SERVICE MANUAL

EXCAVATOR
65R-1

EN - 9813/4550 - ISSUE 2 - 04/2018

This manual contains original instructions, verified by the manufacturer (or their authorized representative).

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Foreword

The Operator's Manual

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

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

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

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If there are multiple faults, the LED will flash them all in sequence. Count the flashes to determine the fault conditions or connect the calibration tool to observe the fault conditions. (Use the "Display Faults" option under the Monitor Menu.)

If there are no faults, the LED will flash once at reset and from then on indicate the detection of engine speed. A continuous on LED indicates that a valid engine speed is being sensed.

The ECM will attempt to shut down for some faults and will not permit starting after reset with faults 1, 5 and 8.

Table 243. Blink Codes

Blink Code	Cause	Engine Shutdown	Action
1 flash	ECM not calibrated	Yes	Calibrate the ECM
2 flashes	Engine speed excessive	Yes	Check parameter settings, overspeed may be too sensitive
			Check for electrical noise entering the controller
			Check wiring and connections
			Check ECM case earth
			Make sure throttle linkage moves freely without backlash
			Check the tip of the engine seed sensor
3 flashes	Engine speed unusually low	Yes	Check parameter settings
			Check throttle linkage and actuator travel
			Make sure engine load is not greater than the engine capacity
4 flashes	Engine shutdown due to engine protection input	Yes	Check parameter settings
			Check what is triggering the protection input
5 flashes	Factory settings lost	Yes	If calibration file is available, download calibration file and cycle power again
			If controller still does not work or no calibration file is available, contact JCB Service
6 flashes	External potentiometer out of range	No	Verify that potentiometer is correctly wired
			Recalibrate potentiometer
7 flashes	Accelerator position/idle switch conflict	No	Verify accelerator position sensor and idle switch are working correctly
8 flashes	Controller unit failed	Yes	Check for electrical noise entering controller
			Check wiring, shielding and connections
			Cycle power to the engine
			If the controller still des not work, contact JCB Service

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Technical Data

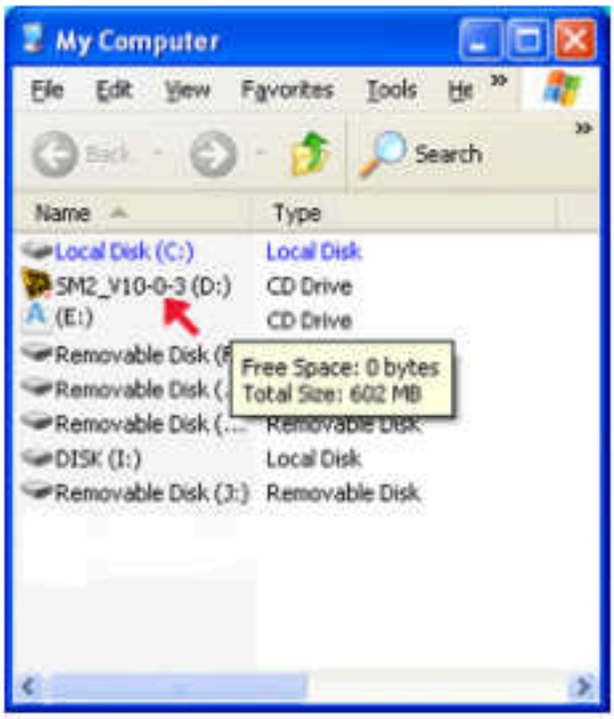
Table 292. Locking Fluids Approved Product Information

Subsection	Commercial name	Product Number	Colour	Shelf life	Strength	Comments
High strength	Loctite 270[1] R.A.S. threadlock for studs[1]	4101/0100	Green fluorescent Red	365 d	80 –120 bar (1,159.4 – 1,739.1 psi) breakaway strength	For the retention of threads up to M20 diameter where disassembly is unlikely and for locking bearings etc. onto shafts and into housing. Has a maximum gap fill of 0.05 mm.
High strength	Loctite 638	4101/1400	Green, UV fluorescent	365 d	More than 250 bar (3,623.2 psi) compressive shear strength	Maximum gap fill of 0.25 mm. Maximum strength at room temperature.
High strength	Permabond A115[1] Loctite 262	4101/0500	Red, fluorescent	365 d	100 – 150 bar (1,449.3 – 2,173.9 psi) prevailing strength	Fast curing (10 –15 min) thread locking up to M20, especially for use on oily surfaces, plated and clean parts.
High strength	Loctite 648[1] Permabond A118	4101/0600	Green, fluorescent	365 d	More than 250 bar (3,623.2 psi) compressive shear strength	Designed for holding gears and sprockets onto gearbox shafts and rotors on electric motor shafts.
High strength	Loctite 2701	4101/1700	Green	365 d	260 – 500 bar (3,768.1 – 7,246.3 psi) breakaway torque	Designed for permanent locking and sealing of threaded fasteners. Particularly suited for use on inactive substrates and/or where maximum resistance to hot oil is required.
Medium to high	Loctite 243	4101/1100	Blue	365 d	140 – 340 bar (2,029.0 – 4,927.5 psi) breakaway torque	Suitable for all nuts, bolts, screws up to M36.
Medium strength	Permabond A119[1]	4101/0900	Blue	365 d	80 –120 bar (1,159.4 – 1,739.1 psi) static shear strength	Maximum gap fill of 0.25 mm. Handling strength in 10 –15 min.
Medium strength	Loctite 640	4101/1200	Green, fluorescent	365 d	150 – 330 bar (2,173.9 – 4,782.6 psi) static shear strength	Product has a slow cure rate, used on parts unlikely to be disassembled.

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3. Select and open the "SM2_V10-0-3 (D:)" CD drive to explore its contents. Refer to Figure 767.

Figure 767.



4. Select and open the "Setup.exe" application.

5. A new window "JCB Servicemaster Setup" will appear on the screen.

   5.1. Click the "Install V10.0.3" option to start the setup application. Refer to Figure 768.

Figure 768.



6. A new window "Select Setup Language" will appear on the screen. Refer to Figure 769.

   6.1. Use the drop down option to select the suitable language.

   6.2. Click the "OK" option to confirm selected language.

Figure 769.



7. A warning message window will appear on the screen. Refer to Figure 770.

   7.1. Click the "OK" option.

Figure 770.



8. A new window "JCB Servicemaster Installation Wizard" will appear on the screen. Refer to Figure 771.

   8.1. Click the "Next" option to proceed.

Figure 771.



9. Put "User Name" and "Organisation" details into the "Customer Registration" screen. Refer to Figure 772.

   9.1. Click the "Next" option when you inserted details.

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3.1. Do not use impact tools on the screw lift mechanism.

Figure 48.



F Screw mechanism

4. When the holes line up, install the safety pin and the retaining clip. Refer to Figure 49.

Figure 49.



H Hole

4.1. The safety pin and the retaining clip are located in the top of the screw lift mechanism.

5. Make sure that the retaining clip is correctly engaged.

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