

JCB 430Z Wheeled Loader Service Repair Manual



VMS 55

[Section 1 - General Information](#)

[Section 2 - Care & Safety](#)

[Section 3 - Maintenance](#)

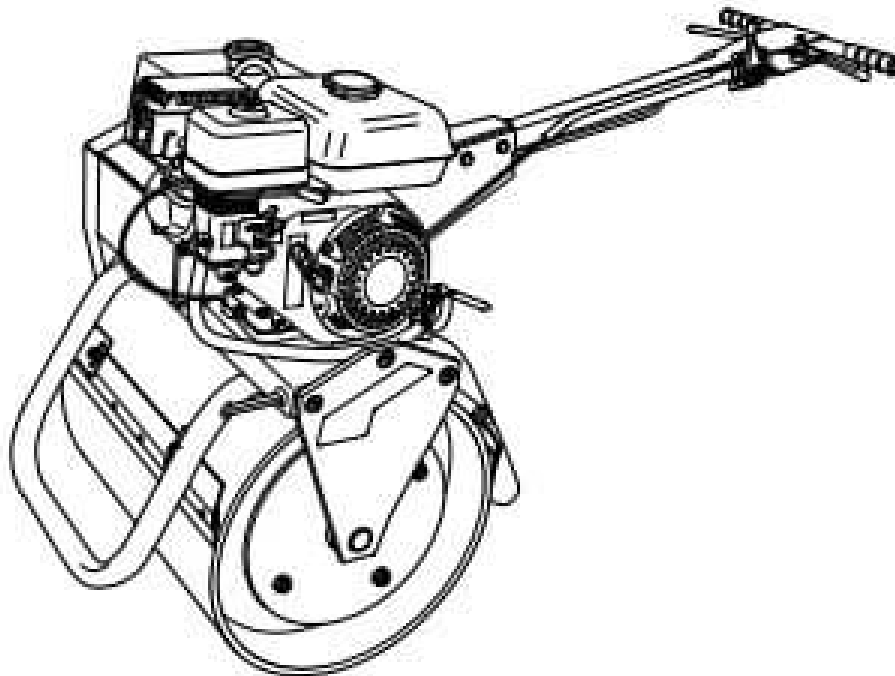
[Section D - Controls](#)

[Section E - Hydraulics](#)

[Section F - Transmission](#)

[Section K - Engine](#)

[Section L - Vibration](#)



Publication No.
9803/9560-3



Copyright © 2007 JCB SERVICE. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB SERVICE.

Issued by JCB Technical Publications, JCB Aftermarket Training, Waidon, Rotherham, South Yorkshire, S71 3BN, England. Tel: +44 1909 561300 Fax: +44 1909 561303

World Class
Customer Support

Engine

Checking the Oil Level

⚠ CAUTION

It is illegal to pollute drains, sewers or the ground. Clean up all spilt fluids and/or lubricants.

Used fluids and/or lubricants, filters and contaminated materials must be disposed of in accordance with local regulations. Use authorised waste disposal sites.

INT-3-3-14

⚠ WARNING

Oil

Oil is toxic. If you swallow any oil, do not induce vomiting, seek medical advice. Used engine oil contains harmful contaminants which can cause skin cancer. Do not handle used engine oil more than necessary. Always use barrier cream or wear gloves to prevent skin contact. Wash skin contaminated with oil thoroughly in warm soapy water. Do not use petrol, diesel fuel or paraffin to clean your skin.

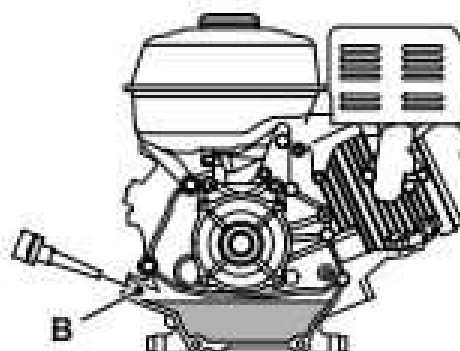
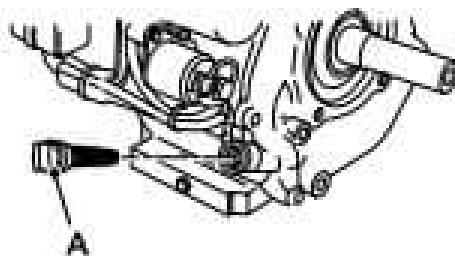
INT-3-3-3

⚠ WARNING

Do not exceed the correct level of engine oil in the sump. If there is too much engine oil, the excess must be drained to the correct level. An excess of engine oil could cause the engine speed to increase rapidly without control.

GEN-1-18

- 1 Park the machine on level ground and stop the engine. Ensure that the machine is parked so that the engine is level.
- 2 Allow time for the oil to drain back into the engine sump before taking a reading. If insufficient time is given a false low reading may be recorded which will result in overfilling the engine.
- 3 Unscrew and withdraw the filler cap A and wipe clean the dipstick. Re-insert the dipstick into the oil filler neck but do not screw in. Withdraw and check the oil level. → Fig 2 (D 3-12).
- 4 If the oil level is low, fill to the top of the filler neck B with the recommended oil.



V015480

Fig 2.

Vibration System

Vibration Drive Belt

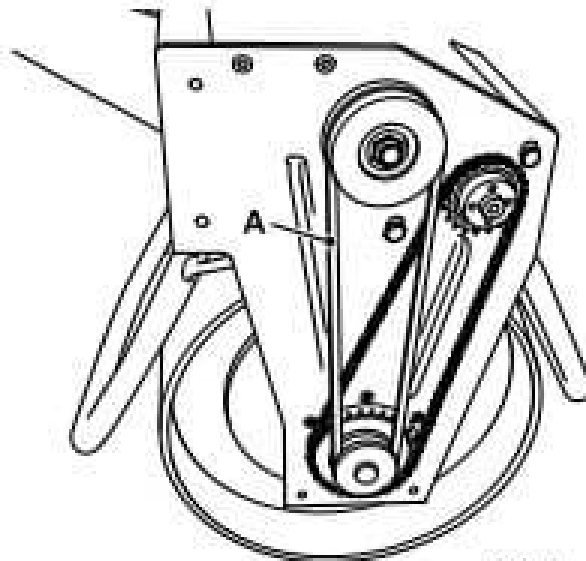


Fig 14.

- 1 Remove the drive belt cover on the right side of the machine.
- 2 Using the adjustment available at the shaft bearing mounting points, adjust the tension of the drive belt **A** so that there is a 6mm deflection for a 3kg force (mid span). → Fig 14. (D 3-24).
- 3 Replace the drive belt cover.

Measurement of Vibration System Performance

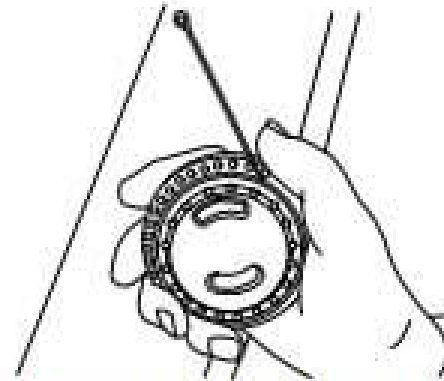


Fig 15. Frequency and Vibration Measuring Tool

Special tool, part number 892/12345 can be used to measure the frequency of the vibrating drum (it will also measure the engine speed).

The tool will assist in accurate fault diagnosis

The basic operation of the tool is described below, however always refer to operating instructions supplied with the tool.

- 1 Place the tool lightly onto the outside case of the running motor or vibrating drum.
- 2 Turn the top part of the tool to extend or retract the wire. When the wire is in resonance with the vibrations of the running motor or drum, it will vibrate in a "loop".
- 3 When the maximum "loop" is achieved the RPM or the Hertz value should be read from the respective scales.

Refer to *Technical Data* for vibration frequency data.

Important: When taking vibration measurements always ensure that an assistant is available to control the machine. As a precaution, always position yourself out of the direction of forward or reverse travel of the machine.

Important: Be aware that vibrating machinery may move in any direction and cause injury even when the propulsion system is not engaged.

Important: Be aware that vibrating drums and associated components could cause personal injury if touched. Take care when using measuring equipment



Thank you very much
for your reading.
Please click here
to get more information.