SERVICE MANUAL

EXCAVATOR

JS115, JS115 [T2/3],
JS130, JS130 [T2/3], JS145

EN - 9813/7050 - ISSUE 1 - 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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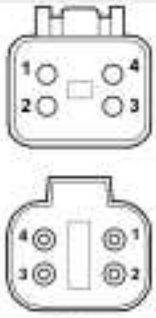
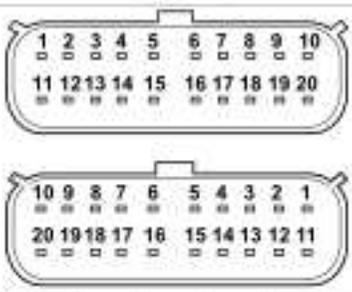
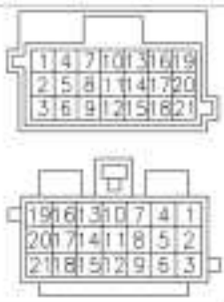
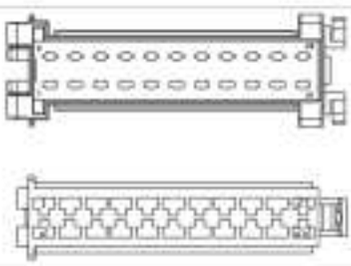
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	Connector Pins	Details
Harness inter-connectors IC04		In-line connectors.
Harness inter-connectors IC07		In-line connectors.
Harness inter-connectors IC08		In - line connectors.
Harness inter-connectors IC10		In-line connectors.

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Fault Codes Page

Figure 1164.



This page allows the engineer to access fault codes logged by an ECU. The ECU logs a fault code if sensor or actuator signals are not valid. These codes are useful when fault finding.

- Active Fault Codes: Displays fault codes for active faults in real time. To link to information about the fault code click on the code. Note: Start the engine to see all the active fault codes. To check if a fault code is no longer active set engine ignition system to OFF and then restart the engine. The Servicemaster log display will not delete codes that are no longer active until the engine ignition system is set to OFF.
- Previously Active Fault Codes: Displays fault codes for faults that have occurred but are not necessarily active. To link to information about the fault code click on the code.
- Save Faults: Click the button to save the fault code lists as a file to a computer location.
- Link to Fault Code List: Click to link to a complete list of possible fault codes.
- Erase Fault Codes: Click the button to erase logged fault codes from the ECU memory.

Setup Tool User Guide

Introduction

The Setup software tool is part of the JCB Servicemaster software suite.

The Setup Up tool can be used to view and change data stored in the applicable ECU. If the machine or engine specification is changed due to operational or maintenance requirements the relevant data must be changed in the applicable ECU.

Connecting Setup

To use a Setup tool your laptop computer must be connected to the machine CANbus.

Starting Setup

1. Turn ON the machine ignition and additionally start the engine if required (taking normal precautions).
2. Start Servicemaster on the laptop computer.

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03 - Antifreeze

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Introduction

Coolant Mixtures

Check the strength of the coolant mixture at least once a year, preferably at the start of the cold period. Do not use solutions of more than 60% or damage to the engine may occur. Replace the coolant mixture according to the intervals shown in the machine's maintenance schedule.

You must dilute full strength antifreeze with clean water before use. Use clean water of no more than a moderate hardness (pH value 8.5). If this cannot be obtained, use de-ionized water. For further information advice on water hardness, contact your local water authority.

The correct concentration of antifreeze protects the engine against frost damage in winter and provides year round protection against corrosion. Always renew the antifreeze every two years.

The protection provided by High Performance Antifreeze and Inhibitor is shown below. If any other antifreeze is used, refer to the manufacturer's instructions and make sure that a corrosion inhibitor is included.

Table 339.

Solution	Maintains circulation down to:	Protects against damage down to:
50% Concentration (Standard)	-33 °C (-27.4 °F)	-40 °C (-39.9 °F)
60% Concentration (Standard)	-42 °C (-43.5 °F)	-56 °C (-68.7 °F)

Important: Do not exceed a 60% concentration, as the freezing protection provided reduces beyond this point.

If you use any other brand of antifreeze:

- Make sure that the antifreeze complies with International Specification ASTM D6210.
- Always read and understand the manufacturer's instructions.
- Make sure that a corrosion inhibitor is included. Serious damage to the cooling system can occur if corrosion inhibitors are not used.
- Make sure that the antifreeze is ethylene glycol based and does not use Organic Acid Technology (OAT).

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Figure 528.



19. Install new O-rings on to plugs. Install plugs in to the rear flange and temporarily tighten with an Allen key.

Figure 529.



20. Install the pistons in to the rear flange.

Figure 530.



21. Install new O-rings on to plugs. Install plugs in to the rear flange and temporarily tighten with an Allen key.

Figure 531.



22. Insert the brake spool into the flange.

Figure 532.



23. Install a new O-ring on to the plug. Install washer and spring on to the plug.

Figure 533.



24. Install plug in to the rear flange making sure that the spring does not get deformed. Temporarily tighten the plug.

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Figure 661.



5. Attach the shoe plate to the swash plate. Place the pump casing with its regulator mounting face down, attach the tilting bush of the swash plate to the tilting pin, and attach the swash plate and shoe plate to the swash-plate support.
   5.1. Manually check that the swash plate can be moved smoothly.
   5.2. Apply clean oil to sliding sections of swash plate and swash plate support so that the drive shaft can be fitted easily.
   5.3. Take care not to damage shoe plate surface.
6. Repeat step 5 for the other pump section.

Figure 662.



7. Install the drive shafts together with their bearing, bearing spacers and snap ring to each pump section.

Figure 663.



8. Install a new O-ring1 into the seal cover.
   8.1. Apply grease lightly to O-ring.
9. Install the seal cover on the swash plate support with socket head screws 4.

Figure 664.



Figure 665.



   9.1. Take care not to damage the oil seal inside the seal cover.
10. Assemble the cylinder sub-assembly consisting of the cylinder, the piston sub-assemblies, set plate, the spherical bush and the cylinder spring.

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