Service Manual

JS300, JS330, JS360/370 - Tracked Excavators - Tier 2 JCB DieselMax Engine

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Section 2 - Operator's Manual

Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track and Running Gear

Section K - Engine

Section M - Electronic Data Systems



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Harness	Connecting Harness	Interconnect	Location	Connector Pins
3 - Revolving Chassis	4 - Boom	IC04		⇨ *Table 7. (□ C3-4)*

Table 3. Harness interconnectors IC01

Connector Pins	Details
	Bulkhead connectors.

Table 4. Harness interconnectors IC10

Connector Pins	Details
	In - line connectors.

Table 5. Harness interconnectors IC07

Connector Pins	Details
	In - line connectors.

Table 6. Harness interconnectors IC08

Connector Pins	Details
	In - line connectors.

Table 7. Harness interconnectors IC04

Connector Pins	Details
	In - line connectors.

Table 8. Harness interconnectors IC22, IC03

Connector Pins	Details
	In - line connectors.

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Spool Stroke vs Pilot Pressure

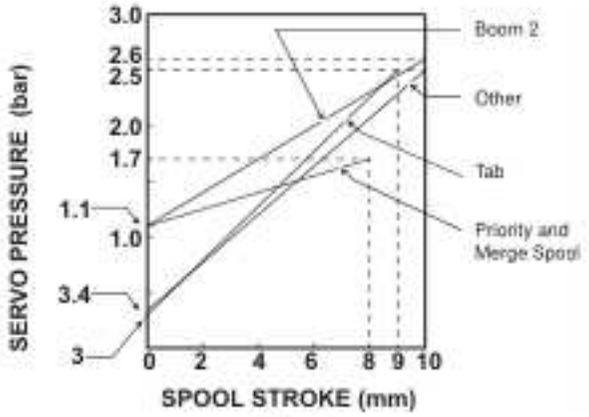


Fig 1.

Boom Ram

Table 13.

	JS300, JS330	JS360/370
Cylinder Inside Diameter	140mm (5.5 in)	150mm (5.9 in)
Rod Diameter	100mm (3.9 in)	100mm (3.9 in)
Max Contracted Length	2095+/3mm (82.4 in)	2095+/3mm (82.4 in)
Stroke	1480+/-2mm (58.2 in)	1480+/-2mm (58.2 in)
Dry Weight	262kg (577 lb)	279kg (615 lb)

Dipper Ram

Table 14.

	JS300	JS330	JS360/370
Cylinder Inside Diameter	150mm (5.9 in)	160mm (6.3 in)	170mm (6.7 in)
Rod Diameter	105mm (4.1 in)	110mm (4.3 in)	120mm (4.7 in)
Max Contracted Length	2260mm (89 in)	2425+/3mm (95.4 in)	2514mm (98.9 in)
Stroke	1632mm (64.2 in)	1733+/-2mm (68.2 in)	1822mm (71.7)
Dry Weight	349 kg (769.4 lb)	365kg (804 lb)	428kg (943 lb)

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Fault Finding

Motor Does Not Rotate

Symptom	Cause	Remedy
The pressure is low.	The relief valve is not set correctly.	Set to the correct value.
	The relief valve does not work properly.	
	Plunger sticking.	Repair or renew the plunger.
	Plunger orifice contaminated.	Dismantle and clean.
	Plunger not seating correctly.	Renew the plunger seat.
The pressure is correct but no rotation.	Overload protection operating.	Remove the cause of overload.
	The moving part is burnt.	Check and repair the piston/shoe, cylinder/valve plate, etc.
	No release pressure acting on the rake.	Check and repair the circuit.
	The brake piston is sticking.	Dismantle and clean/repair.
	The brake friction plate is burnt and sticking to counter plate.	Dismantle and renew the damaged parts.

Motor Rotates in the Reverse Direction

Symptom	Cause	Remedy
Reverse rotation.	The motor has been incorrectly assembled.	Check step 16 of the Assembly procedure to verify that the valve housing 303 and main housing 301 are in their correct relative positions. Rectify if necessary.
	Inlet/outlet hoses reversed.	Re-locate hoses.

Motor Speed is Low

Symptom	Cause	Remedy
Slow rotation.	The oil flow volume is low.	Check the pump output and the circuit to the motor.
	The temperature is high and leakage is serious.	Check the oil cooling circuit.
	The sliding parts are worn out or broken.	Renew suspect parts.

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Assembly

Note: *Apply clean hydraulic fluid to all sliding contact faces during assembly. New seals must be used on assembly.*

1 Place seal on to it's seat in the gearbox housing.



Fig 26.

2 Using the Seal Ring Tool and a soft faced hammer, see ***Service Tools, Section 1***. Push the seal against it's seat.

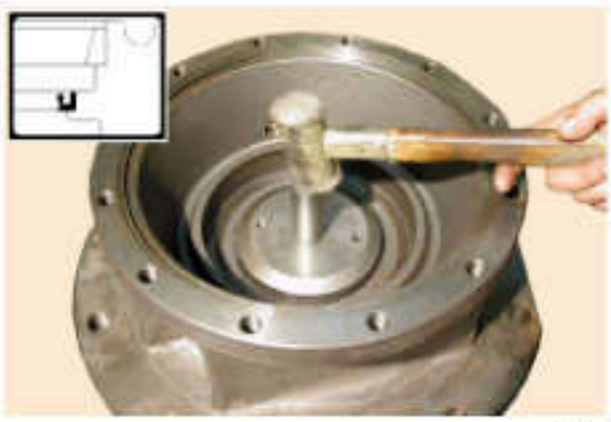


Fig 27.

3 Place the bearing outer ring into the gearbox housing. ⇨ *Fig 28. (E9-12)*



Fig 28.

4 Using the tool and a press, push the bearing outer ring against the gearbox housing shoulder.



Fig 29.

5 Turn the gear box housing upside down and place the bearing outer ring inside it. ⇨ *Fig 30. (E9-13)*

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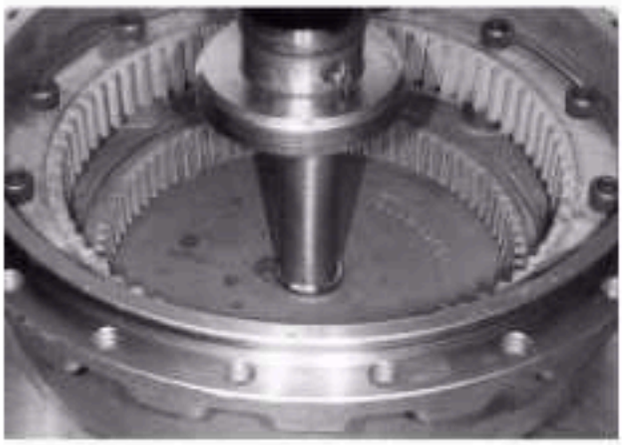


Fig 62.

22 Install Bonfig tool 6689969020 on the end cover (6) and using lifting tackle place the end cover (6) on the gearbox housing (13).



Fig 63.

23 Tighten the 20 M12 x 35 socket head screws (1), with a torque wrench to 130 Nm.



Fig 64.

24 Insert the M22 x 1,5 plugs (3) and the washers (2) into the oil draining-filling holes of the end cover (6).Tighten the plugs with a torque wrench to 60-70 Nm.



Fig 65.

25 Use pliers to assemble the circlip (20) into its seat in the coupling (19).

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