Service Manual

JS 200W

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* Main Components (CAPS II)

1	Headlamp (RH dip)
2	Headlamp (LH dip)
3	Number Plate Lamp
4	Pressure Switch
5	Coolant Overheat Switch
6	Engine Oil Pressure Switch
7	Refuelling Pump
8	A/C Compressor
9	Washer
10	Heater Assembly
11	Air Conditioning Assembly
12	Battery
13	Work Lamps
14	Fuse Box
15	Relay
16	Oil Temperature Sensor
17	Oil Overheat Switch
18	Changeover Solenoid Valve
19	Stabiliser Solenoid Valve
20	Column Switch
21	Horn
22	Stabiliser Switch Panel
23	Sub Monitor
24	Wheel Controller
25	Status Monitor
26	Harness
27	Harness
28	Harness
29	Harness
30	Harness
31	Controller Assembly
32	Rear Lamp LH
33	Rear Lamp RH
34	Air Filter Switch
35	A/C Pressure Switch
36	Engine Speed Sensor
37	Sensor - Water Temperature
38	Sensor - Hydraulic Oil Temperature
39	Proportional Solenoid Valve
40	Low Flow (Grab)
41	Transmission Valve
42	Solenoid Valve Assembly
43	Low Flow (W/Cut)
44	Amplifier
45	Low Accumulator Pressure Switch
46	Brake Valve Pressure Switch
47	Fuel Level Sensor
48	Resistor Assembly
49	Travel Pilot Pressure Switch
50	Upper Pressure Switch
51	Swing Solenoid Valve
52	Battery Relay
53	Throttle Motor
54	Panel Switch Assembly LH
55	Panel Switch Assembly RH
56	Key Switch
57	Throttle Driver
59	Monitor

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Fault finding

	Symptom		Possible cause	Remedy
1	Low secondary pressure.	a	Primary pressure is low.	Apply the correct primary pressure.
		b	Spring **14** is damaged.	Renew the spring.
		c	Clearance between the spool and seating is too large.	Renew the remote control valve assembly.
		d	The handle unit is loose.	Dismantle, reassemble or renew the handle unit.
2	Unstable secondary pressure.	a	Sliding parts are sticking.	Release the sticking part.
		b	Fluctuations in the tank line pressure.	Check return line and filter for blockage.
		c	Air is trapped in the piping.	Operate the valve several times to remove the air.
3	High secondary pressure.	a	The tank line pressure is too high.	Check return line and filter for blockage.
		b	Sliding parts are sticking.	Release the sticking part.

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Steering Axle with Internal Multi disk, Positive Retraction Brakes

Assembly (continued)

Example II

Dimension C	9.50 mm
+ Dimension D	15.50 mm
gives Dimension II	25.00 mm

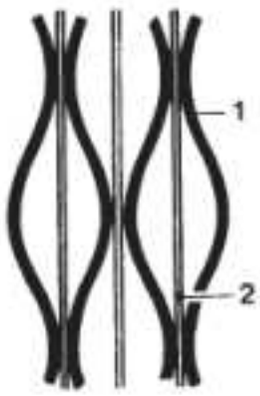
Example III

Dimension I	27.00 mm
- Dimension H	25.00 mm
Difference. = plate play e.g.	2.00 mm

Note: If the required clearance is not obtained, correct by means of a corresponding outer plate.

7 Install alternating outer 1 and inner plates 2.
Note: Pay attention to the sequence of the corrugated outer discs.

If required, install thinner outer plates (s = 2.0mm) at the



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piston and backing plate.

8 Insert backing plate and fix it with a circlip **18**.

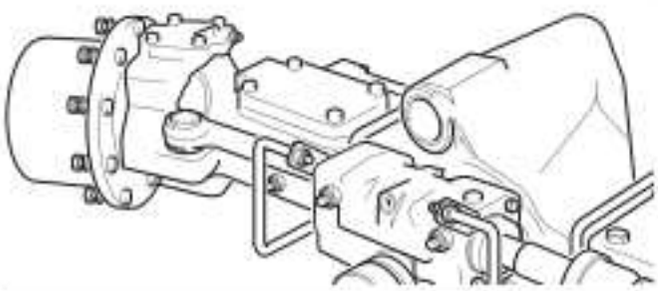
Check pressure test the brake hydraulic system
Install adaptor piece **B** and new o-ring, screw in bleeder.
Note: Bleed brake hydraulic system and actuate it several times prior to start the check.

High Pressure test

1 Pressurise brake with 120 bar. After 5 minutes the pressure drop may not exceed 2% (117 bar).

2 Low-pressure test pressurise brake with 5 bar. After 5 minutes there may be no visible pressure drop.

A324380



Test media Motor oils SAE I 0 W, corresponding to MIL - L 2104 C ATF-oils, type A Suffix A Dexron H D.

3 Whilst the multi-disk brake is pressurised, insert sun-gear shaft and tighten socket head screw.

Torque Settings

Item	Nm	kgf m	lbf ft
B	120	12.25	88.5

4 Install shim and engage circlip.

Planetary carrier :

5 Install components

Note : Install cylindrical rollers **36** with grease. Broad stop face of L-shaped rings **37** showing towards the bearing rollers.

6 Heat bearing inner race, replace planetary gears firmly against shoulder and fix them by means of circlip.

Note: large radius of the bearing inner race is facing towards the planetary carrier.

7 Adjust end play of the universal shaft - 0.4 to 0.6 mm

8 Measure dimension A from the flange facing to the contact face of the thrust washer.

Dimension A e.g. 205.20 mm (8.07 in.)

9 Slide sun gear, inner plate carrier firmly against shoulder.

10 Determine dimension B from the end face/sun-gear shaft to the flange facing/ hub.

Dimension B e.g. 202.50 mm (7.97 in.)

Example -

Dimension A	205.20 mm
Dimension B	202.50 mm
Difference	2.70 mm
required end play e.g.	0.50 mm

Difference ' thrust washer thickness

11 Insert thrust washer (e.g. s = 2.20 mm and fix by means of snap ring.

12 Insert o-ring into the annular groove of the hub.

13 Assemble planetary carrier and fasten by means of two socket head screws.

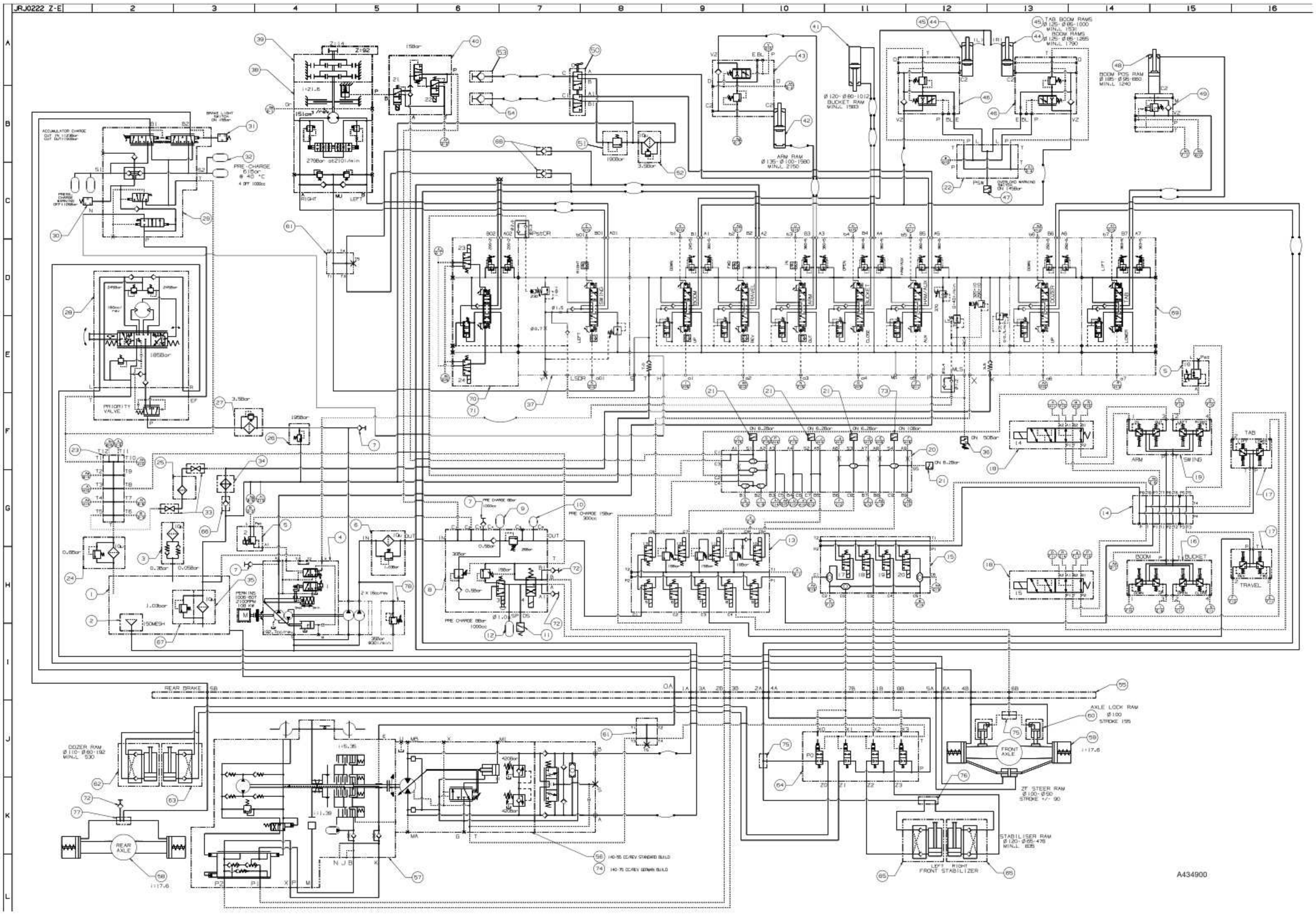
Torque Settings

Item	Nm	kgf m	lbf ft
20	86	8.7	63

14 Tighten the screw stops.

15 Engage the tie rods, tighten castle nuts and secure with cotter pins.

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