CRAWLER EXCAVATOR

SERVICE MANUAL

R110-7A

HYUNDAI

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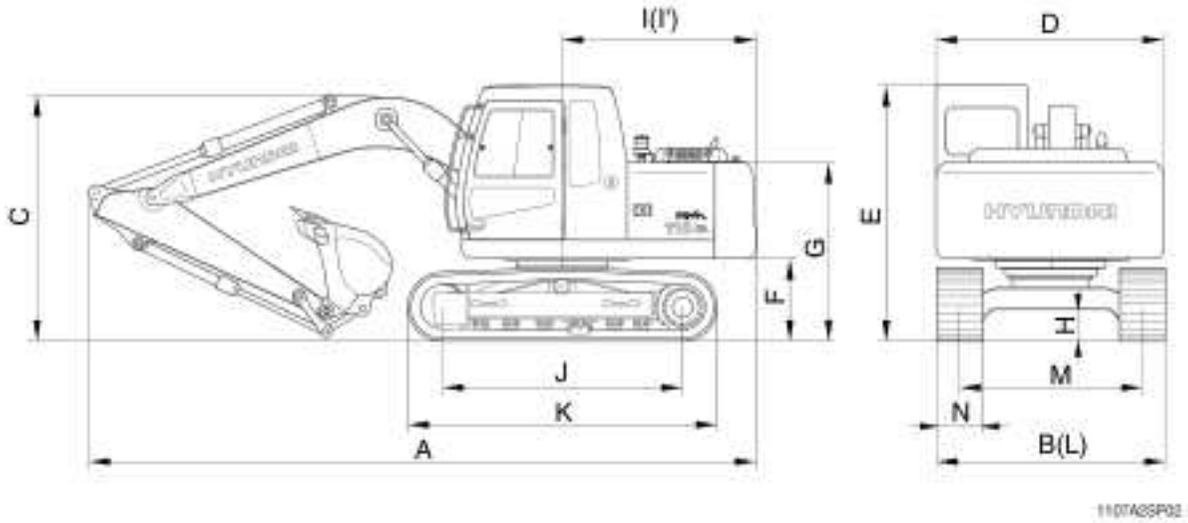
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2. SPECIFICATIONS

1) R110-7A

(1) 4.3m(14' 1") MONO BOOM, 2.26m(7' 5") ARM



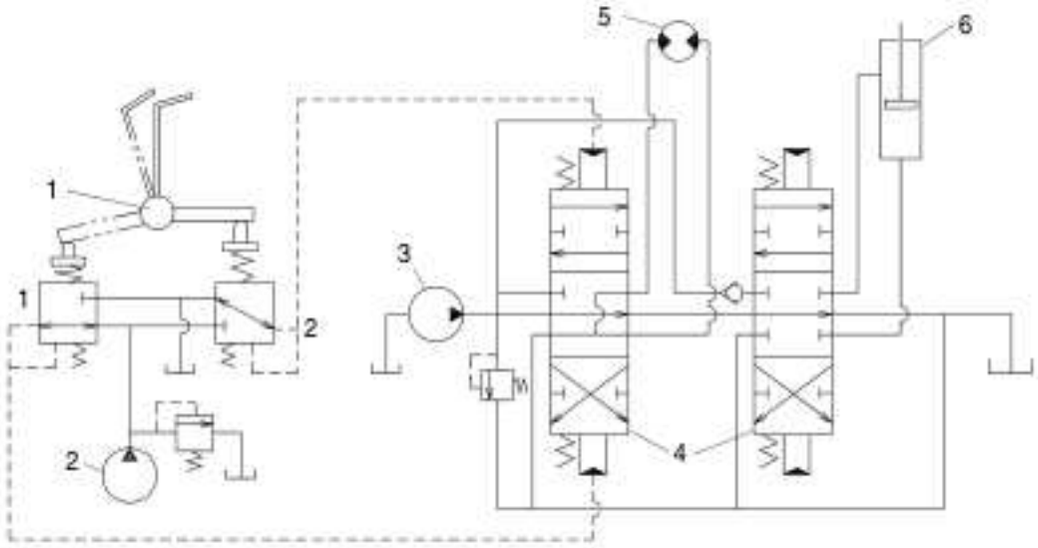
Description		Unit	Specification
Operating weight		kg(lb)	11200(24690)
Bucket capacity(SAE heaped), standard		m³(yd³)	0.45(0.59)
Overall length	A	mm(ft-in)	7270(23' 10")
Overall width, with 500mm shoe	B		2490(8' 2")
Overall height	C		2720(8' 11")
Superstructure width	D		2475(8' 1")
Overall height of cab	E		2800(9' 2")
Ground clearance of counterweight	F		900(2' 11")
Engine cover height	G		1990(6' 6")
Minimum ground clearance	H		440(1' 5")
Rear-end distance	I		2110(6' 11")
Rear-end swing radius	I'		2130(7' 0")
Distance between tumblers	J		2610(8' 7")
Undercarriage length	K		3340(10' 11")
Undercarriage width	L		2490(8' 2")
Track gauge	M		1990(6' 6")
Track shoe width, standard	N		500(20")
Travel speed(Low/high)		km/hr(mph)	3.4/5.2(2.1/3.2)
Swing speed		rpm	12.0
Gradeability		Degree(%)	35(70)
Ground pressure(500mm shoe)		kgf/cm²(psi)	0.39(5.55)

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3) OPERATION

The operation of the pilot valve will be described on the basis of the hydraulic circuit diagram shown below ant the attached operation explanation drawing.

The diagram shown below is the typical application example of the pilot valve.

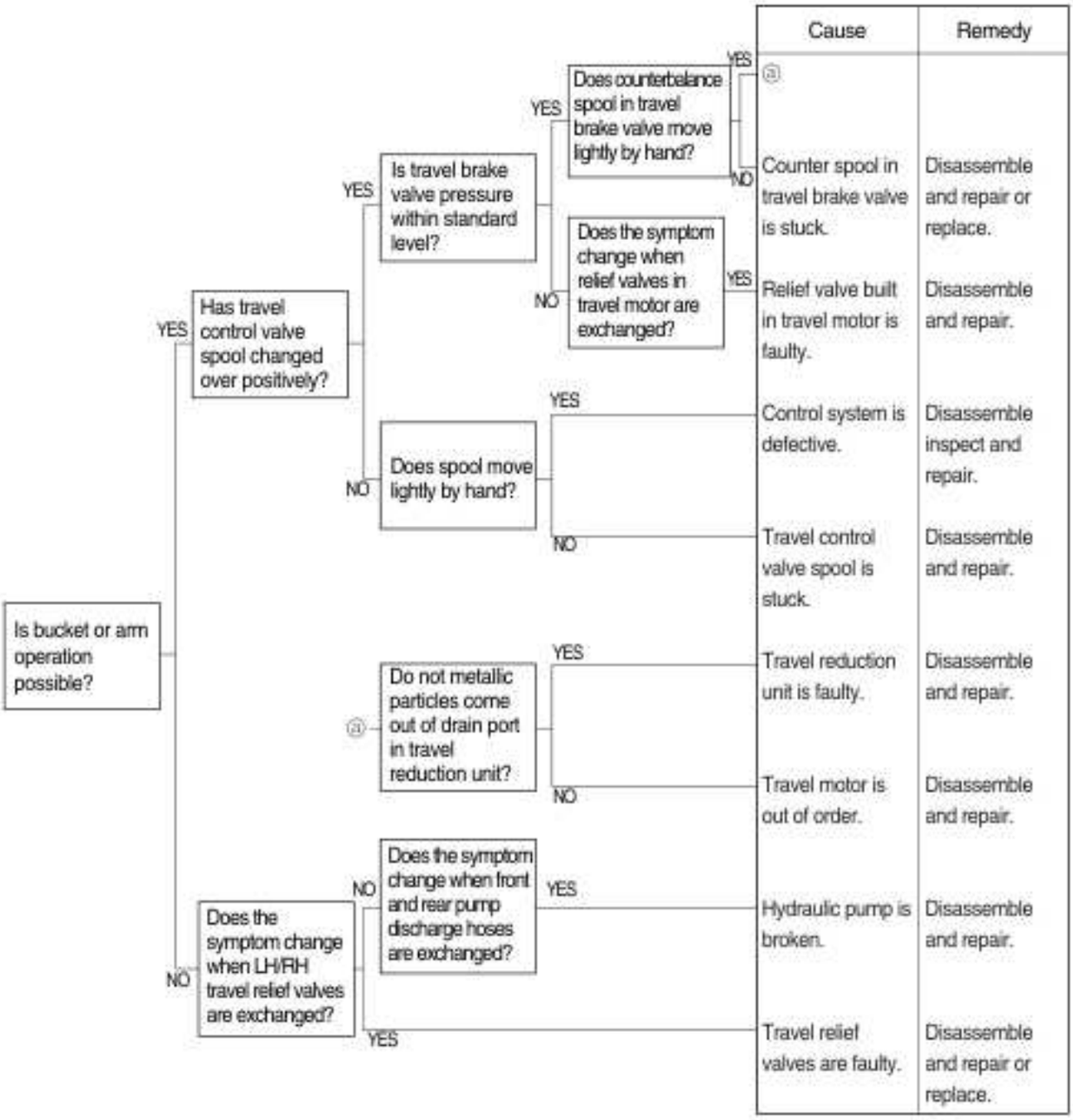


1	Pilot valve	3	Main pump	5	Hydraulic motor
2	Pilot pump	4	Main control valve	6	Hydraulic cylinder

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5. TRAVEL SYSTEM

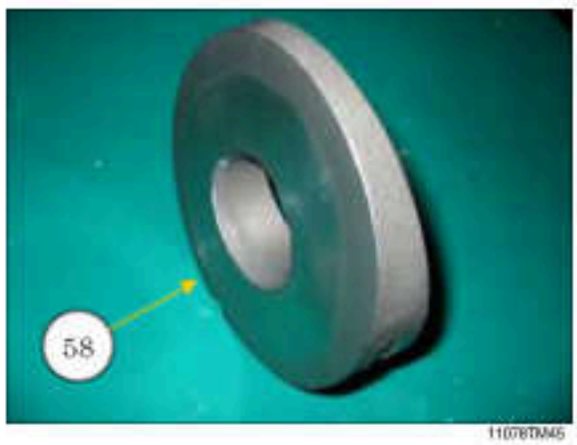
1) TRAVEL DOES NOT FUNCTION AT ALL ON ONE SIDE



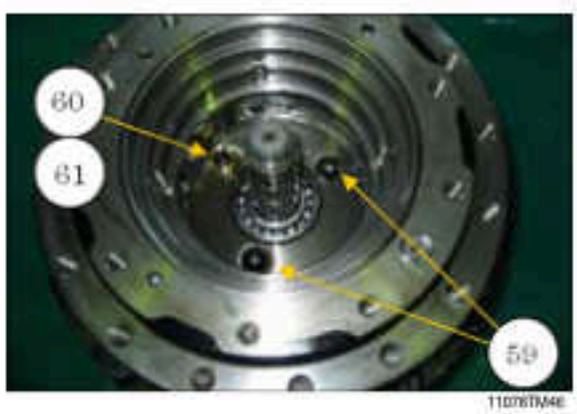
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(31) Remove cam(58) from the body casing.





(32) Remove two steel balls(59) and piston(60) from the body casing. Remove the spring(61) behind the piston.

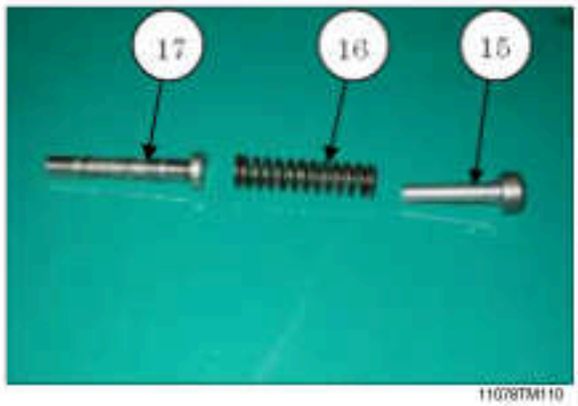




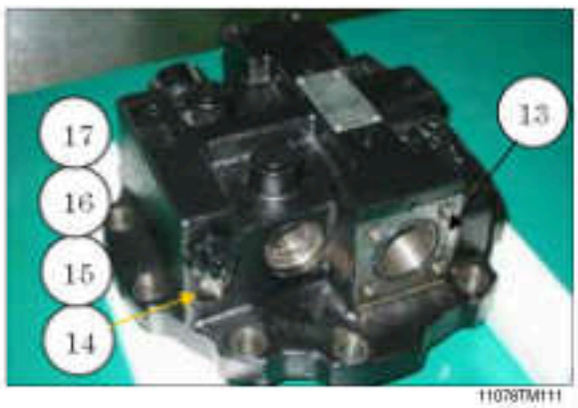
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(34) Put spool(17), spring(16), and stopper(15) in the brake valve body. Put the O-ring on plug(14). Install plug(14) to the travel brake valve. Tighten the plug to a torque of **49 ± 4.9N · m (36.1 ± 3.6lbf · ft)**.

Put O-ring(13) on the brake valve body.

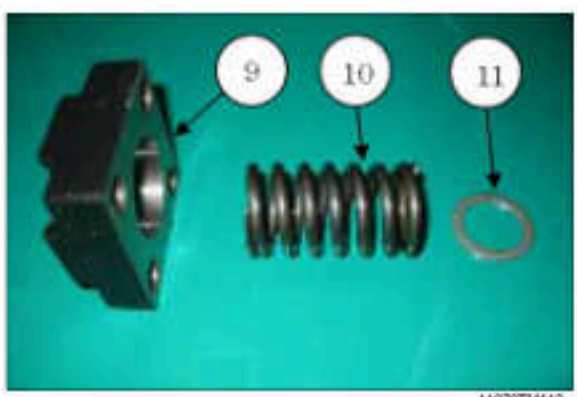


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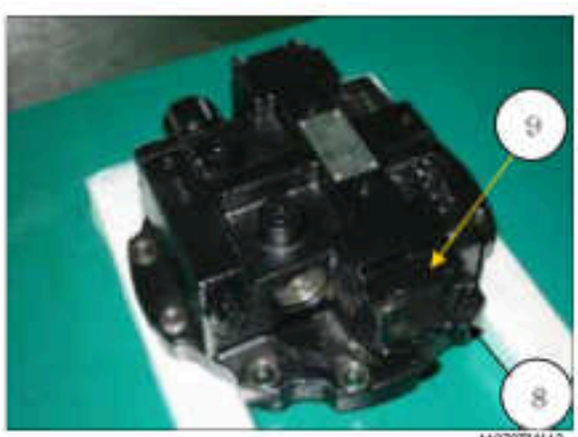


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(35) Install plate(11) and then spring(10) in the brake valve.
Then, install cover(9) with four bolts(8).
Tighten the bolts(8) to a torque of **78.5 ± 7.8N · m(57.9 ± 5.8lbf · ft)**.



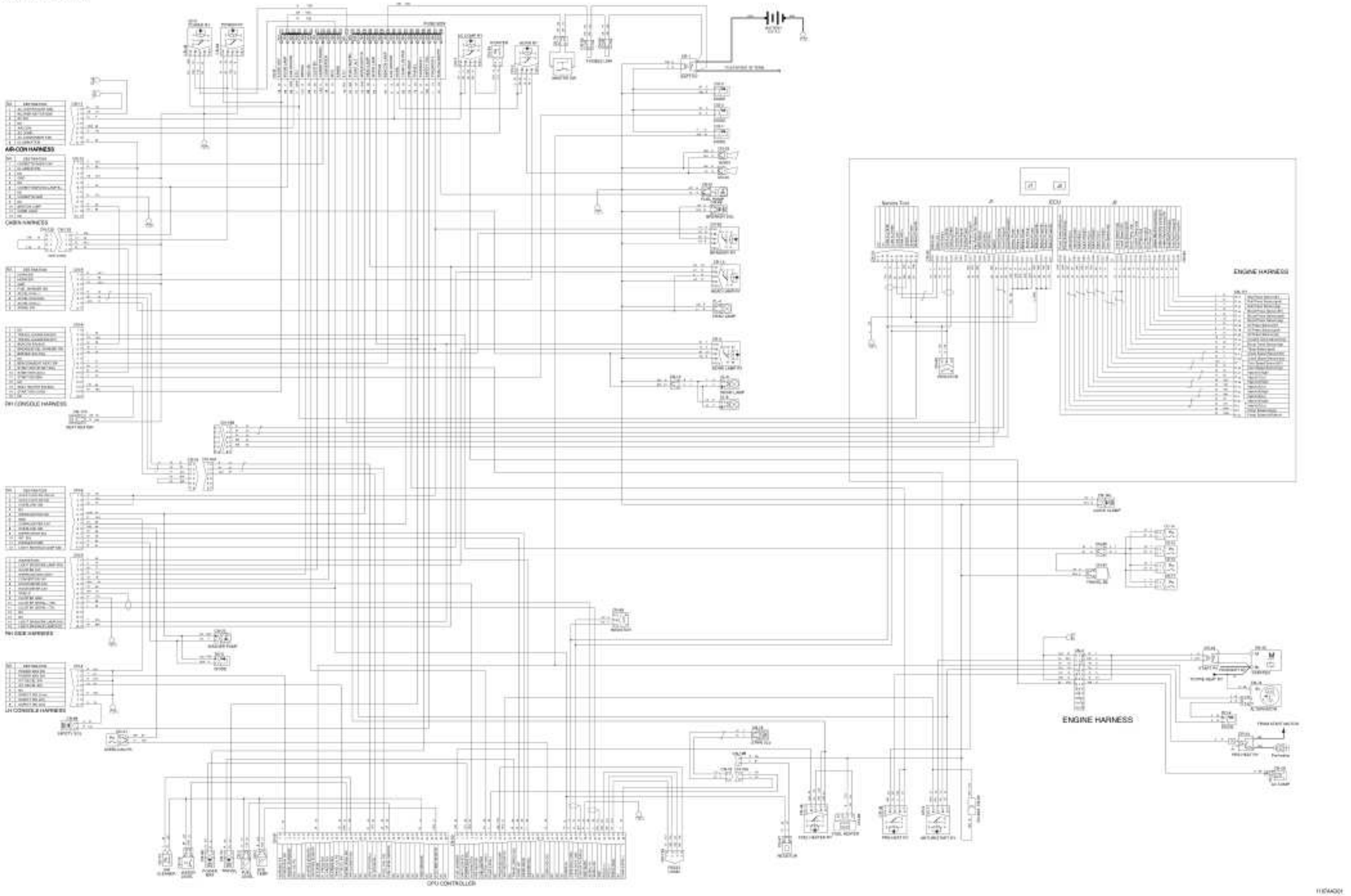
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- ELECTRICAL CIRCUIT(1/2)



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