Service Manual

JS200
from machine no. 705001
JS210
from machine no. 705648
JS220
from machine no. 705001
JS240
from machine no. 708001
JS260
from machine no. 708501

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General Information 1
Care & Safety 2
Routine Maintenance 3
Attachments A
Body & Framework B
Electrics C
Hydraulics E
Transmission F
Brakes G
Track & Running Gear J
Engine K

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Contents

	Page No.
Bolt and Nut Torque Specifications	1 - 1
* Service Tools	
Section C - Electrics	4 - 1
Section E - Hydraulics	5 - 1
* Section F - Transmission	6 - 1
* Sealing and Retaining Compounds	7 - 1

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Contents

	Page No.
Safety Notices	1 - 1
General Safety	2 - 1
Operating Safety	3 - 1
Maintenance Safety	4 - 1 4 - 2

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Contents

	Page No.
Fluids and Lubricants	1 - 1
Lubricants - Health and Safety	1 - 2
Service Schedules	2 - 1
Greasing	
Slew Ring Bearing	3 - 1
Slew Ring Teeth and Slew Pinion	3 - 1
Excavator End	3 - 2
Battery	4 - 1
Fuses	See Section C
Hydraulics	
Air bleeding procedures	5 - 1
Releasing tank pressure	5 - 1
Air bleeding from hydraulic pump	5 - 2
Air bleeding from ram	5 - 2
Air bleeding from the slew motor	5 - 3
Checking the fluid level	5 - 4
Topping up fluid level	5 - 4
Changing the hydraulic oil	5 - 5
Changing the Return Filter Element	5 - 6
Cleaning/Changing the Suction Strainer	5 - 7
Changing the Air Breather Element	5 - 8
Draining Tank Impurities	5 - 9
Changing the Pilot Oil Filter	5 - 9
Changing the Breaker In-line Filter	5 - 10
Changing the Drain Line Filter	5 - 10
Changing the Nephron Filter	5 - 11
Transmission	
Checking Track Gearbox Oil Level	6 - 1
Changing the Track Gearbox Oil	6 - 1
Checking the Slew Gearbox Oil Level	6 - 2
Changing the Slew Gearbox Oil	6 - 2
Replenishing Slew Gearbox Grease	6 - 2
Tracks and Running Gear	
Cleaning the Tracks	7 - 1
Checking/Adjusting the Track Tension	7 - 2
Checking the Shoe Plate	7 - 3
Checking the Rollers and Idler Wheels for Oil Leaks	7 - 3

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Travel Equipment

Type	Fixed Displacement Piston Motor (automatic 2-speed change)
Suction Capacity	157.8/92.9 cc/rev
Working Pressure	350 kgf/cm² (343 bar, 4977 lb/in²)
Working Flow	199 litre/min (43.7 UK gal)
Reduction Gears Deceleration Ratio	44.384
Parking Brake Brake Torque Brake Pressure Release * Brake Valve Pressure Relief	2135 kgf/m (20.9 kN/m) including reduction gear > 14 kgf/cm² (6.8 bar, 101 lb/in²) 360 kgf/cm² (353 bar, 5119 lb/in²) at 40 litre/min (8.8 UK gal)
Dry Weight	* 270 kg (595 lb)

Boom Ram

Cylinder Inside Diameter	125 mm
Rod Diameter	85 mm
Max Contracted Length	1790 mm
Stroke	1295 mm
Dry Weight	* 176 kg (388 lb)

Dipper Ram

Cylinder Inside Diameter	135 mm
Rod Diameter	100 mm
Max Contracted Length	2150 mm
Stroke	1580 mm
Dry Weight	* 275 kg (606 lb)

Bucket Ram

Cylinder Inside Diameter	120 mm
Rod Diameter	80 mm
Max Contracted Length	1582 mm
Stroke	1012 mm
Dry Weight	* 146 kg (322 lb)

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Control Valve Trouble Shooting *(continued)*

Relief Valve

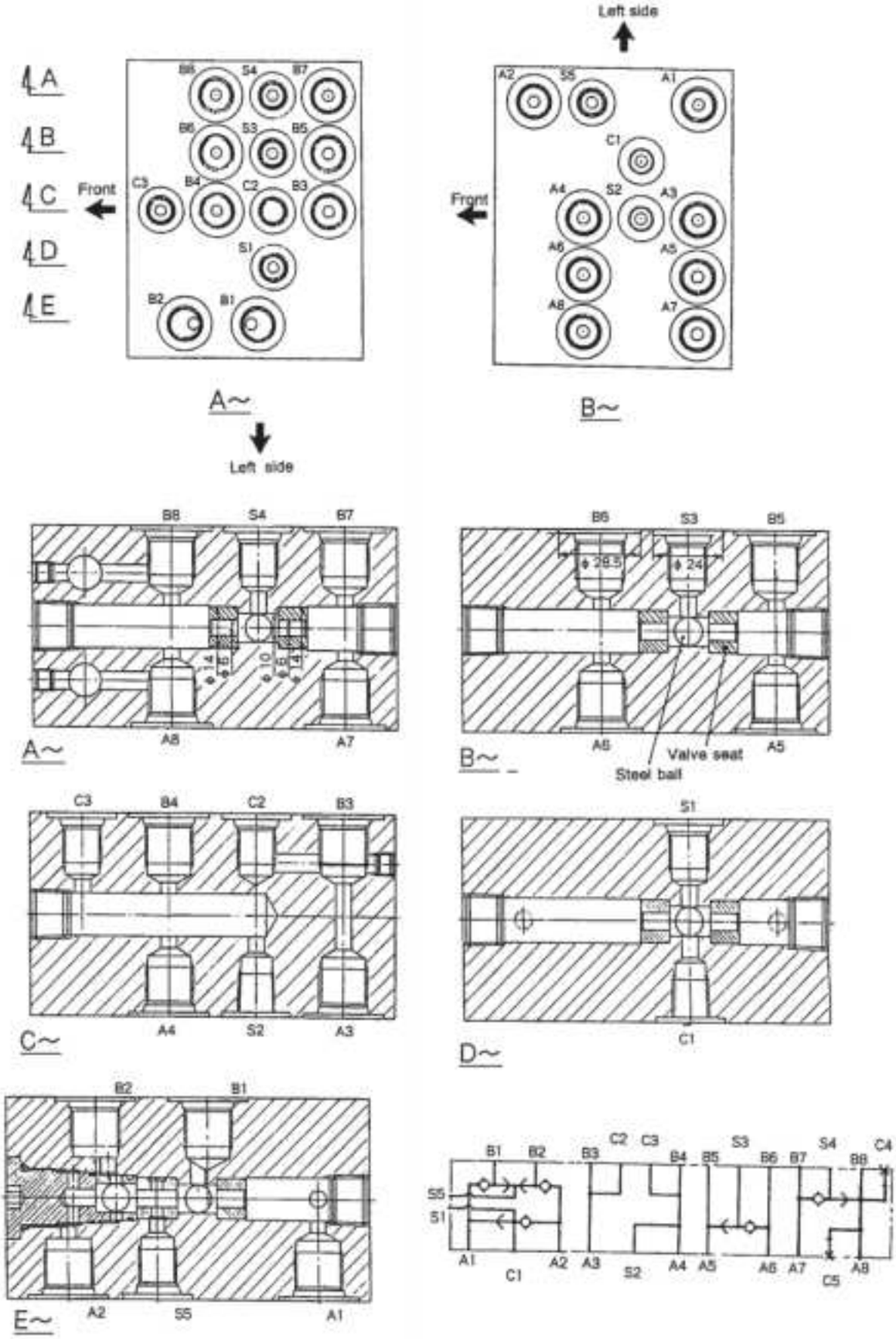
Symptoms	Possible Causes	Countermeasures
Pressure does not rise at all	1. The main poppet, sleeve or pilot poppets are sticking open or foreign matter is in the valve seat.	Check whether foreign matter is in each poppet. Check whether each part is sliding smoothly. Clean all the parts.
Relief pressure is unstable	1. The pilot poppet seat is damaged.	Replace the damaged parts.
	2. The piston is sticking to the main poppet.	Remove the surface scratches. Clean all the parts.
Relief pressure is out of control	1. Wear due to foreign matter.	Replace the worn parts
	2. Lock nut and adjuster are loose.	Reset the pressure and tighten the lock nut to the rated torque.
Oil leakage	1. Damaged seat or worn O-ring.	Replace damaged or worn parts. Check whether each part is sliding smoothly.
	2. Parts are sticking due to foreign matter.	Check for scratches, cuts or foreign matter. Clean all the parts.

Hydraulic System

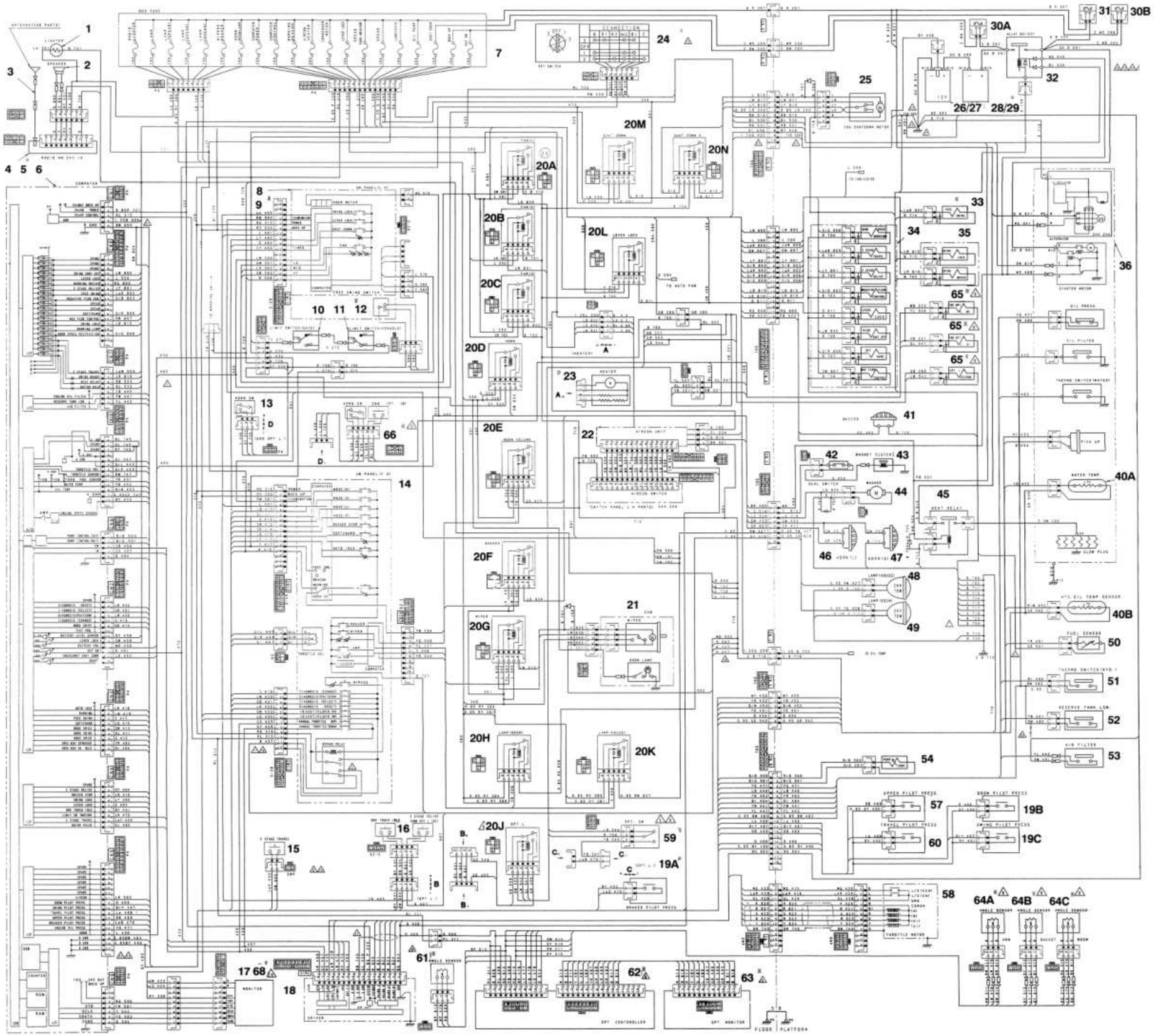
Symptoms	Possible Causes	Countermeasures
The hydraulic system is not working well or not at all	1. Pump problem.	Check the pressure or replace the pump.
	2. Foreign matter clogging inside the relief valve.	Disassemble the relief valve and clean.
	3. Relief valve trouble.	Check according to the maintenance procedures.
	4. Ram trouble.	Repair or replace.
	5. Load is too heavy.	Check the circuit pressure.
	6. Crack in the valve.	Replace the valve assembly.
	7. Spool does not stroke fully.	Check the spool movement and operation link.
	8. Oil level too low.	Replenish hydraulic oil.
	9. Filters inside circuit are clogged.	Clean filter or replace.
	10. Hose runs are kinked.	Check the hoses.

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Schematic



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