SERVICE MANUAL

EXCAVATOR

100 C-1, 85 Z-1, 86 C-1, 90 Z-1

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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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Technical Data

Table 38. Cylinder head flatness check

Level deviation[1]	Action
More than 0.10mm (0.004in)	Cylinder head must be machined

(1) The cylinder head should not be machined more than 0.20mm (0.008in) in depth.

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Introduction

A schematic wiring diagram is a simplified pictorial representation of the machines hydraulic circuit. It shows the components of the circuit as simplified hydraulic symbols, and the connections between the different components. The schematic diagram is used to troubleshoot problems and to make sure that all the connections have been made and that everything is present. Detailed schematics for individual systems are given in the relevant PIL section.

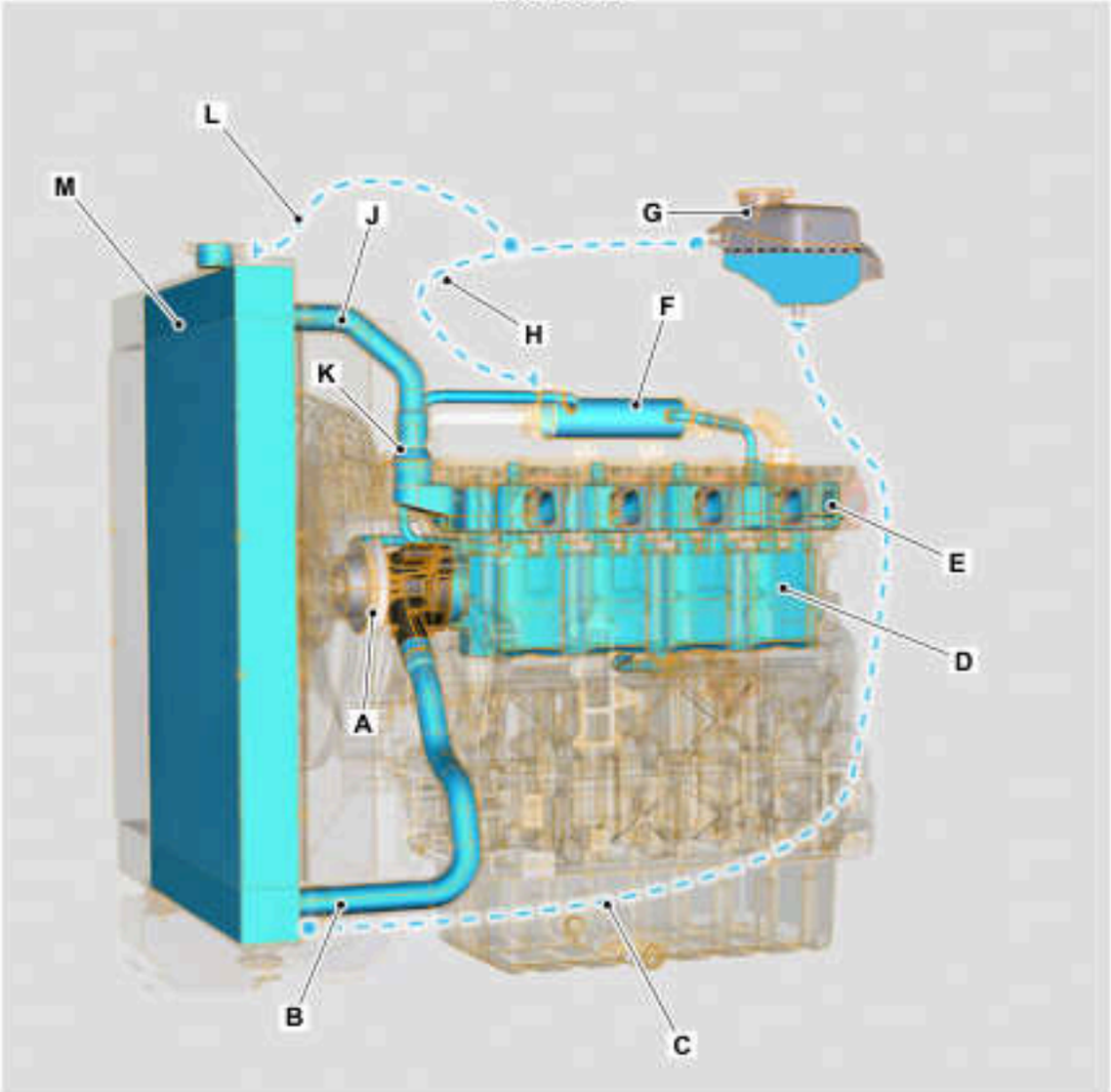
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Fault Code	Description	Warning display colour	Severity
P0696	Circuit Short To Battery Or Open - Coolant fan high speed relay short to battery		Critical
P0704	General Signal Failure - Clutch switch circuit malfunction (manual transmission only)		Service
P0850	General Signal Failure - Neutral switch circuit malfunction (manual transmission only)		Service
P0934	Circuit Voltage Below Threshold - Hydraulic pressure sensor signal too low		Service
P0935	Circuit Voltage Above Threshold - Hydraulic pressure sensor signal too high		Service
P1217	Signal Above Allowable Range - C/Rail pressure exceeds hi upper limit1		Critical
P1219	Event Information - P/L (pressure limiter) activated		Critical
P1219	Component Or System Operating Conditions - Multiple high rail pressure error/ Engine stall after PLV opening		Critical
P1220	Component Or System Operating Conditions - C/Rail pressure control can not achieve target fuel		Service
P1221	General Signal Failure - C/Rail pressure falls below the control limit of the target pressure		Service
P1222	Signal Ampltidue Greater Than Maximum - Fuel filter diagnosis level 1		Trivial
P1223	Signal Invalid - Fuel filter diagnosis level 2		Trivial
P1601	Calibration/Parameter Memory Failure - QR definition error (definition concerning QR correction is not right)		Trivial
P1602	Not Programmed - QR data is not written		Critical
P2122	Circuit Voltage Below Threshold - Accelerator pedal for ASC (PTO) sensor 2 signal too low		Critical

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Component Identification

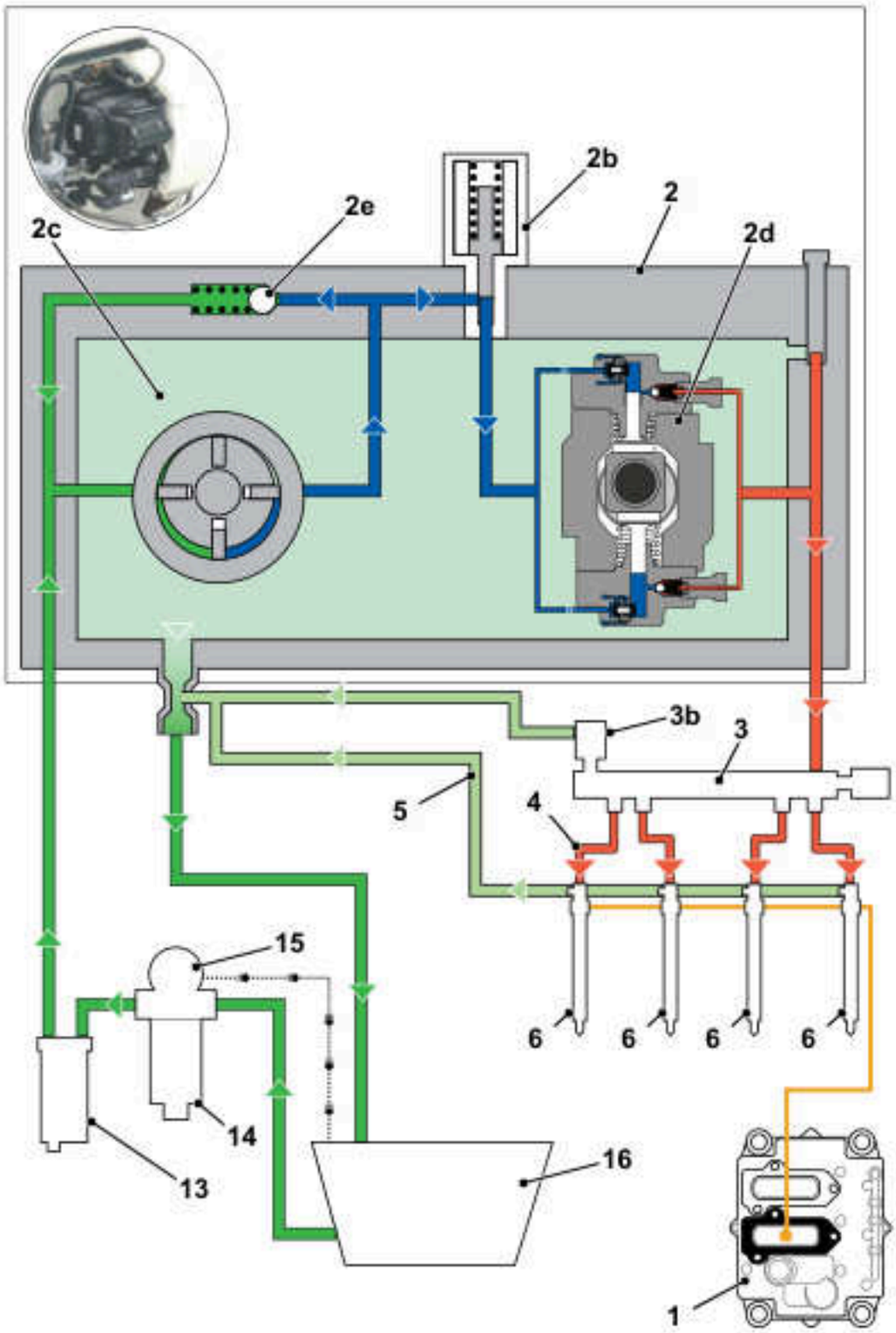
Figure 534.



A Water pump
B Coolant intake
C Return from expansion tank
D Coolant cylinder
E Coolant cylinder head
F EGR cooler coolant
G Expansion tank
H Vent line to expansion tank
J Coolant to radiator
K Thermostatic valve
L Vent line from radiator to expansion tank
M Coolant into radiator

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Figure 384.



1 ECM
2b IMV
2 Fuel high pressure pump
2c Fuel high pressure pump (transfer section)

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