Service Manual

JS70

from machine no. 695501

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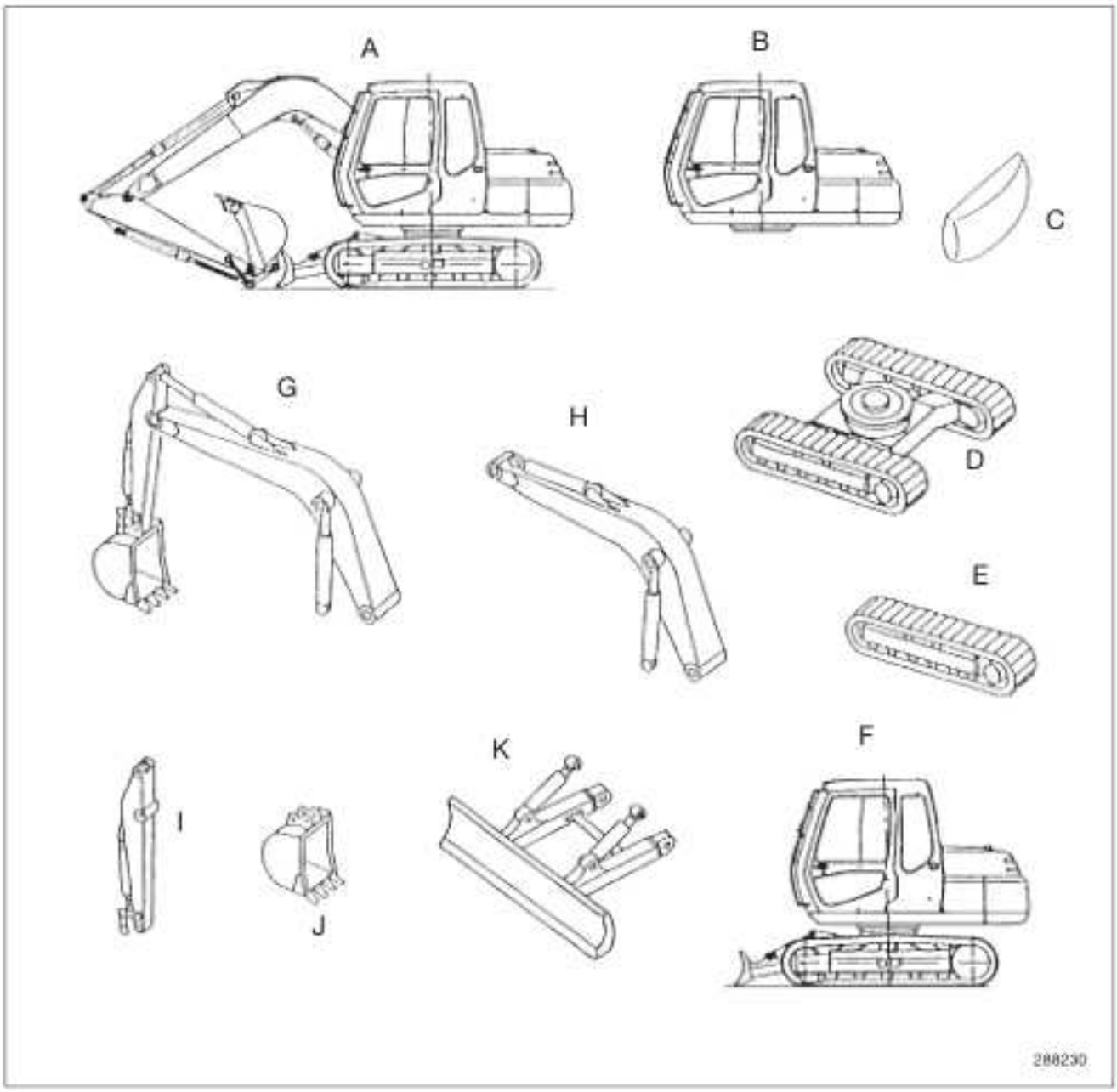
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Weights



	Description	Weight kg (lb)		Description	Weight kg (lb)
A	Overall mass	6700 (14773)	G	Attachment	1075 (2370)
B	Upper mechanism Includes	3115 (6868)	H	Boom (including ram)	620 (1367)
	Counterweight and Slew ring		I	Dipper (including ram and link)	250 (551)
C	Counterweight	700 (1543)	J	Bucket	206 (454)
D	Lower mechanism (with grouser shoe)	2510 (5534)	K	Blade (including ram)	305 (672)
E	Shoe (one side) (450 mm grouser)	400 (882)			
F	Machine main body	5625 (12403)			

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Schematic, Hydraulic Circuit

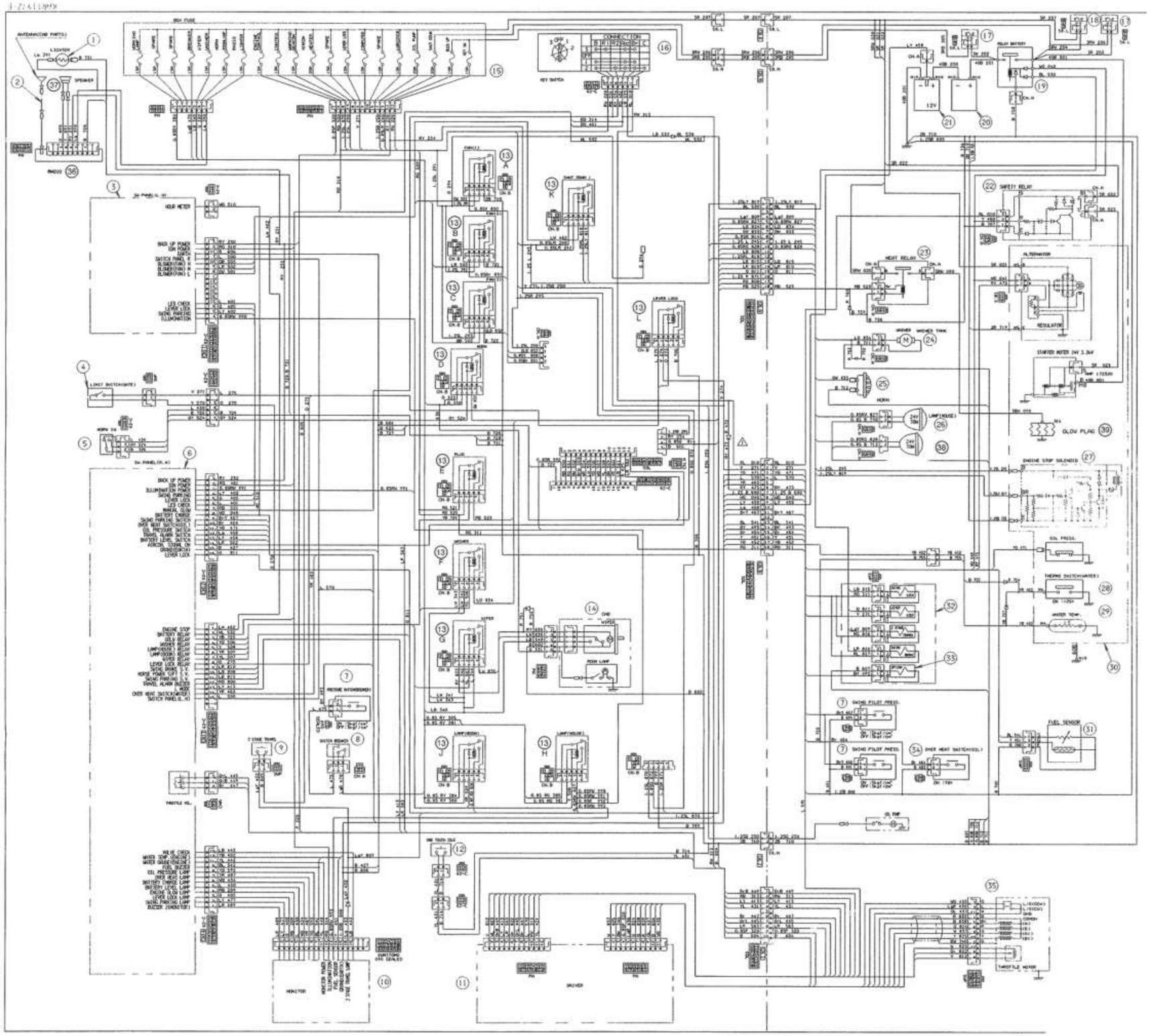
1	Blade Ram (Left)
2	Blade Ram (Right)
3	Traction Motor
4	Rotary Coupling
5	Line Filter
6	Slew Motor
7	Filter
8	Radiator
9	Control Valve
10	Return Manifold
11	Relief Valve
12	Control Valve
13	Stop Valve
14	Relief Valve
15	Manifold
16	Line Filter
17	Oil Tank
18	Air Breather
19	Relief Valve
20	Return Filter
21	Strainer
22	Pressure Switch
23	Cushion Valve
24	Cushion Valve
25	Cushion Valve
26	Manifold
27	Remote Control Valve
28	Filter
29	Remote Control Valve
30	Remote Control Valve
31	Valve
32	Accumulator
33	Line Filter
34	Flat Flange
35	Hydraulic Pump
36	Bucket Ram
37	Boom Ram
38	Dipper Ram

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Fault Finding (cont'd)

Item	Symptoms	Related Parts	Trouble	Treatment
4	Poor operation 4-1 Movement not smooth	Piston rod cylinder tube	Bending to more than the specified limit. (Bending distortion: refer to maintenance standards)	• Replace with new part. The seal and sliding part material may be damaged too, so inspect. If abnormal, renew.
		Cylinder tube	Tube scored	• Replace with new part. As above, inspect the seal and sliding part material.
		Piston rod cylinder rod sliding part	Abnormal wear, damage of sliding area Foreign matter intruding on piston and cylinder head sliding area	• Replace with new part. As above, inspect the seal and sliding part material. • Remove foreign material. As above, inspect the seal and sliding part material.
	4-2 Inner oil leakage. Piston rod extends when work stops or lowers abnormally during work. Also, specified operating speed is not achieved.	Piston seal	Scratches, wear are present	• Replace with new part. Inspect the cylinder tube inner surface also.
		Cylinder tube	Scratches, rust on inside	• Remove the scratches, rust by honing or with an oil stone and make the surface smooth. If the scratch is deep and cannot be repaired, renew cylinder tube. • Renew piston seal.
		Piston nut	Loose nut	• Tighten to specified torque.
		Valves	Leak from valve	• Inspect the valve leakage amount and service.
	Note: Hydraulic oil expands and contracts due to changes in temperature and pressure. Accordingly, the ram also expands and this can be mistaken for internal leakage. When inspecting for internal leakage, do so at set conditions.			

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