Service Manual

Tracked Excavators
JS81

Service Manual - JS81

Section 1 - General Information

Section 2 - Operator's Manual

Section B - Body & Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track & Running Gear

Section K - Engine



Publication No.
9813/2000-02



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Technical Data
Static Dimensions

Dimensions

Figure 165.



Table 17.

	Description	Length
A	Track length on ground	2,244mm
B	Undercarriage overall length	2,817mm
C	Track gauge	1,700mm
D	Width over tracks	2,150mm

Table 18.

Dipper lengths		1,950mm
E	Transport length	6,226mm
F	Transport height	2,768mm

Table 19.

	Description	Length
G	Counterweight clearance	775mm
H	Tailswing radius	1,866mm
I	Width of superstructure	2,228mm
J	Height over cab	2,722mm
K	Height over grab rail	2,722mm
L	Ground clearance	365mm
M	Track height	666mm

Weights

Shipping Weight

An approximate weight when the machine has a monoboom, medium length dipper, bucket, operator and a full fuel tank.

Table 20.

Track shoe width	Dozer	Weight
450mm	Dozer	8,400kg

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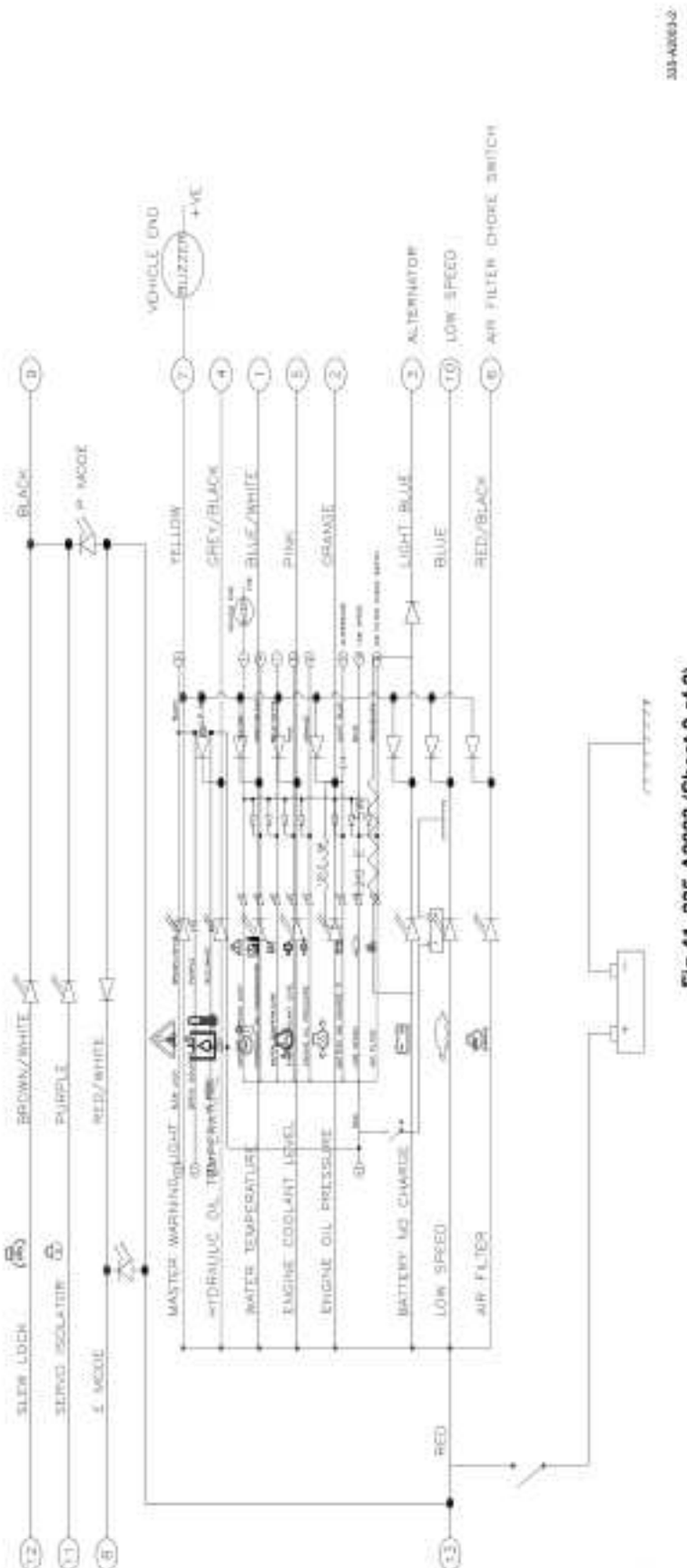


Fig 41. 335-A2003 (Sheet 2 of 2)

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Slew Motor

Table 4.

Symptom	Cause	External Inspection	Countermeasure	Repair
Motor does not run	Internal damage to the motor.	Measure the oil drain volume.	High possibility of damage to the sliding surfaces if the supply volume is approximately equal to the drain volume. Dismantle and inspect.	⇨ *Table 5. (E-189).*
	Internal damage to the motor.	Open the motor inlet and outlet ports and apply 20 kgf/cm² (284 lbf/in²) pilot pressure to the brake release port. Try to rotate the shaft with a torque of approx. 39 Nm (29 lbf ft).	High possibility of internal damage to the motor if the supply shaft does not rotate smoothly when this torque is applied. Dismantle and inspect.	Renew damaged parts or renew the motor assembly.
	Relief valve in circuit not set correctly.	Measure pressure.	Reset to the prescribed setting.	
Excessive slip	Wear or damage to the motor sliding surfaces or to the high-pressure seal.	Measure the oil drain volume.	Leakage is too high if the oil drain volume exceeds 5 l/min (1.1 gal/min). Dismantle and inspect.	⇨ *Table 5. (E-189).*
	Oil hot and excessive parts or circuit.	Measure the oil temperature.	Reduce the oil temperature.	⇨ *Table 5. (E-189).*
Abnormal heating	Seizure of motor sliding parts or circuit.	Check for any metallic matter deposited in motor drain oil or drain filter. Apply a 30 kgf/cm² (427 lbf/in²) pilot pressure to the brake release port and try to rotate the shaft with a torque of approx.39 Nm (29 lbf ft).	If metallic matter is discovered or the supply shaft does not rotate smoothly when torque is applied, there is a high possibility of internal damage to the motor. Dismantle and inspect.	Repair or renew the damaged parts. Renew the motor assembly.
Leakage from oil seals	Damage or wear to oil seal lip.			Renew the oil seals.
	Damage or wear of the shaft seal.			Repair the problem or renew the motor assembly.
	Abnormal pressure in the casing.	Check the pressure in the casing and measure the drain volume.	Set the pressure in the casing below 3 kg/cm². (43 lbf/in²) Dismantle and inspect if drain volume is excessive.	Renew the oil seal. Repair or renew the damaged parts. Renew the motor assembly.

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Fig 49.

22 Insert the 2nd reduction assembly **14**.



Fig 50.

23 Assemble the O-ring **12** into its seat in the connecting cover **16**.



Fig 51.

24 Assemble the connecting cover **16**.



Fig 52.

25 Tighten the nos.4 socket head screws M10x55 **19**, grade 8.8, by a torque wrench at **50 Nm torque**.

Tighten the nos.12 socket head screws M10x65 (17),grade 12.9, by a torque wrench at **85 Nm torque.**

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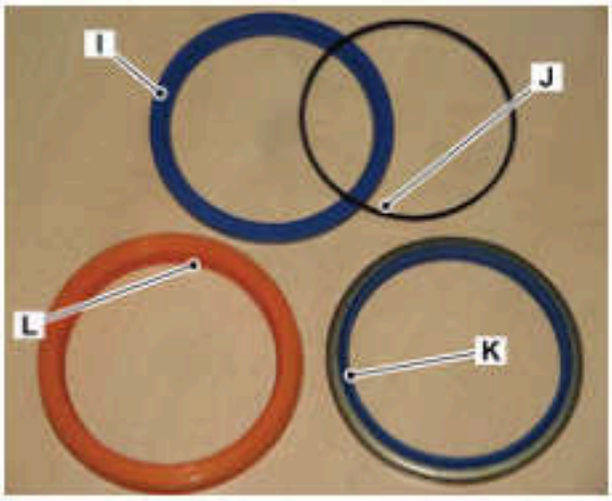


Fig 65.

I Primary Seal
J Backup Ring
K Wiper
L Secondary Seal

Disassembly of Seals in Head End Cover

1 Remove wiper locking snap ring as shown in ⇨ *Fig 66. (E-130)*



Fig 66.

2 Remove secondary seal using bend screw driver as shown in ⇨ *Fig 67. (E-130)*



Fig 67.

3 Remove secondary rod seal back up ring as shown in ⇨ *Fig 68. (E-130)*



Fig 68.

4 Remove primary seal using bend screw driver as shown in ⇨ *Fig 69. (E-131)*

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