CONTENTS

Page

INTRODUCTION

About this Manual
Machine Model and Serial Number 1
Using this Manual 1
Units of Measurement 1
Page Numbering 1
Left Side, Right Side 1
Using the Machine 1
Page Cross References 1

The JCB 506, 508 Loadall
Machine Description 2

Safety - Yours and Other People's 3

Safety Check List
General Safety 3
Operating Safety 4
Maintenance Safety 5

Safety Decals 8

Identifying Your Machine
Identification Plate 9
Typical Machine Identification Number 9
Unit Identification 9

OPERATION

Introduction 21

Before Entering the Cab 21-22

Entering & Leaving the Cab, Doors and Windows
Entering and Leaving 22
Emergency Exit 23
Opening and Closing the Door 23
Open and Closing the Upper Door Section 24
Opening and Closing the Windshield 24

Seat Controls
Seat Type 1 25
Seat Type 2 25

Cab Layout and Controls 26-27

Seat Belt
Fasten the Seat Belt 28
Release the Seat Belt 28
Adjust the Seat Belt 28

Adjusting the Steering Column 28

Page

Cab Switches and Instruments
Starter Switch 29
Instrument Panel Switches 29
Steering Column Switches 30
Cab Light 31
Optional Warning Beacon 31
Instruments 32
Warnings (Audible/Visual) 33

Heater (cab versions only) 34

Steer Mode Control
Steer Mode selector 35
Re-aligning the Road Wheels 35

Boom and Carriage Controls
Raise/Lower Boom 36
Extend/Retract Boom 37
Tilt Carriage Forward/Tilt Carriage Back 37

Auxiliary Control 38

Sway Control Option 39

Before Starting the Engine 40

Starting the Engine 41

Preparing for Road Travel 42

Preparing for Site Travel 43

Testing the Parking Brake 44

Getting the Machine Moving
Operating Hints 45

Stopping and Parking the Machine 47

Using the Load Charts and Boom Indicators 48-49

Working with the Loadall 50
Handling Palleted Loads 51
Uneven Loads 52
Lifting Bales 53
Placing Bales 53

Operating in Low Temperatures 54

Operating in High Temperatures 54

Towing a Machine 55

Recovery Hitch 55

Transporting the Machine 56

Lifting a Machine 57

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

⚠ WARNING

Study This Manual Before Starting The Machine

You must understand and follow the instructions in this manual. You must observe all relevant laws and regulations. If you are unsure about anything, ask your JCB distributor or employer. **Do not guess**, you or others could be killed or seriously injured.

INT-1-1-1

⚠ CAUTION

Do not fit an attachment to this machine which is not JCB approved. Consult your JCB distributor before fitting any non approved attachment.

8-4-1-6

In this manual and on the machine there are safety notices. Each notice starts with a signal word. The meanings of the signal words are given below.

⚠ DANGER

Denotes an extreme hazard exists. If proper precautions are not taken, it is highly probable that the operator (or others) could be killed or seriously injured.

INT-1-2-1

⚠ WARNING

Denotes a hazard exists. If proper precautions are not taken, the operator (or others) could be killed or seriously injured.

INT-1-2-2

⚠ CAUTION

Denotes a reminder of safety practices. Failure to follow these safety practices could result in injury to the operator (or others) and possible damage to the machine.

INT-1-2-3

CALIFORNIA

Proposition 65 Warning

⚠ WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

⚠ WARNING

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

0013

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

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 distributor. 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 practicing 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

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 a raised boom can be hazardous. You could be crushed if the boom falls or is inadvertently lowered.

Lower the boom fully before doing these checks. If you are new to this machine, get an experienced operator to lower it for you.

If there is nobody to help you, study this manual until you have learned how to lower the boom. Also make sure that the parking brake is engaged before doing these checks.

5-2-1-1

1 Check for Cleanliness

- **a** Clean the windows, light lenses and rear view mirrors.
- **b** Remove dirt and debris, especially from around the linkages, cylinders, pivot points and radiator.
- **c** Make sure the cab step and handholds are clean and dry.
- **d** Clean all safety decals. Replace any that are missing or cannot be read.

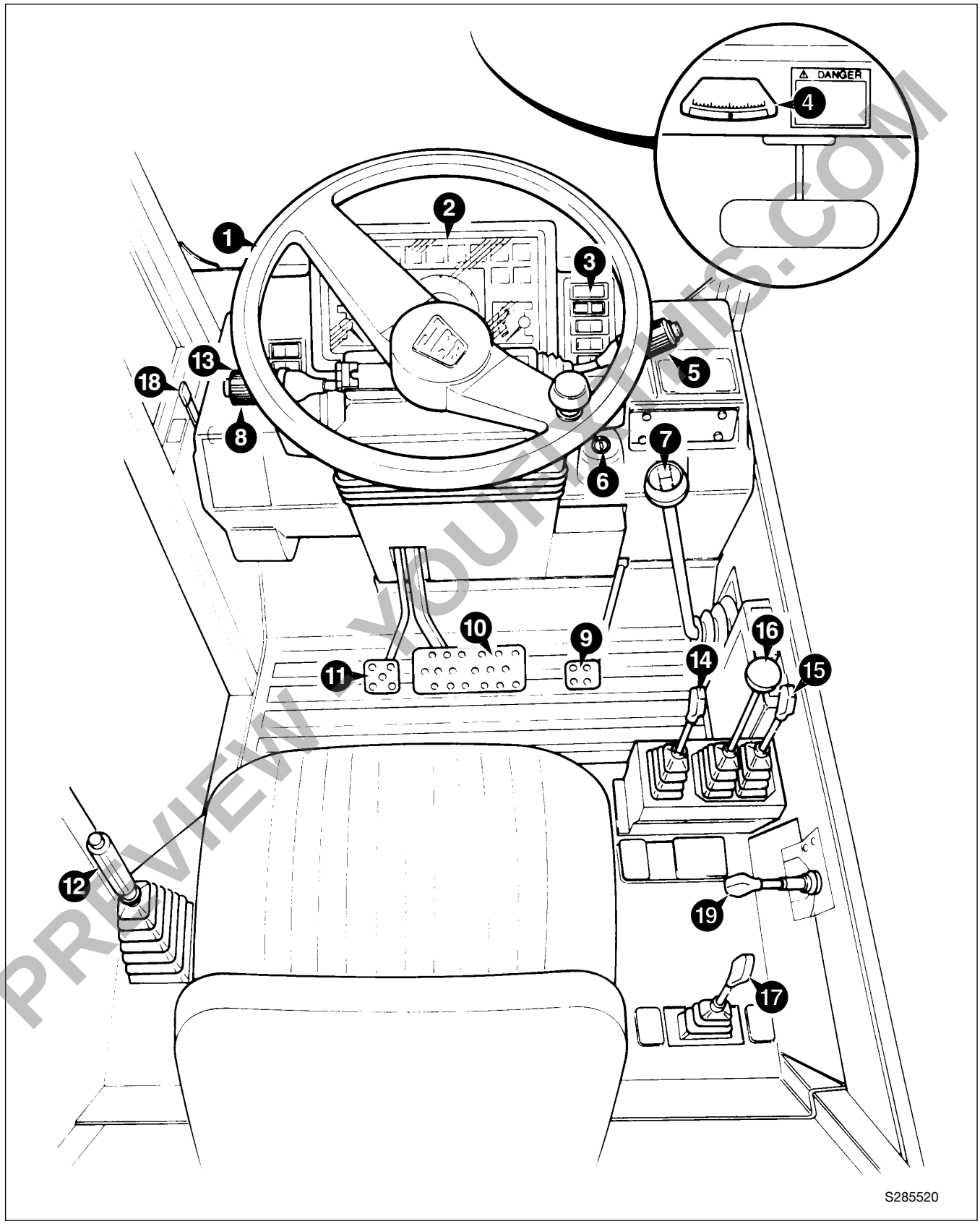
2 Check for Damage

- **a** Inspect the machine generally for damaged and missing parts.
- **b** Make sure that all pivot pins are secured correctly in place.
- **c** Inspect the windows for cracks and damage.
- **d** Check for oil, fuel and coolant leakages beneath the machine.

PREVIEW : YOUFIXTHIS.COM

Download full manual at youfixthis.com

CAB LAYOUT AND CONTROLS



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

LUBRICANTS - HEALTH AND SAFETY

It is most important that you read and understand this information and the publications referred to. Make sure all your colleagues who are concerned with lubricants read it too.

Hygiene

JCB lubricants are not a health risk when used properly for their intended purposes.

However, excessive or prolonged skin contact can remove the natural fats from your skin, causing dryness and irritation.

Low viscosity oils are more likely to do this, so take special care when handling used oils, which might be diluted with fuel contamination.

Whenever you are handling oil products you should maintain good standards of care and personal and plant hygiene. For details of these precautions we advise you to read the relevant publications issued by your local health authority, plus the following.

Storage

Always keep lubricants out of the reach of children.

Never store lubricants in open or unlabelled containers.

Waste Disposal

All waste products should be disposed of in accordance with all the relevant regulations.

The collection and disposal of used oil should be in accordance with any local regulations. Never pour used oil into sewers, drains or on the ground.

Handling

New Oil

There are no special precautions needed for the handling or use of new oil, beside the normal care and hygiene practices.

Used Oil

Used engine crankcase lubricants contain harmful contaminants.

Here are precautions to protect your health when handling used oil:

1 Avoid prolonged, excessive or repeated skin contact with used oils.

2 Apply a barrier cream to the skin before handling used oil.

3 Note the following when removing oil from skin:

- **a** Wash your skin thoroughly with soap and water.
- **b** Using a nail brush will help.
- **c** Use special hand cleansers to help clean dirty hands.
- **d** Never use gasoline, diesel fuel, or kerosene for washing.
- **e** Avoid skin contact with oil soaked clothing.
- **f** Don't keep oily rags in pockets.
- **g** Wash dirty clothing before re-use.
- **h** Throw away oil-soaked shoes.

First Aid - Oil

Eyes
In the case of eye contact, flush with water for 15 minutes. If irritation persists, get medical attention.

Swallowing
If oil is swallowed do not induce vomiting. Get medical advice.

Skin
In the case of excessive skin contact, wash with soap and water.

Spillage

Absorb on sand or a locally approved brand of absorbent granules. Scrape up and remove to a chemical disposal area.

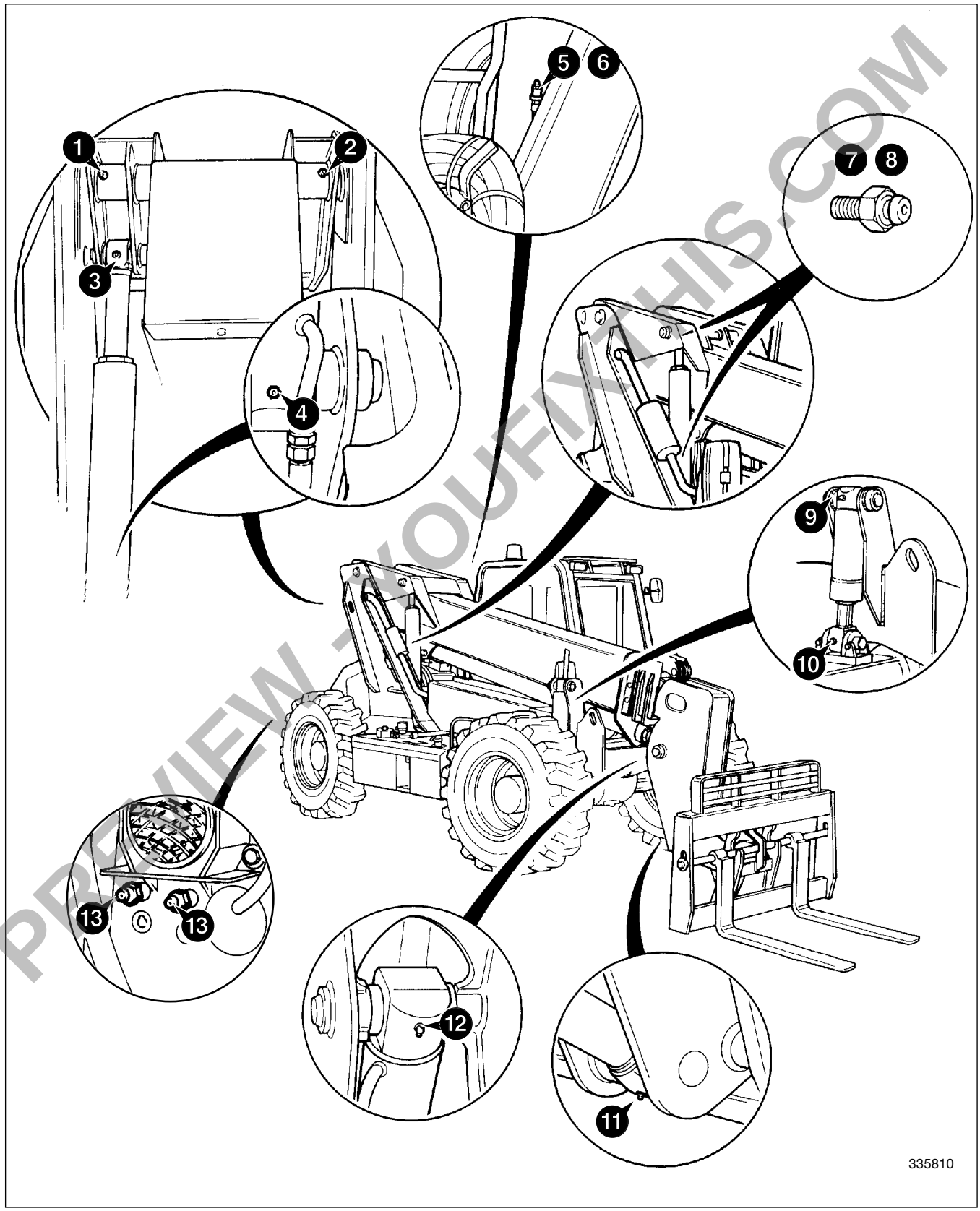
Fires

Extinguish with carbon dioxide, dry chemical or foam extinguishers. **Do not use water**. Fire-fighters should use self-contained breathing apparatus.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

GREASING (EVERY 50 HOURS)



PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

STOPPING AND PARKING THE MACHINE

Where possible, stop the machine on dry and level ground.

1 Ease up on the accelerator pedal and down on the brake pedal to bring the machine to a smooth stop. Keep the foot brakes on until the parking brake has been engaged and the drive disengaged. *(Steps **2** and **3**).*

2 Engage the parking brake**.** Pull the parking brake lever fully up. Make sure that the parking brake indicator lights up. Release the foot brakes.

⚠ CAUTION

The parking brake must not be used to slow the machine from traveling speed, except in an emergency, otherwise the efficiency of the brake will be reduced.

Whenever the parking brake has been used in an emergency, always renew both brake pads.
4-2-1-1/2

***Notice**: An audible alarm will sound when the parking brake is engaged with the machine in forward or reverse drive. The alarm will stop when the drive is disengaged (see Step **3**).*

3 Set the forward/reverse lever to neutral.

4 Retract and lower the boom, rest the forks flat on the ground.

5 If you are leaving the machine, make sure that all switches are set to off. Remove the starter key.

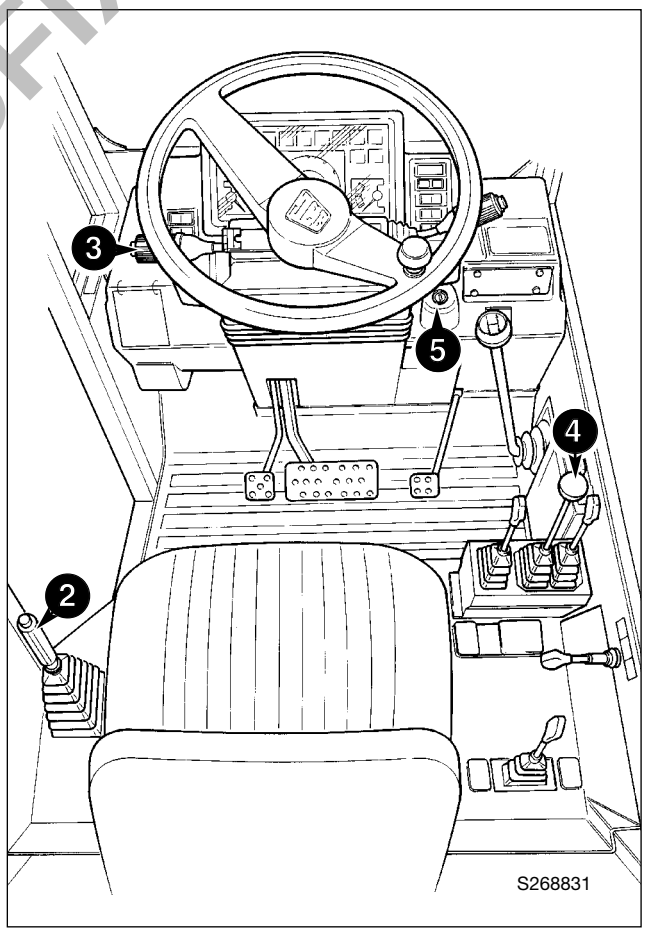
It is recommended that turbocharged engines are run at 1000 RPM (approx) and reduced load for 2-3 minutes before shut down. This will allow the turbocharger to cool.

6 Use the handholds and steps when you climb down from the machine. If you are leaving the machine, close and latch all windows and lock the door. We also recommend that the fuel filler cap is locked on.

⚠ WARNING

Always face the machine when entering (and leaving) the cab. Make sure your shoes and hands are clean and dry. Otherwise you could slip and fall.
2-2-1-3

7 At the end of a working cycle or if the machine is being left unattended, provided the lights are not required remove the battery isolator key, *see **Battery** (MAINTENANCE section).*



PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

FLUIDS, LUBRICANTS, CAPACITIES AND SPECIFICATIONS
506B, 506C

***Notice**: Under no circumstances should the engine be allowed to idle for extended periods; (e.g. warming up without load). Engines of new machines are filled at the factory with JCB 10W/30 Multigrade oil. This oil should be drained after the first 100 hours operation and the engine filled with the appropriate recommended grade as shown in the lubrication chart. JCB 10W/30 Multigrade should also be used for the first 100 hours operation whenever a new or reconditioned engine is fitted to the machine. After the first 100 hours operation, it is essential that the 10W/30 oil is replaced by the lubricant recommended below.*

ITEM	CAPACITY US Gal (Liters)	FLUID/LUBRICANT	INTERNATIONAL SPECIFICATION
Fuel Tank	23.7 (90)	Diesel Oil (See **Types of Fuel**)	ASTM D975-66T Nos. 1D, 2D
Engine (Oil) **Engine Type:** **A Series**	2.6 (10)	**JCB 15W/40 Engine Oil** 14 °F to 122 °F (-10 °C to 50 °C) **JCB 10W Engine Oil** -4°F to 50°F (-20 °C to 10°C)	SAE15W/40 API CF4/SG SAE10W API CF4/SG
R Series	2.6 (10)	**JCB Genuine Engine Oil 15W/40**	CH4/SJ (ACEA E5-B3-A3)
Engine (Coolant)	6.2 (23.5)	**Antifreeze/Water** (See **Coolant Mixtures**)	ASTM D3306-74
Transmission **Syncro Shuttle** **Powershift**	 4.8 (18.25) 3.9 (15.0)	 **JCB Special Transmission Fluid** **JCB Special Transmission Fluid**	 ESP-M2C 33G ESP-M2C 33G
Front Axle **Housing** **Hubs (x2)**	 4.7 (18) 0.5 (2.0)	 **JCB Special High Performance Gear Oil**	 API GL4
Rear Axle **Housing** **Hubs (x2)**	 3.4 (13) 0.5 (2.0)	 **JCB Special High Performance Gear Oil**	 API GL4
Brake System		**JCB Light Hydraulic Fluid** DO NOT USE ORDINARY BRAKE FLUID	ISO VG15
Hydraulic Tank	*32 (121)	**JCB High Performance Hydraulic Oil** (Above 100 °F, 38 °C)	ISO VG46
Grease Points		**JCB Special MPL or HP Grease**	Lithium based, No. 2 consistency
Wear Pad Runways		**JCB Waxoyl**	
Boom Hoses		**JCB Special Slide Lubricant**	
Boom Chains		**JCB Chain Lubricant**	

***Notice:** This is nominal tank capacity. The total hydraulic system capacity depends on the equipment being used. Fill with all cylinders closed. Watch level sight glass when filling.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SERVICE SCHEDULES (continued)

Pre-start Cold Checks Service Points and Fluid Levels	Operation	Daily 10 Hr	Weekly 50 Hr	First 100 Hr	6 Monthly 500 Hr	Yearly 1000 Hr	2 Yearly 2000 Hr
ENGINE							
Rain Cap/Pre-cleaner Installed if fitted	Check			●			
Engine Air Filter Pre-cleaner	Clean	●	●	●	●	●	●
Oil Level and Condition	Check	●	●	●	●	●	●
Oil and Filter (A Series engines)	(1) Change			●	●	●	●
Oil and Filter (R Series engines)	(1) Change				●	●	•
Air Cleaner Dust Valve (A Series engines)	Clean				●	●	●
Air Cleaner Dust Valve (R Series engines)	Clean				●	●	●
Air Cleaner Outer Element	Change				●	●	●
Air Cleaner Inner Element	Change						●
Fuel System For Leaks and Contamination	Check	●	●	●	●	●	●
Fuel Filter	Drain		●	●	●	●	●
Fuel Filter (A Series engines)	Change			●	●	●	●
Fuel Filter (R Series engines)	Change				●	●	●
Coolant Level and Antifreeze Strength	Check	●	●	●	●	●	●
Fuel Sedimenter	Drain and clean		●	●	●	●	●
Fan Belt Tension/Condition (A Series engines)	Check		●	●	●	●	●
Fan Belt Tension/Condition (R Series engines)	Check		●	●	●	●	●
Valve Clearances (A Series engines)	*Check and Adjust					●	●
Valve Clearances (R Series engines)	*Check and Adjust					●	●
Engine Mount Security (A Series engines))	Check			●	●	●	●
Engine Mount Security (R Series engines)	Check				●	●	●
Radiator	Clean				●	●	●
TRANSMISSION AND AXLES							
Transmission Oil Level	Check	●	●	●	●		
Transmission Oil	(2) Change					●	●
Transmission Oil Filter	Change			●	●	●	●
Axle(s) Oil Level	Check		●	●			
Axle(s) Oil	Change				●	●	●
Hub Oil Level	Check		●				
Hub Oil	(3) Change			●	●	●	●
Drive Shafts and Universal Joints	Security/Grease			●	●	●	●
Axle Pivots and Linkages	Grease		●	●	●	●	●
Axle Breather(s)	Check			●	●	●	●
Tyre Pressures/Condition	Check	●	●	●	●	●	●
Hub Wheel Bearings	Check			●	●	●	●
Transmission Strainer	Clean					●	●
Wheel Nut Security	Check	●	●	●	●	●	●
Wheel Alignment	Check	●	●		●	●	●
Trunnion Bearings	*Check/Adjust			●	●	●	●
Steering Stops (if fitted)	Security			●	●	●	●
Transmission Mount Security	Check			●			
Axle Mount Security	Check			●			

(1) In arduous conditions (eg. refuse re-handling, waste paper reclamation etc.) change the oil and filter after every **250 Hours** or three months (whichever comes first).

(2) After a major transmission repair, the new oil should be run to operating temperature and changed again to remove any contamination which entered during the repair. Change the oil and filter after a further 100 hours if the oil was heavily contaminated because of, or from the failure (eg. water contamination).

(3) After a hub repair, the new oil should be run to temperature and changed again to remove any contamination which entered during the repair. Change the oil again after a further 100 hours to remove any bedding-in wear. This is particularly important if new brake plates have been fitted.

***Notice**: Jobs which should be done by a specialist are shown by *. First 100 hrs service only to be completed by JCB Distributor.*

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

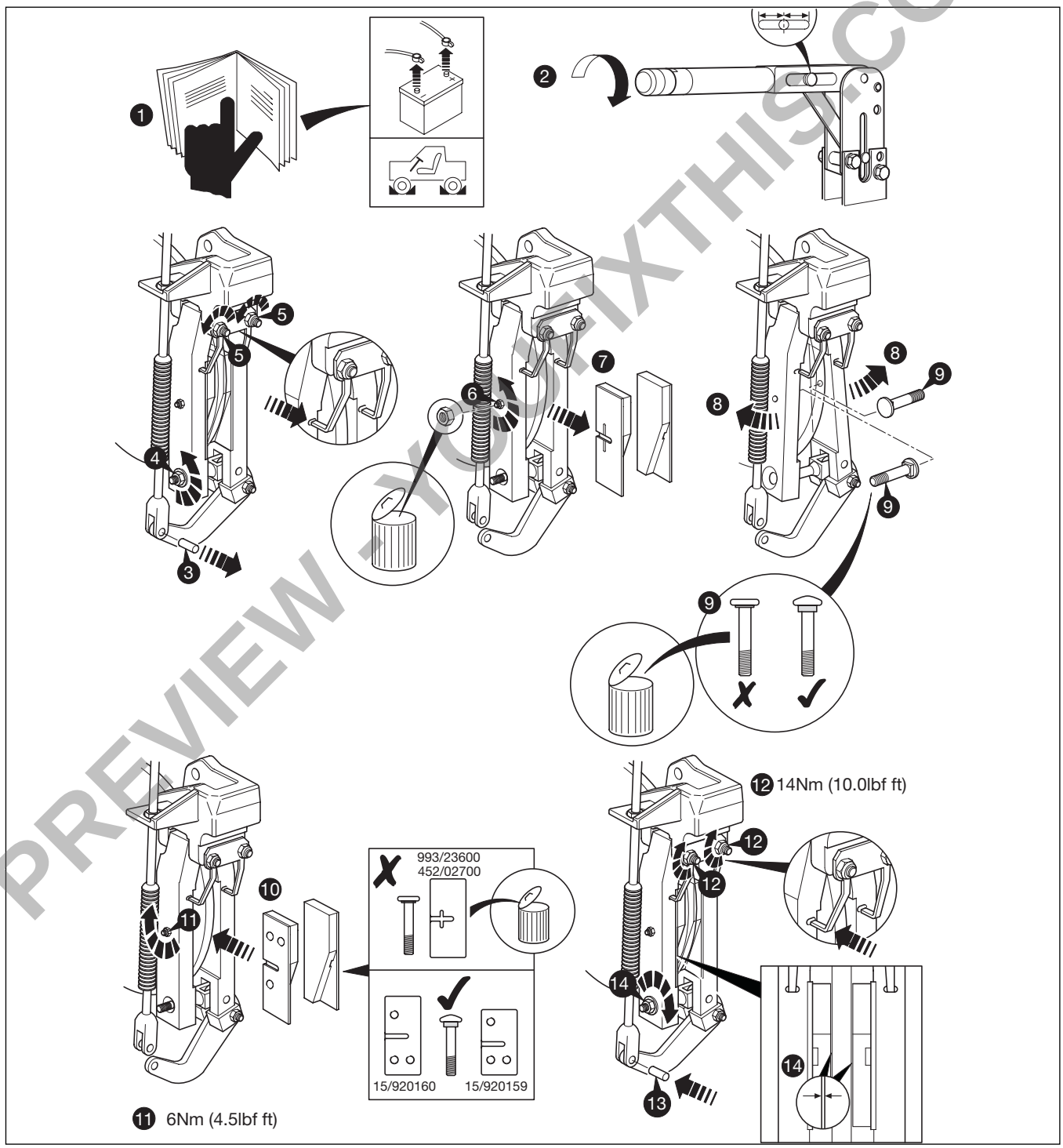
BRAKES

3 Renewing the Brake Pads

Change the pads as detailed on the illustrated fitting instructions with each kit or as shown below.

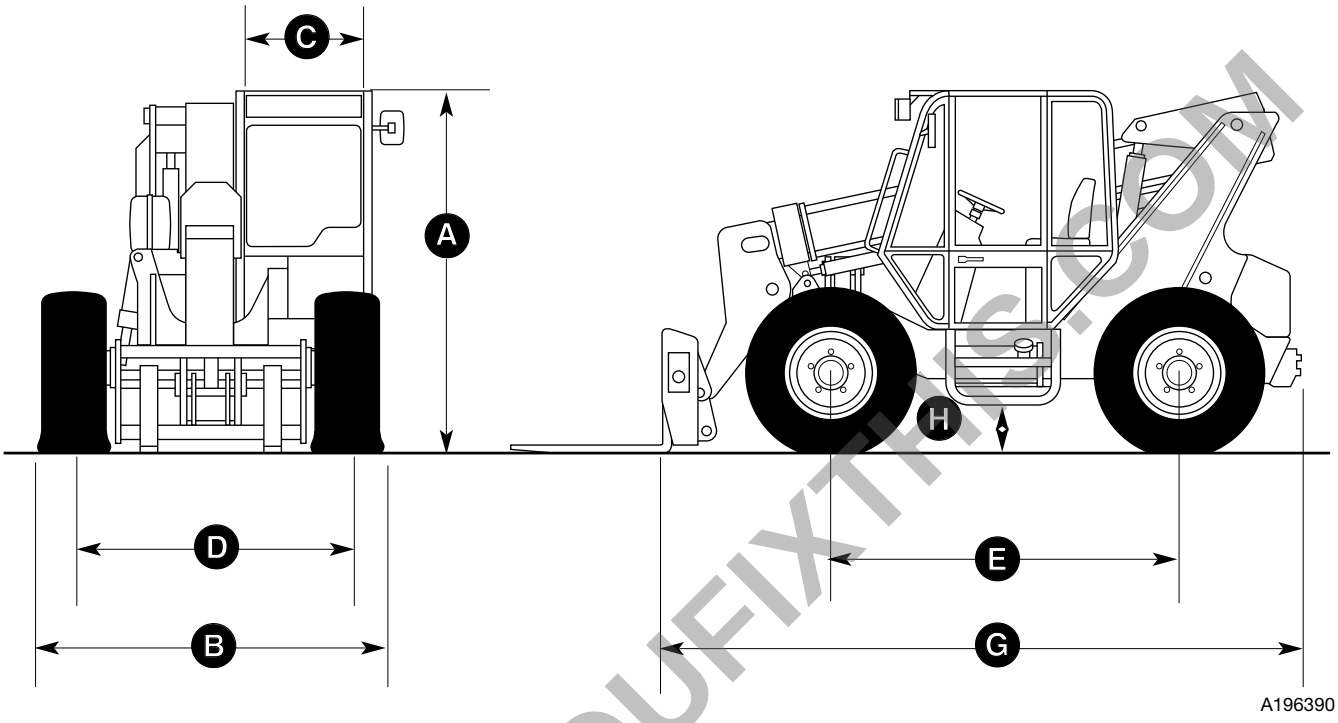
Test the parking brake; see **Testing the Parking Brake** (OPERATION section).

Notice: If after completing the above steps, the parking brake does not pass the testing procedure, do not use the machine, contact your JCB Distributor.



PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

STATIC DIMENSIONS



	DESCRIPTION	DIMENSION		
		506	506 (HL)	508
A	Overall height	8 ft 8 in (2.67 m)	8 ft 8 in (2.67 m)	8 ft 8 in (2.67 m)
B	Overall width	7 ft 8 in (2.13 m)	8 ft 1 in (2.46 m)	8 ft 1 in (2.46 m)
C	Inside width of cab (between windows)	3 ft 0 in (0.93 m)	3 ft 0 in (0.93 m)	3 ft 0 in (0.93 m)
D	Track	6 ft 3 in (1.92 m)	6 ft 7 in (2.01 m)	6 ft 7 in (2.01 m)
E	Wheelbase	9 ft 1 in (2.78 m)	9 ft 10 in (3.00 m)	9 ft 10 in (3.00 m)
G	Overall length to front of Q-Fit carriage	17 ft 6 in (5.34 m)	20 ft 1 in (6.12 m)	20 ft 1 in (6.12 m)
H	Ground clearance	1 ft 3 in (0.38 m)	1 ft 4 in (0.41 m)	1 ft 4 in (0.41 m)
	Weight (unladen)	21,040 lbs (9,540 kg)	22,150 lbs (10,069 kg)	25,225 lbs (11,440 kg)

***Notice**: Dimensions are based on a machine with 15.5-25 tires fitted.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

INTRODUCTION

Before installing, using or removing any optional attachment, make sure you read and understand the information provided. If there is anything you do not understand, ask your JCB distributor.

⚠ CAUTION

Use only the JCB approved attachments that are specified for your machine. Operating with non-specified attachments can overload the machine, causing possible damage and machine instability which could result in injury to yourself or others.

2-4-5-2

⚠ CAUTION

If you have an attachment which is not covered in this manual do not install it, use it or remove it until you have obtained, read and understood the pertinent information. Install attachments only on the machines for which they were designed.

5-5-1-1

The machine has been designed as a high lift machine. The procedure for fitting fork frame is included in this section.

The attachments for these machines do not fit other Loadalls.

Should you consider fitting attachment from an alternative manufacturer we strongly recommend that you first seek the expert advice of your JCB dealer to ascertain the compatibility of the attachment.

Other JCB attachments compatible with the above machines and available as this manual went to press are as follows:

Fork Carriage
Bucket ‘clean up’
Jib Extension
Side Tilt Carriage
Side Shift Carriage

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 110 pages

The full manual includes:

- All 110 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

JCB 506B, 506C, 508C, 506C (HL) Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual