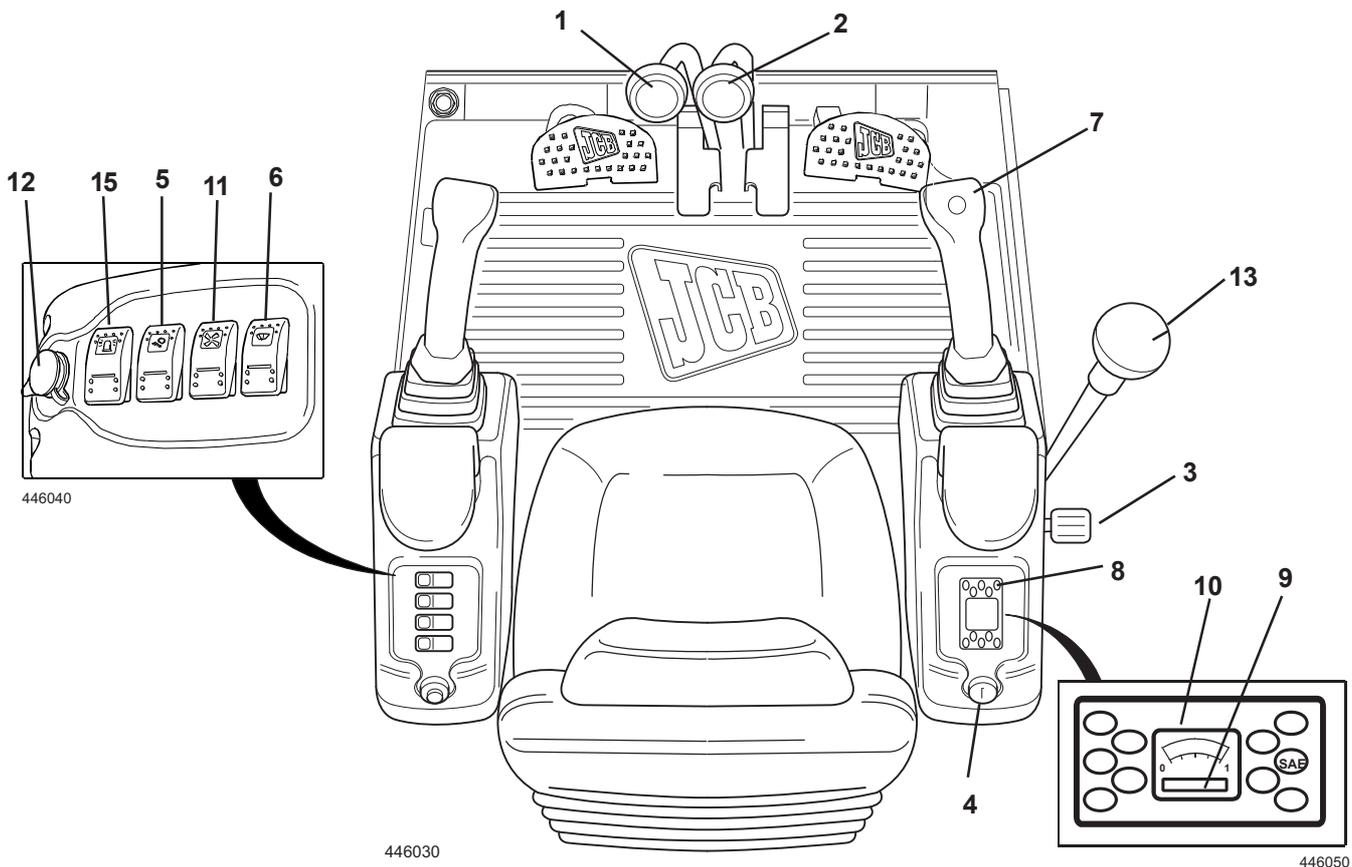


Engine and Track Controls, Switches and Instruments

8052 machines upto 803370  
8060 machines from 883000



8052 machines from 803371



## Engine and Track Control, Switches and Instruments

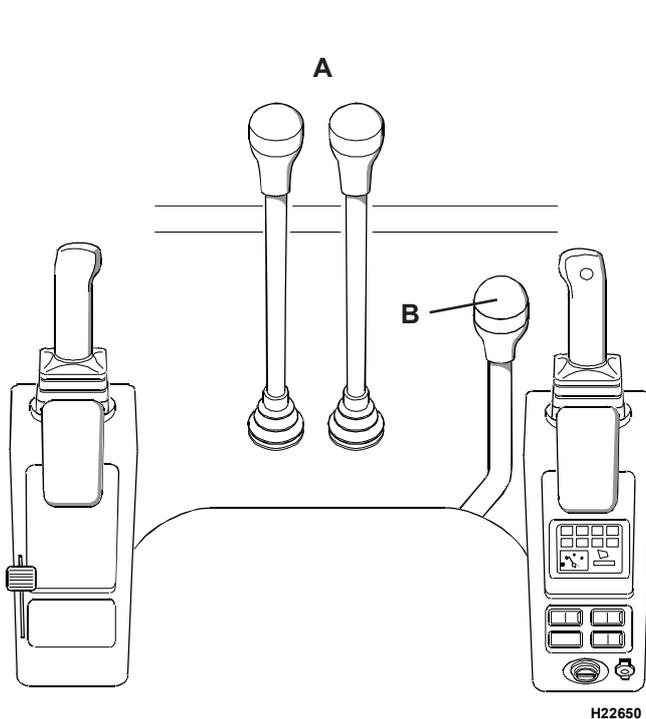
- 1 Left Track Control Lever
- 2 Right Track Control Lever
- 3 Hand Throttle Lever

### CAUTION

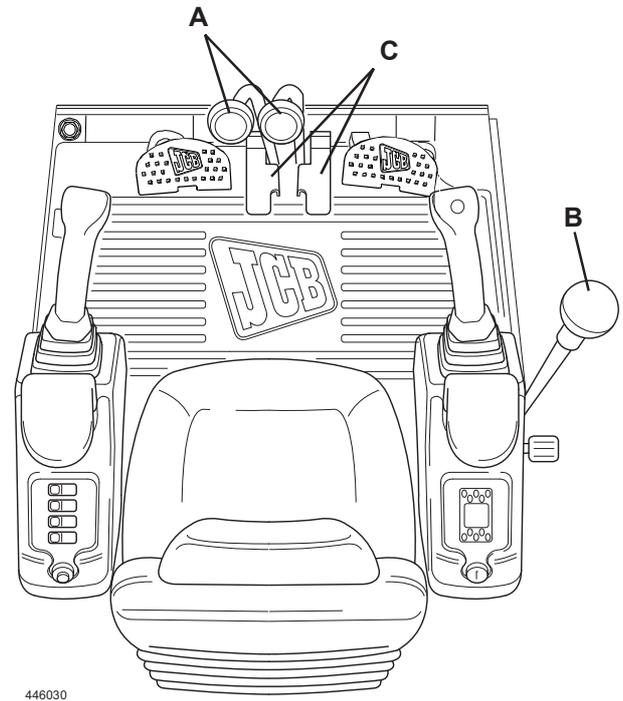
The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated.  
Before any service is selected, the engine speed must be increased to maximum.  
NEVER operate any services with the engine at idle.

- 4 Starter Switch
- 5 Working Lights Switch
- 6 Windscreen Wiper Switch
- 7 Horn Button
- 8 Warning Lights
- 9 Hourmeter
- 10 Fuel Gauge
- 11 Heater Fan (LH side of seat bulkhead, 8060)
- 12 12V Accessory Socket
- 13 Two Speed Tracking Switch
- 14 Temperature Control (8060 - LH side of seat bulkhead, not illustrated)
- 15 Beacon Switch (8052 machines from 803371 only)

## Engine and Track Controls, Switches and Instruments (cont.)



8052 machines upto 803370  
8060 machines from 883000



8052 machines from 803371

### 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 **C** (later machines only). An increase in speed can be achieved by operating the two speed tracking push button switch **B** located in the dozer lever.

#### **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.

**Note:** Ensure the engine speed is set to maximum.

### Forward

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

**Note:** Ensure the engine speed is set to maximum.

### Reverse

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

### Turn

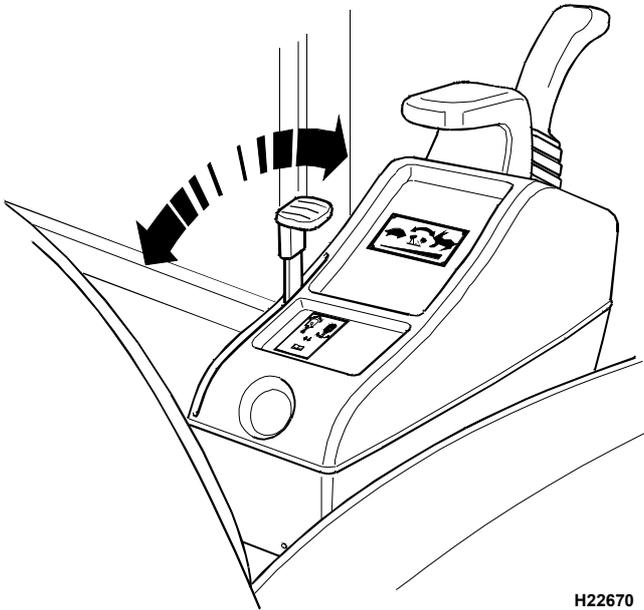
To turn the machine whilst travelling, allow the lever to return back towards the central position on the side towards which you want to go e.g. left lever back to turn left. This causes one of the tracks to move slower than the other. The faster moving track will push the machine around. Release the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

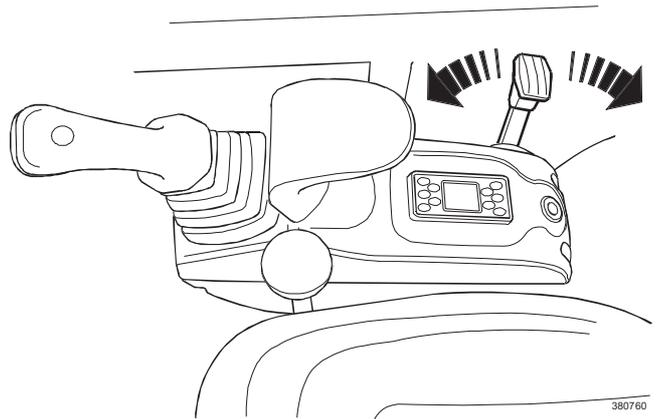
## Engine and Track Controls, Switches and Instruments (cont.)

### Engine Controls



H22670

8052 machines upto 803370  
8060 machines from 883000



380760

8052 machines from 803371

#### **⚠ CAUTION**

The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated. Before any service is selected, the engine speed must be increased to maximum. **NEVER** operate any services with the engine at idle.

### Engine Speed

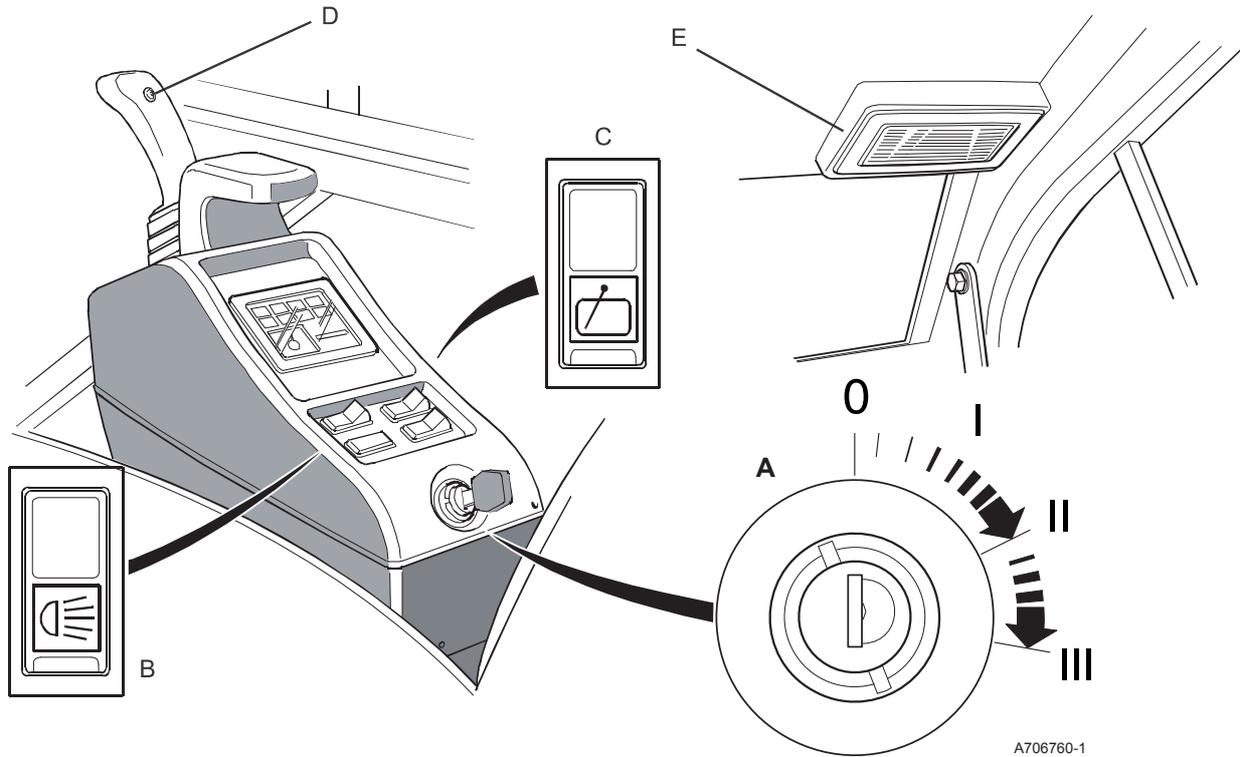
A hand operated throttle lever located in the left hand control pod on early machines or the right hand control pod on later machines, controls the speed of the engine.

Move the lever back to increase and forward to decrease the engine speed. The lever can be left in any position between idle (fully forward) and maximum (fully back) as required.

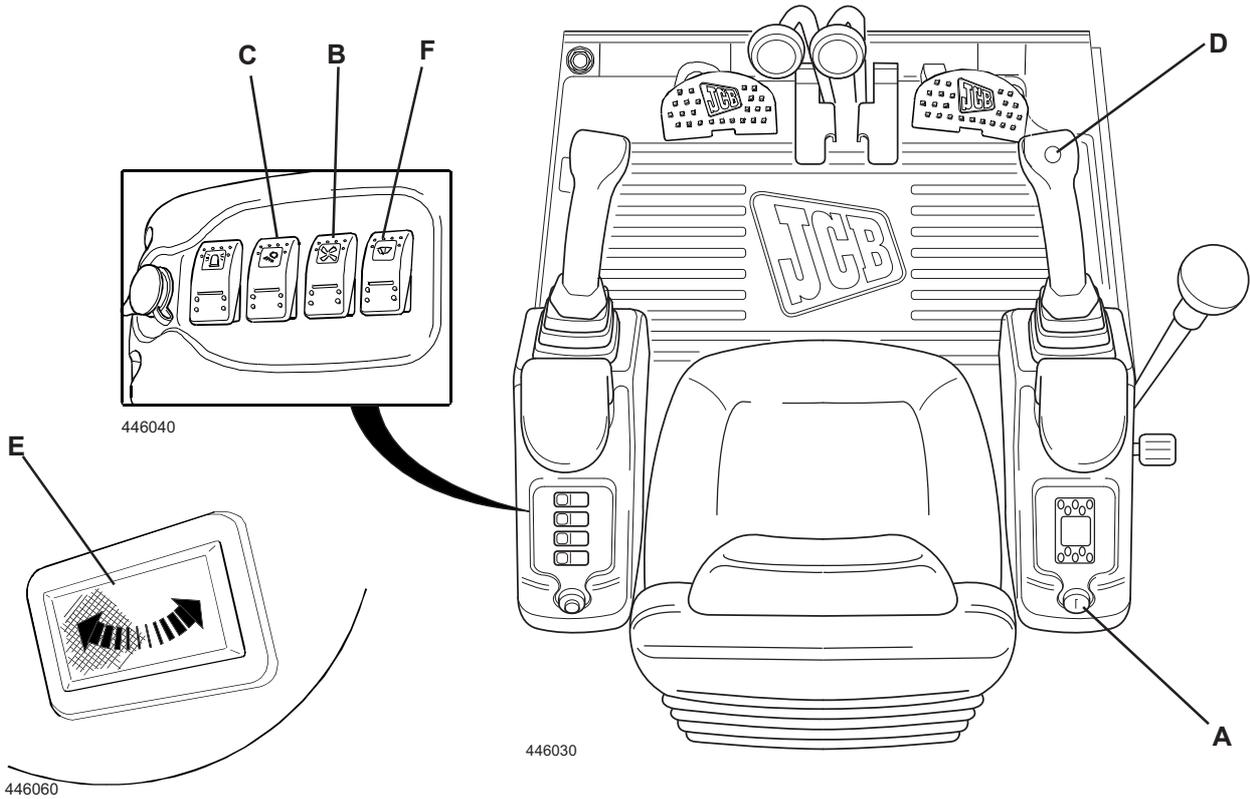
### Engine Start / Stop

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

8052 machines upto 803370  
8060 machines from 883000



8052 machines from 803371



## Engine and Track Controls, Switches and Instruments (cont.)

### Switches

**Note:** Read **Section 1, Starting The Engine** before starting the machines

#### **Starter Switch A**

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 starting. Do not hold in this position for more than 60 seconds. The key will spring back to I when released.

#### **III Start**

Operates the starter motor to turn the engine.

**Note:** Do not operate the starter for more than 15 seconds at one time. If the starter fails to start, allow the starter to cool for a few minutes before trying again.

The starter switch has an inhibitor to stop the switch being turned ON when the engine is running. If the engine fails to start, the switch needs to be returned to the OFF position before re-engaging the starter.

#### **Horn Button D**

This is a push button switch located in the R.H. excavator control lever. Press the switch to activate the horn.

#### **Cab Light E**

A cab light is situated on the right side of the cab, above the rear window. It is operated by pressing either end of the light lens.

#### **Flashing Beacon Switch F**

(8052 machines from 803371)

On/Off switch.

Function with ignition ON or OFF

#### **Working Light Switch B**

This is an illuminated rocker switch. Press the switch down to switch the working lights on. The yellow part of the switch will illuminate. Press the switch again to switch the working lights off, the yellow part of the switch will go out.

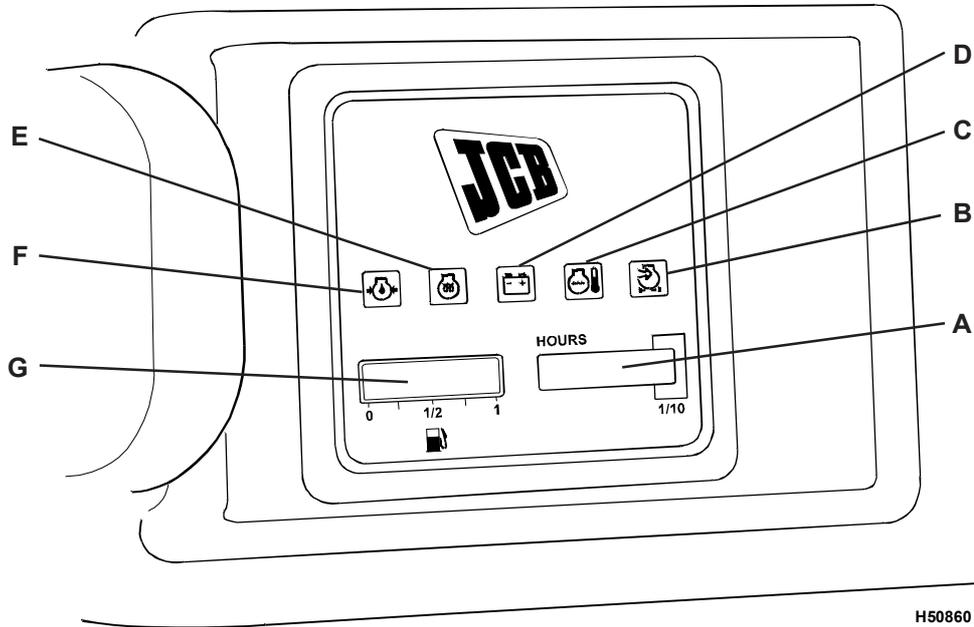
#### **Windscreen Wiper Switch C**

This is a three position rocker switch. Press the switch down on one side to switch the windscreen wiper off, in this position the wiper will self park. Press the switch to the centre position to switch the windscreen wiper on. Press the switch to the other side for windscreen wash, when released the switch will return to the middle, on, position.

Functions only with the starter switch at I.

## Instrument cluster

8052 machines upto 803370  
8060 machines from 883000



H50860

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

### Hourmeter (A)

Indicates the accumulative machine operating hours.

### Blocked Air Cleaner (B) Optional

Illuminated when the air flow through air cleaner is restricted

### Coolant Temperature (C)

Illuminated when the engine coolant becomes overheated.

### Alternator (D)

Illuminated when the alternator supply current to the battery is defective and/or the fan belt is broken. It will also illuminate initially with the starter key at position I before the engine is cranked.

### Glow Plug (E)

Illuminated with the starter key at positions II and III. Extinguished at all other times.

### Engine Oil Pressure (F)

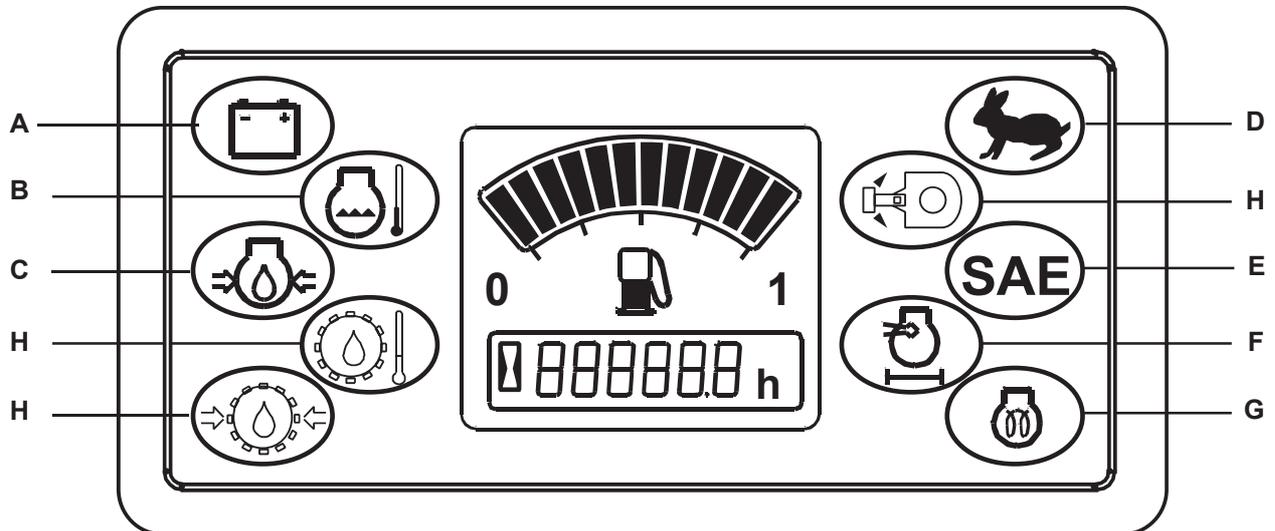
Illuminated when the pressure of the oil in the engine is too low, and initially with the starter at position I before the engine is cranked.

### Fuel Gauge (G)

Indicates the amount of fuel in the tank.

**Instrument cluster**

8052 machines from 803371



A439980

Indicators for the engine and related systems are mounted in the instrument cluster in the left hand 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**

Illuminated RED when engine oil pressure is too low.

**D Two Speed (High Engaged) Indicator**

Illuminated GREEN when high speed is engaged.

**E SAE Controls (Selected) Indicator**

Illuminates GREEN when the SAE Control Pattern is selected.

**F Air Filter (Blocked) Indicator**

Illuminates YELLOW when the Air Filter is blocked.

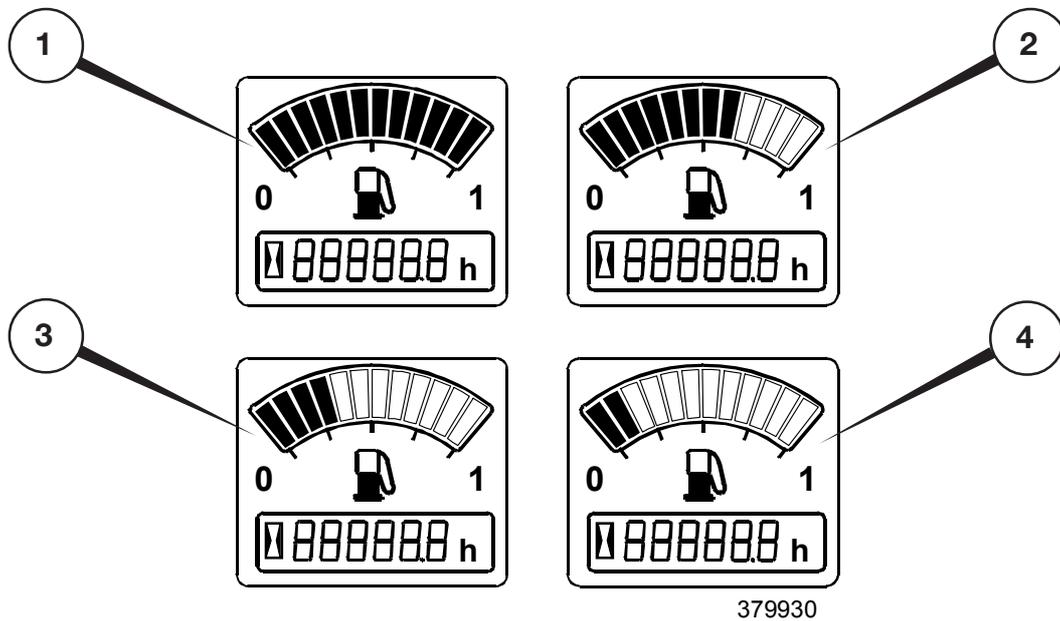
**G Glow Plugs (On) Indicator**

Illuminates YELLOW when the Glow Plugs are energised.

**H Not Used**

**Digital LCD Fuel Gauge**

8052 machines from 803371



**Fuel Tank Level Indicator**

- 1 Full Tank** All bars illuminated  
Filler symbol illuminated
- 2 4 bars to Full** Filler symbol illuminated  
All bars illuminated and reducing as level drops ie. 11 bars, 10 bars, 9 bars etc.
- 3 4 bar to 3 bar** Buzzer gives 3 short beeps. Pump symbol starts to flash.
- 4 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.

**Audible Warnings**

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

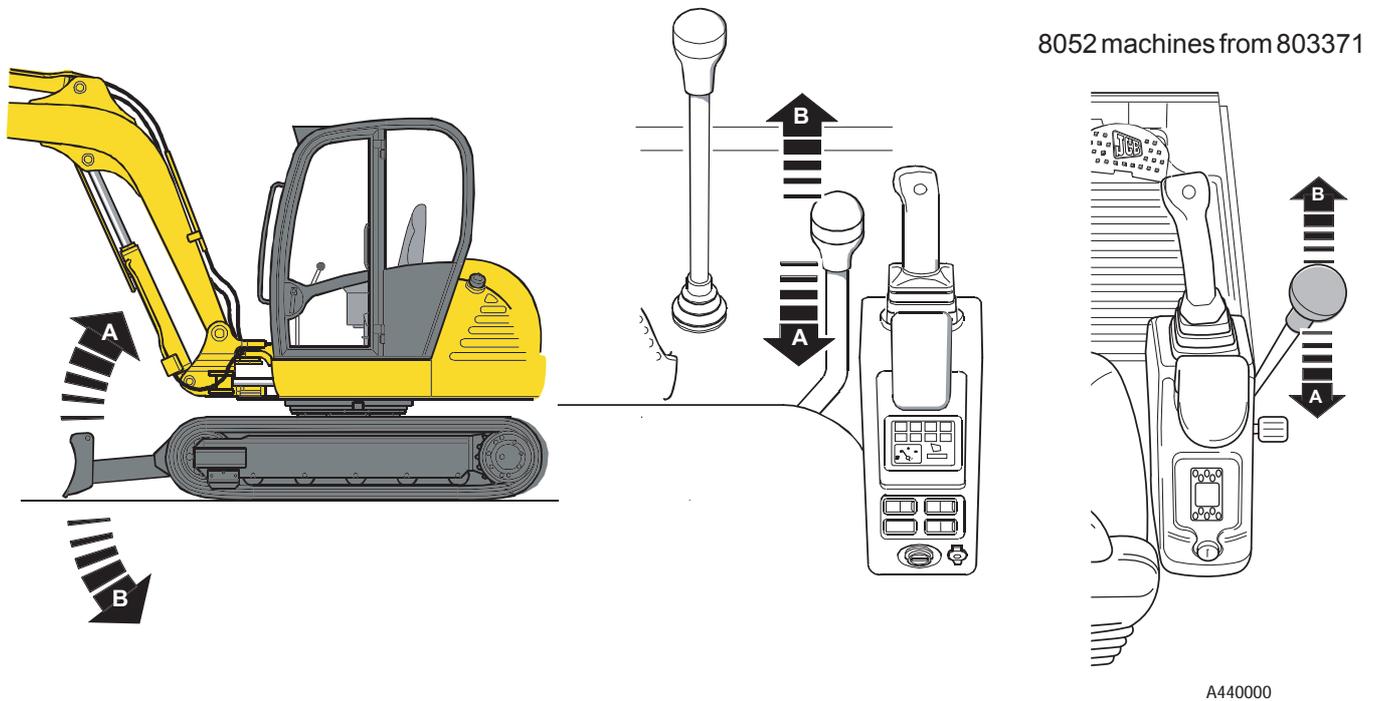
- A** Charge indicator
- B** Coolant indicator
- C** Engine oil pressure
- F** Air Filter indicator

(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

**CAUTION**

The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated. Before any service is selected, the engine speed must be increased to maximum. NEVER operate any services with the engine at idle.

**Raise Dozer 'A'**

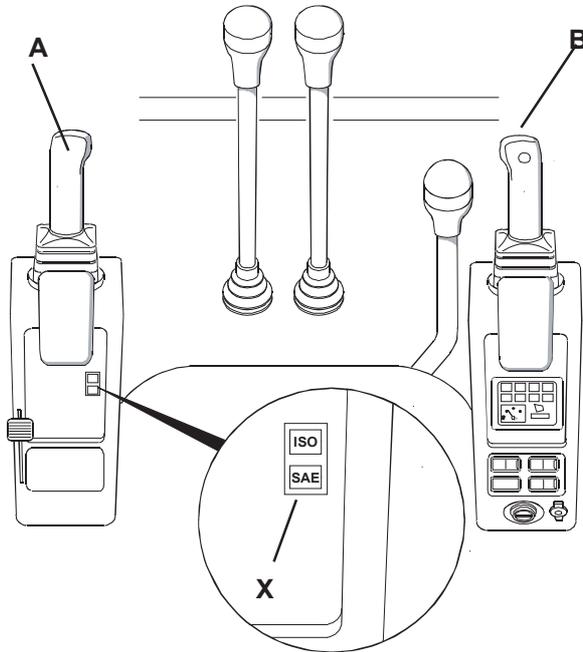
To raise the dozer pull the lever backward. At the required position release the lever.

**Lower Dozer 'B'**

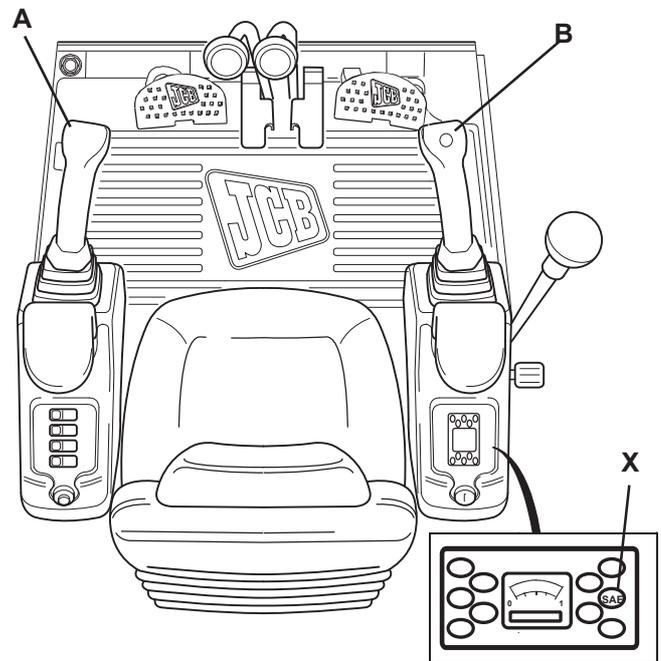
To lower the dozer push the lever forward until an increased resistance is felt and the blade moves. At the required position release the lever.

**Excavator Controls**

8052 machines upto 803370  
8060 machines from 883000



8052 machines from 803371



A440010

**⚠ 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

**⚠ WARNING**

Before operating the excavator controls always check to see which control pattern has been selected. Operate the machine slowly until you are familiar with the pattern selected. If the pattern selection indicator lamp is not illuminated, DO NOT operate the machine until any faults have been rectified.

**⚠ CAUTION**

The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated. Before any service is selected, the engine speed must be increased to maximum. NEVER operate any services with the engine at idle.

The slew lock is situated in the seat bulkhead. Lift and move to the left placing it in the unlocked position. Ensure it is UNLOCKED before operating the excavator controls.

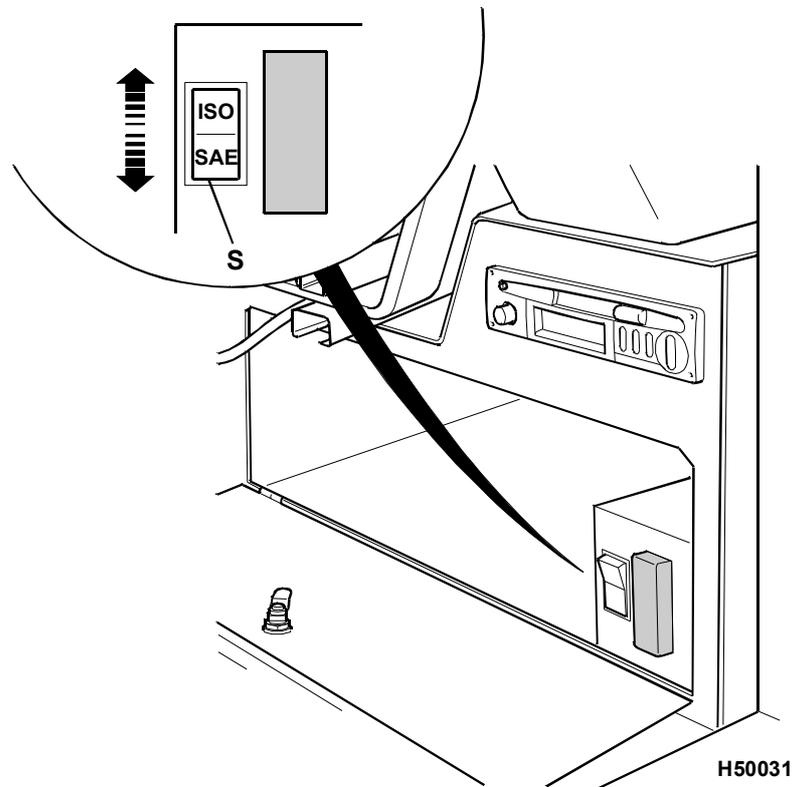
The excavator controls consist of those levers which operate the boom, dipper and bucket and slew the machine.

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 excavator operation.

An optional switch facility allows the operator to select either the ISO or SAE excavator control pattern. One of the indicator lamps, X illuminates to show which pattern has been selected.

In the ISO pattern, the left controller A controls slew and dipper functions. The right hand controller B controls boom and bucket functions.

## Excavator Controls (cont.) - 8052



In the SAE pattern, the left hand controller operates slew and boom functions. The right hand controller operates the dipper and bucket functions.

A windscreen mounted decal acts as a reminder of each control pattern.

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. Practice such movements until you are familiar with the operations that can be achieved safely.

### Changing the Excavator Control Pattern

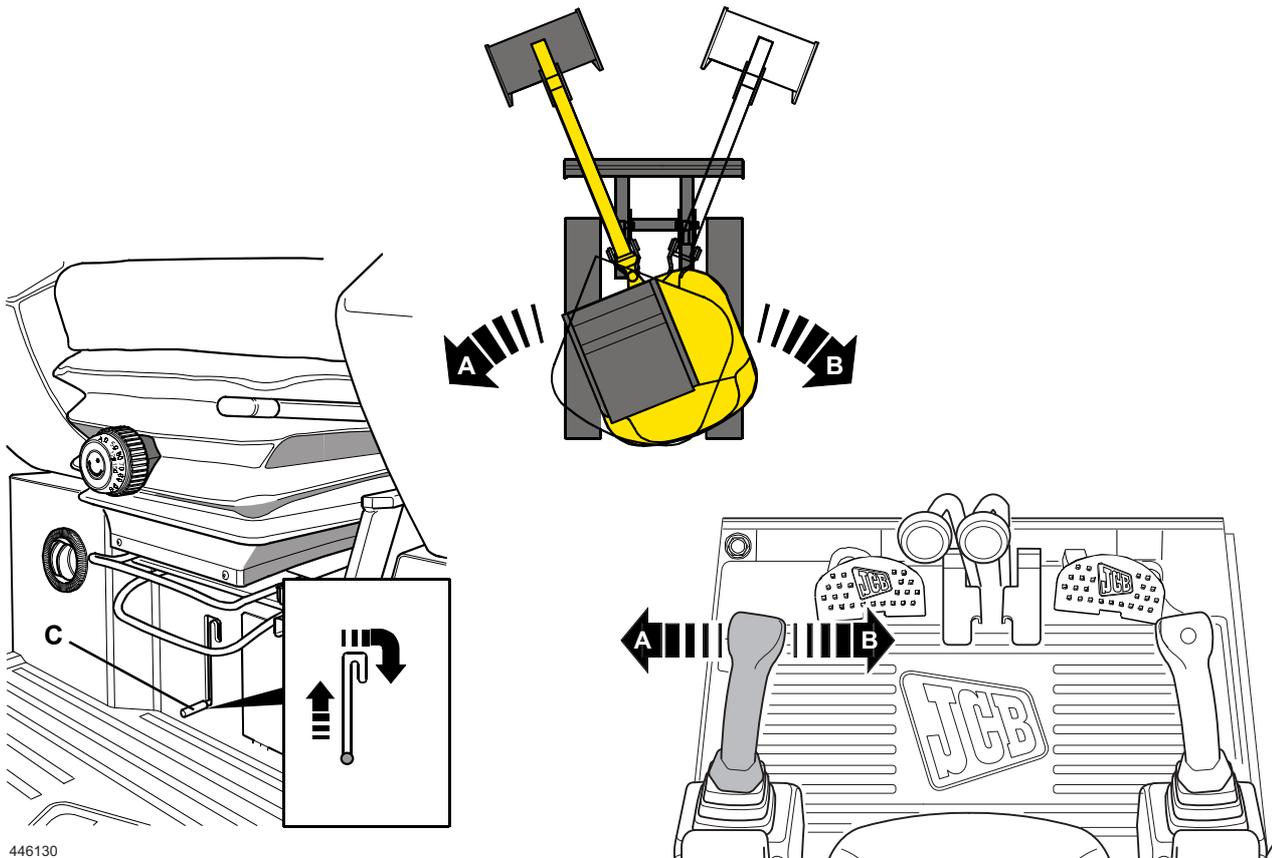
To change the control pattern between ISO and SAE, proceed as follows:

- 1 Lower the excavator and dozer to the ground.
- 2 Switch off the engine and remove the key.
- 3 Raise the arm rest/lever lock to its fully raised position.
- 4 Secure the door in its fully open position.

- 5 Working from outside the cab, unlock and open the fuse box door located under the operators seat.
- 6 Move the ISO/SAE switch **S** to the required position.
- 7 Close and lock the fuse box door.
- 8 Switch on the engine and check that the correct indicator lamp for the selected control pattern illuminates.

**Note:** On 8060 machines the ISO/SAE switch is located on top of the seat base, under the L.H. pod.

## Excavator Controls (cont.)



446130

**⚠ CAUTION**

The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated. Before any service is selected, the engine speed must be increased to maximum. NEVER operate any services with the engine at idle.

### Slew Lock

8052 machines from 802000  
8060 machines upto August 2001

Before slewing the cab, ensure that the slew lock C is disengaged, (the up position).

8060 machines from August 2001

The slew lock automatically engages when the left controller is returned to the neutral position

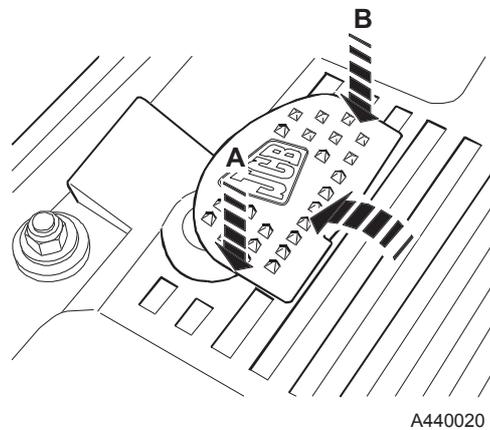
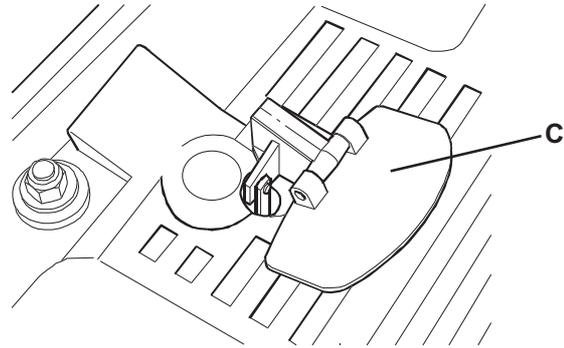
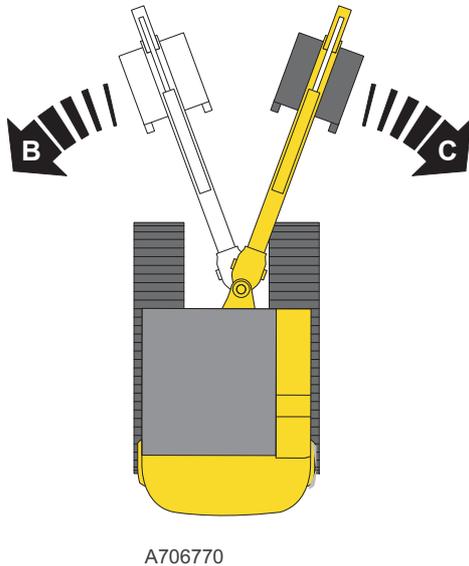
### Slew Cab Left

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

### Slew Cab Right

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

## Excavator Controls (cont.) - 8052



### Swing Boom Left

To swing the boom to your left **A**, unlock the swing pedal by pivoting the pedal **C** forward into its operating position, press the pedal to the left side. Release the pedal when the excavator end has reached the desired position.

### Swing Boom Right

To swing the boom to your right **B**, unlock the swing pedal by pivoting the pedal **C** forward into its operating position, press the pedal to the right side. Release the pedal when the excavator end has reached the desired position.

#### CAUTION

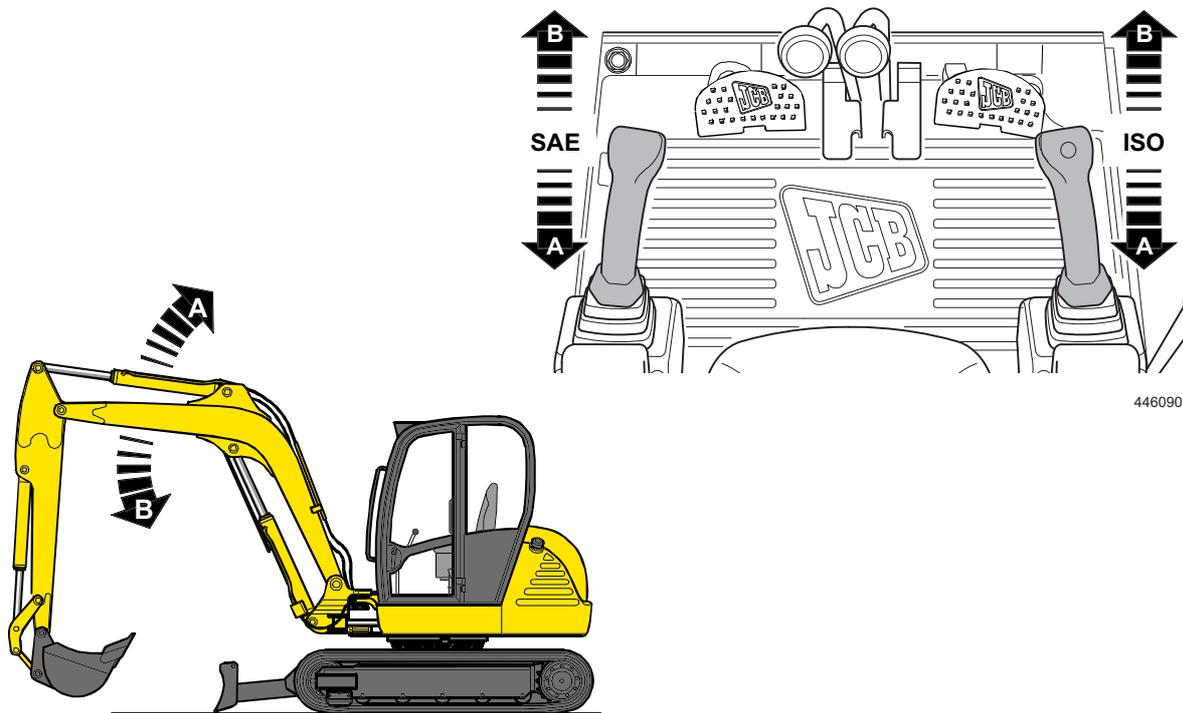
The swing pedal must be in the locked position when not in use.

#### CAUTION

When buckets 750mm or wider are fitted to the machine, use extreme caution in operation to avoid contact with the cab.

**Note:** 8060 machines have a swing stop to restrict L.H. swing.

### Excavator Controls (cont.)



446090

#### **⚠ WARNING**

Thoroughly warm the hydraulic oil before operating the excavator services. Before selecting boom up, check there are no overhead obstructions or electric power cables. HOP40

#### **⚠ 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

#### **⚠ CAUTION**

The hand throttle's lowest setting allows the engine to idle when the excavator is not being operated. Before any service is selected, the engine speed must be increased to maximum. NEVER operate any services with the engine at idle.

#### **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.

#### **Lower Boom**

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