Service Manual

JS370

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Section 2 - Care and Safety

Section 3 - Maintenance

Section B - Body & Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track and Running Gear

Section K - Engine



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Hydraulic pump

Table 34. Oil not delivered by oil pump

Cause	Remedy
Low hydraulic oil	Refill
Clogged suction filter	Repair

Table 35. Hydraulic pump does not build pressure

Cause	Remedy
Oil leakage inside hydraulic pump	Replace hydraulic pump(1)
Air inside the hydraulic pump	Refill oil or check hose on suction side
Main relief valve pressure set too low	Adjust pressure(1)

Table 36. Abnormal noise from hydraulic pump

Cause	Remedy
Cavitation resulting from deformed hose on the suction side or suction filter clogged	Replace filter, replace hydraulic oil if dirty
Joint of the suction side is loose or hydraulic oil is low and air is being sucked in	Retighten or grease the joints. Check that oil is filled to proper level inside casing
Cavitation resulting from excessively high viscosity of hydraulic oil	Replace with hydraulic oil of suitable viscosity

Table 37. Oil leakage from hydraulic pump

Cause	Remedy
Defective seal in hydraulic pump	Replace seal or hydraulic pump(1)

(1) Indicates jobs which should be done by a specialist.

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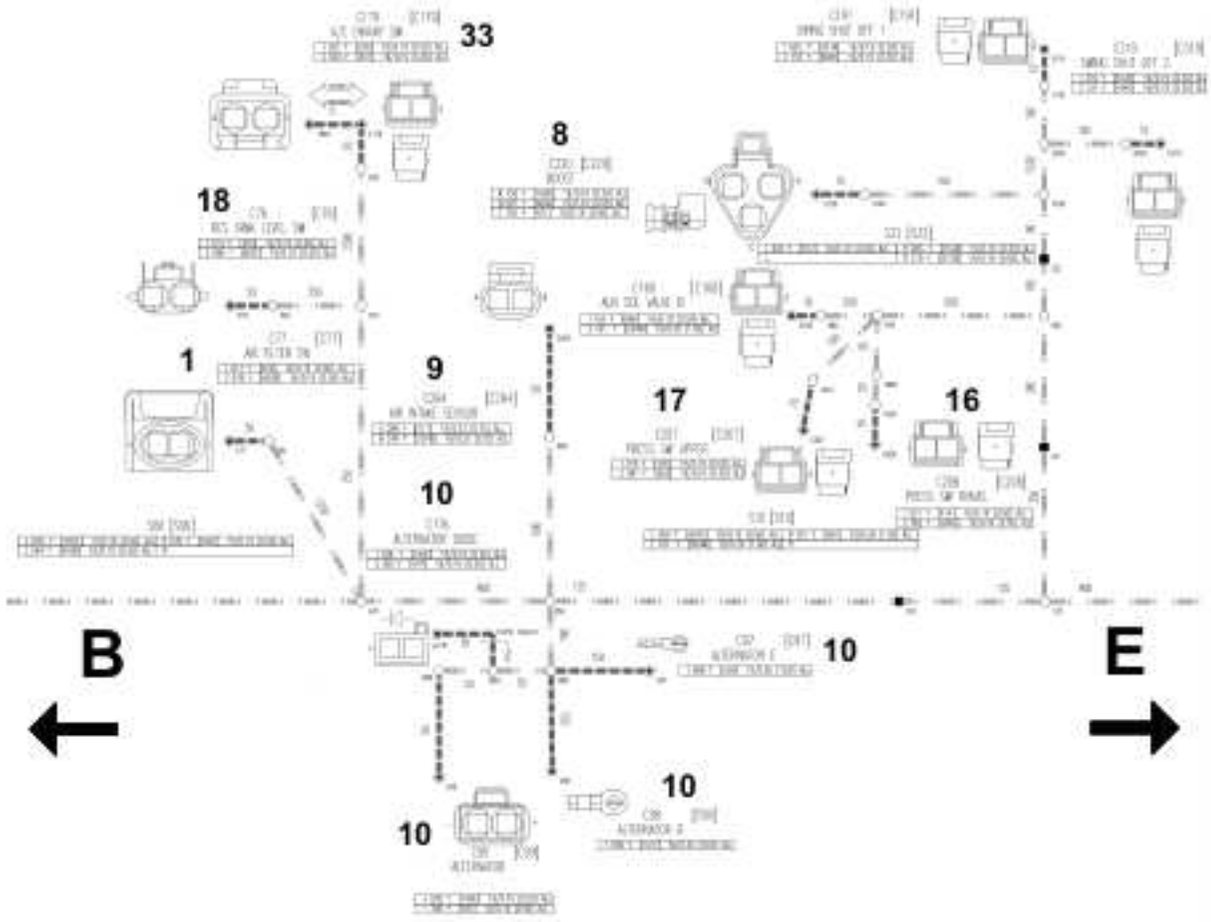


Fig 8. Main Harness 'D' 332/J6195 issue 2

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Technical Data

General Data

Main Hydraulic Pump

Table 1.

	JS370
Type	Twin variable displacement piston pump
Displacement Volume	160 cm^3/rev (9.76 in^3/rev) x 2
Rated Speed	1900rpm
Operating Pressure RATED	348 bar (5047 lb/in^2)
Maximum Output	304 l/min x 2 (67 gal/min)

Servo Pump

Table 2.

	JS370
Type	Fixed Displacement Gear Pump
Displacement Volume	15 cm^3/rev (0.92 in^3/rev)
Working Pressure	45 bar (653 lb/in^2)

Proportional Solenoid

Table 3.

	JS370
Max. primary pressure	39 bar (566 lb/in^2)
Max. back pressure (allowable pressure)	9.8 bar (142 lb/in^2)
Secondary pressure setting range	0 - 39 bar (0 - 566 lb/in^2)
Max. flow rate	10 l/min (2.2 gal/min)
Electrical specifications	
1 Rated current	700 mA
2 Coil resistance (at 20°C)	17.5 ohms
3 Recommended fluctuation of proportional solenoid current	80 Hz, 200 mA

Slew Motor

Table 4.

	JS370
Type	Fixed displacement piston motor
Displacement	210 cm^3/rev (12.8 in^3/rev)
Rated Pressure	284 bar
Max Pressure	331 bar
Max Flow	
Relief Setting	284 bar (4119 lb/in^2)
Max Speed	1400 rpm
Brake Torque	1050Nm (775 lbf ft)

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Fig 7.

7 Lift out 2nd Reduction Sun Gear .



Fig 8.

8 Remove the O-ring from the ring gear. ⇨ *Fig 9. (E-151)*.



Fig 9.

9 Lift out 2nd Reduction Planet gear assembly.



Fig 10.

10 Remove ring gear ⇨ *Fig 11. (E-152)*.

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Fault Finding

JCB Servicemaster

TC-010

Introduction

Servicemaster is a gateway application allowing a large number of vehicle support applications to be linked using one familiar interface. The interface acts as a graphical tool for selecting the target vehicle from a database of vehicle families and triggering the particular service tool application desired. This removes the need for a user to 'remember' every individual service tool available and select which one is intended for a particular machine.

The interface also provides several key features that will accompany all JCB projects, a multi language editing tool that provides a means of individual text string translation for all JCB applications and the means to select a localised language translation for each JCB application.

The contents of this document aim to explain to you, the user, how to operate this application and to make most of its functionality.



CD62910

Fig 1.

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