Dear JCB Customer

Even if you have operated this type of equipment before, it is very important that your new machines operations and functions are explained to you by a JCB Dealer Representative following delivery of your new machine.

Following the installation you will know how to gain maximum productivity and performance from your new product.

Please contact your local JCB dealer if the Installation Form has not yet been completed with you.

Your Local JCB Dealer is:

OPERATOR MANUAL

THIS MANUAL SHOULD ALWAYS STAY WITH THE MACHINE

JCB VIBROMAX VM RANGE

ENGLISH - 9821/0250 - ISSUE 4 - JULY 12

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Safety Notices

Important Information

T1-042

The Operator Manual

⚠ WARNING

You and others can be killed or seriously injured if you operate or maintain the machine without first studying the Operator Manual. You must understand and follow the instructions in the Operator Manual. If you do not understand anything, ask your employer or JCB dealer to explain it.

INT-1-4-2

Do not operate the machine without an Operator Manual, or if there is anything on the machine you do not understand.

Treat the Operator Manual as part of the machine. Keep it clean and in good condition. Replace the Operator Manual immediately if it is lost, damaged or becomes unreadable.

Safety Warnings



This safety alert system identifies important safety messages in this manual. When you see this symbol, be alert, your safety is involved, carefuly read the message that follows, and inform other operators.

In this publication and on the machine, there are safety notices. Each notice starts with a signal word. The signal word meanings 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

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Operation

Introduction

T2-006_2

The aim of this part of the manual is to guide the operator step-by-step through the task of learning how to operate the machine efficiently and safely. Read the ***Operation*** section through from beginning to end.

Before you start the machine, you must know how the machine operates. Use your manual to identify each control lever, switch, gauge, button and pedal. Do not guess. If there is anything you do not understand, ask your JCB distributor.

The operator must always be aware of events happening in or around the machine. Safety must always be the most important factor when you operate the machine.

When you understand the operating controls, gauges and switches, practice using them. Drive the machine in an open space, clear of people. Get to know the 'feel' of the machine and its driving controls.

Finally, do not rush the job of learning, make sure you fully understand everything in the ***Operation*** section. Take your time and work efficiently and safely.

Remember

BE CAREFUL
BE ALERT
BE SAFE

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Cab Layout

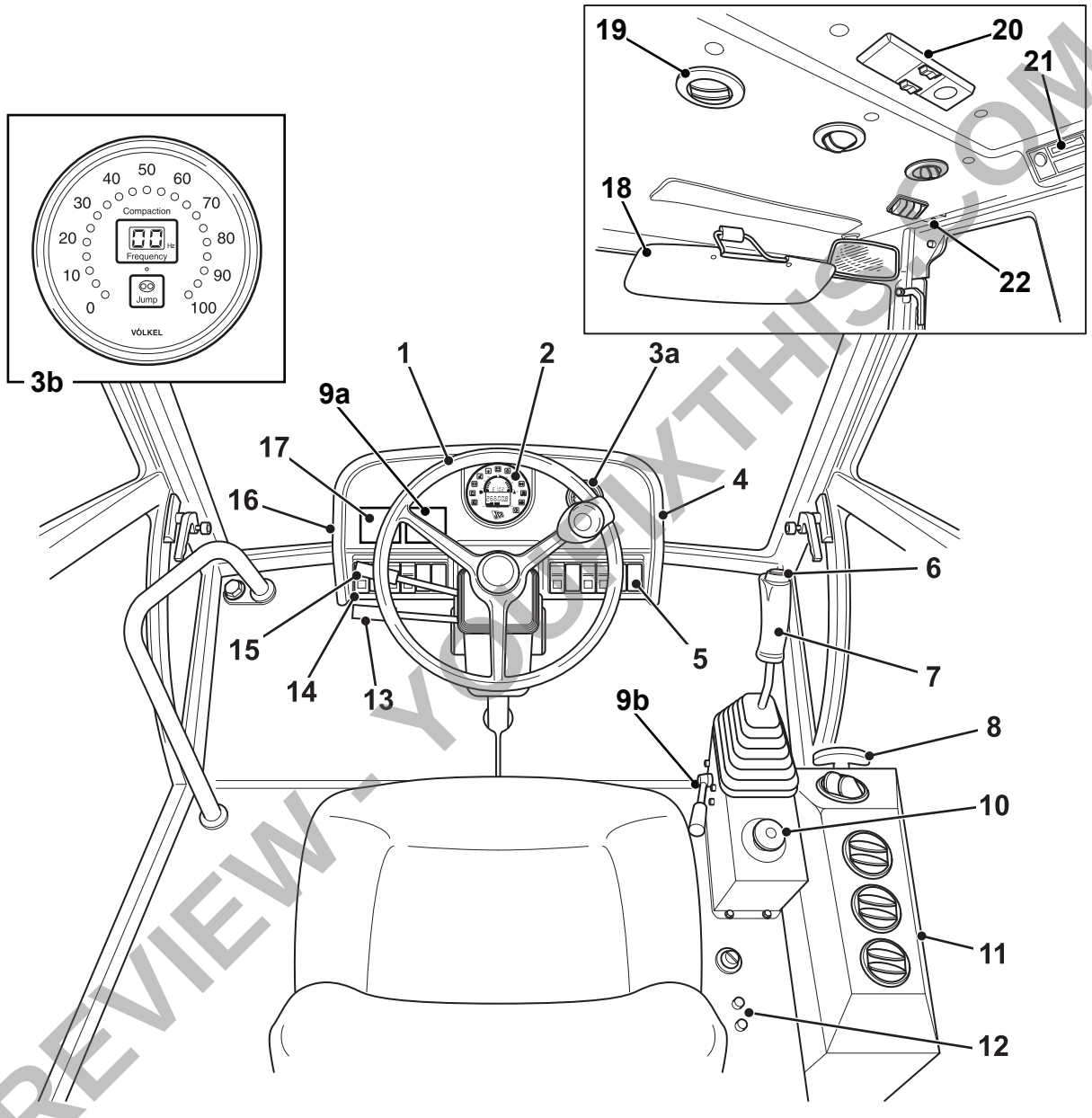


Fig 14.

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Changing the Coolant

⚠ WARNING

The cooling system is pressurised when the coolant is hot. When you remove the cap, hot coolant can spray out and burn you. Make sure that the engine is cool before you work on the cooling system.

9-3-3-1_2

VM46-VM200

1 Park the machine on firm level ground. ⇨ *Stopping and Parking the Machine (🗋 60)*.

2 Carefully loosen cap **A** on the coolant reservoir. ⇨ *Fig 28. (🗋 127)*, ⇨ *Fig 29. (🗋 128)*, ⇨ *Fig 29. (🗋 128)*. Let any pressure escape before removing the cap.

3 Place a container of suitable size beneath the drain valve in the radiator and drain the coolant.

4 Flush the system using clean water. After flushing, close the drain valve.

5 Use the necessary mix of clean, soft water and antifreeze. ⇨ *Fluids, Lubricants and Capacities (🗋 96)*. The coolant level should be between the minimum and maximum marks on the coolant over flow tank.

Important: *The machine must be filled at no more than 5 litres per minute. If the fill rate is any higher than this there is a possibility of air becoming trapped in the system.*

6 Refit the filler cap. Make sure it is tight.

7 Run the engine for a while, to raise the coolant to working temperature and pressure.

Note: *Make sure the cab heater control is in the hot position. This will ensure the coolant mixture circulates through the entire cooling system.*

8 Stop the engine. Check for leaks. Check the coolant level and top up if necessary.

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	Operation	10	50	250	500	1000	2000
ENGINE - VM46/VM166/VM200							
Coolant Quality and Level	- Check	☐	☐	☐	☐	☐	☐
Cooling System	- Drain and Refill						☐
Breather Tube	- Check	☐	☐	☐	☐	☐	☐
Fuel System for Leaks and Contamination	- Check	☐	☐	☐	☐	☐	☐
Water Seperator and Engine Fuel Filter(1)	- Drain	☐	☐	☐	☐	☐	☐
Water Seperator Fuel Filter	- Change				☐	☐	☐
All Hoses - Condition	- Check	☐	☐	☐	☐	☐	☐
External Oil Leaks	- Check	☐	☐	☐	☐	☐	☐
Pre-Cleaner (if fitted)	- Check and Clean	☐	☐	☐	☐	☐	☐
Oil level	- Check	☐	☐	☐	☐	☐	☐
Oil and Filter(2)	- Change				☐	☐	☐
Engine Mounts and Bolts for Tightness	- Check			☐	☐	☐	☐
Air Cleaner Rubber Dust Valve	- Clean / Check			☐	☐	☐	☐
Air Cleaner Outer Element(3)	- Change				☐	☐	☐
Air Cleaner Inner Element(3)	- Change					☐	☐
Engine Fuel Filter	- Change				☐	☐	☐
Valve Clearances(4)	- Check and Adjust					☐	☐
Radiator	- Clean				☐	☐	☐
Fuel Tank & Filter Screen	- Clean				☐	☐	☐
Fuel Injection Pump Mounting(5)	- Check			☐	☐	☐	☐
Fan Belt Condition	- Check					☐	☐
Vibration Damper(5)	- Check						☐

(1) If the engine is difficult to start or the engine has poor performance, fit new filters.
(2) The oil service interval will be affected if there is a high sulpher content in the fuel.
(3) More frequent in dusty operations.
(4) Jobs which should only be done by a specialist.
(5) Applicable to Cummins engine installations only.

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Initial Service and Inspection

T3-006_2

To further protect your machine's performance it is essential your JCB Distributor carries out an initial service and inspection when the machine is three months old or when it has completed 250 hours of operation (whichever occurs first). You should notify your Distributor in advance to allow the necessary arrangements to be made.

Obtaining Replacement Parts

T3-096

If you use non-genuine JCB parts or consumables, then you can compromise the health and safety of the operator and cause machine failure

A Parts Book for your machine is available from your JCB Distributor. The Parts Book will help you identify parts and order them from your JCB distributor.

Your dealer will need to know the exact model, build and serial number of your machine. See ***Identifying Your Machine (Introduction section)***.

The data plate also shows the serial numbers of the engine, transmission and axle(s), where applicable. But remember if any of these units have been changed, the serial number on the data plate may be wrong. Check on the unit itself.

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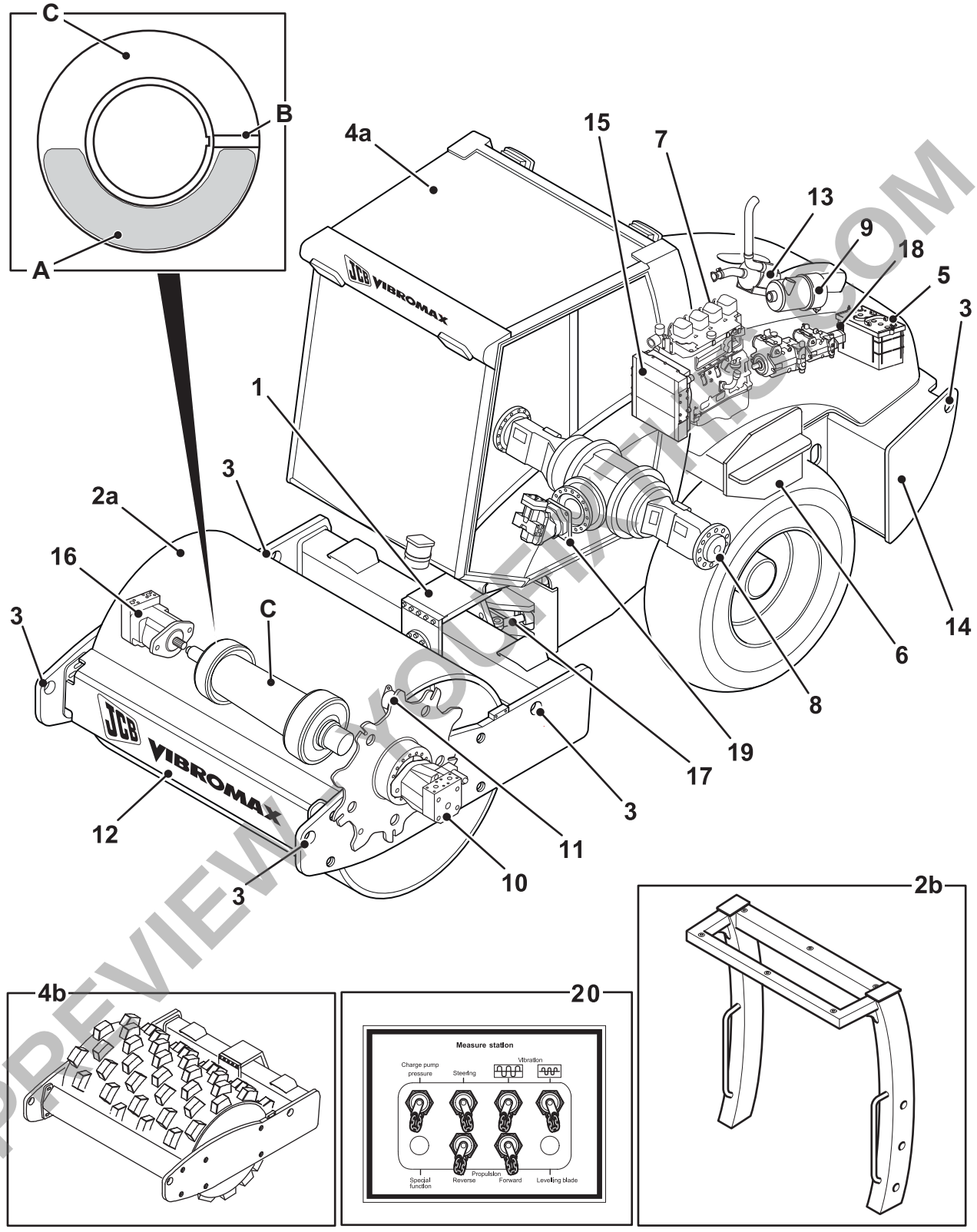


Fig 2.

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Table 6. Torque Settings

Item	Nm	lbf ft
B	210	155
C	49	36
D	710	520

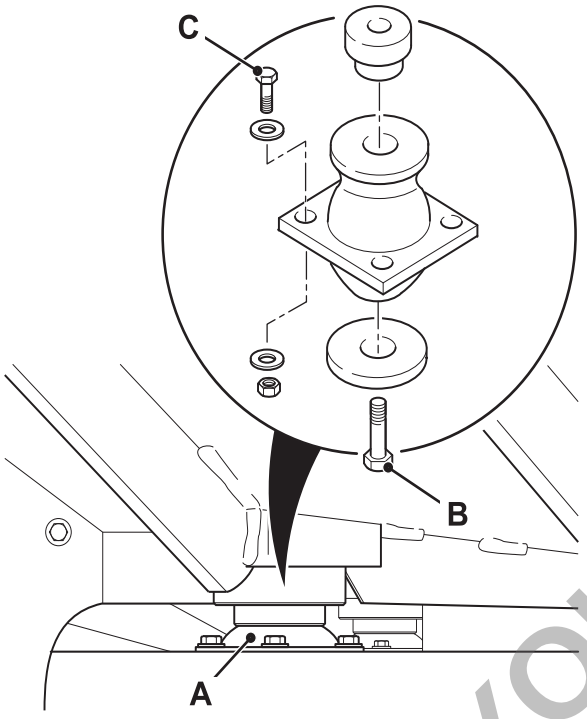


Fig 3.

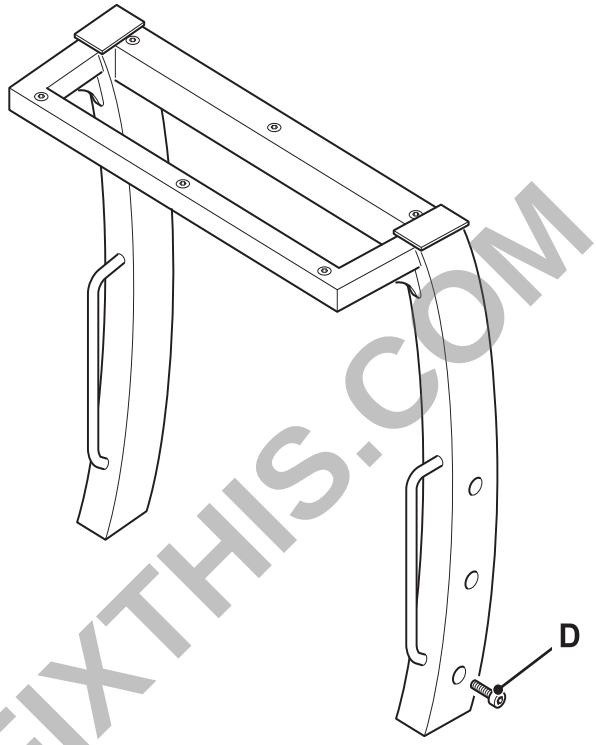


Fig 4.

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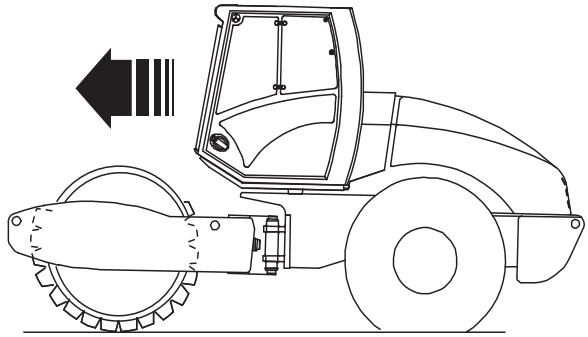


Fig 43.

7 Mount the third shell segment with lifting gear. Install all segment bolts and tighten evenly to maintain proper spacing of the segments.⇨ *Fig 44. (🗋 68)*.

Note: *The temporary spacer* ***B*** *should be removed prior to tightening.**⇨ Fig 42. (🗋 67)*.

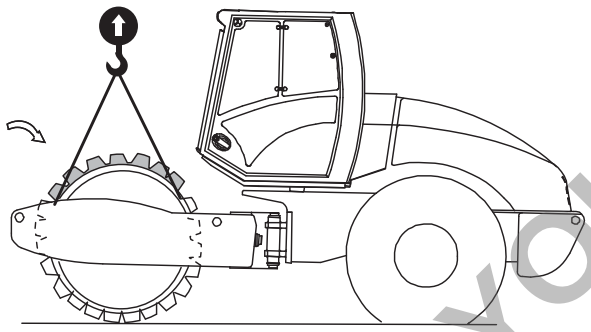


Fig 44. Third Shell Segment

8 Roll the drum and re-tighten the segment bolts. Repeat several times until the shell segments are seated correctly on the drum.

9 Torque tighten segment bolts to 640Nm (470 lbf ft).

10 Mount the pad foot scraper and adjust if necessary ***See Maintenance, Drum in Routine***.

Levelling Equipment (if fitted)

⚠ WARNING

Levelling Blade

The levelling blade must not be used as a dozer. The machine must be used in reverse when levelling.Using the machine in forward will damage the blade and the rams.

15-1-1-13

Levelling equipment can be fitted on the roller (except VM 166 and VM200 PD). It is intended to be used only when the machine is being driven backwards and the blade is lowered.

The levelling blade is bolted onto two lifting arms which are actuated by two lifting cylinders. The lifting cylinders and the lifting arms are articulated on the drum frame.

Located on the diesel engine is an additional gear pump which supplies the lifting cylinder with oil via hoses, control block and throttle valve.

The control block is actuated by a pedal.

The levelling blade can be raised, lowered or in `hold' position.

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