CRAWLER EXCAVATOR

SERVICE MANUAL

R180LC-7

HYUNDAI

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7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm²(92psi)
	Maximum	26kgf/cm²(370psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø 115× Ø 80× 1090mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø 120× Ø 85× 1340mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø 115× Ø 80× 950mm
	Cushion	Extend only

※ **Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.**

※ **Discoloration does not cause any harmful effect on the cylinder performance.**

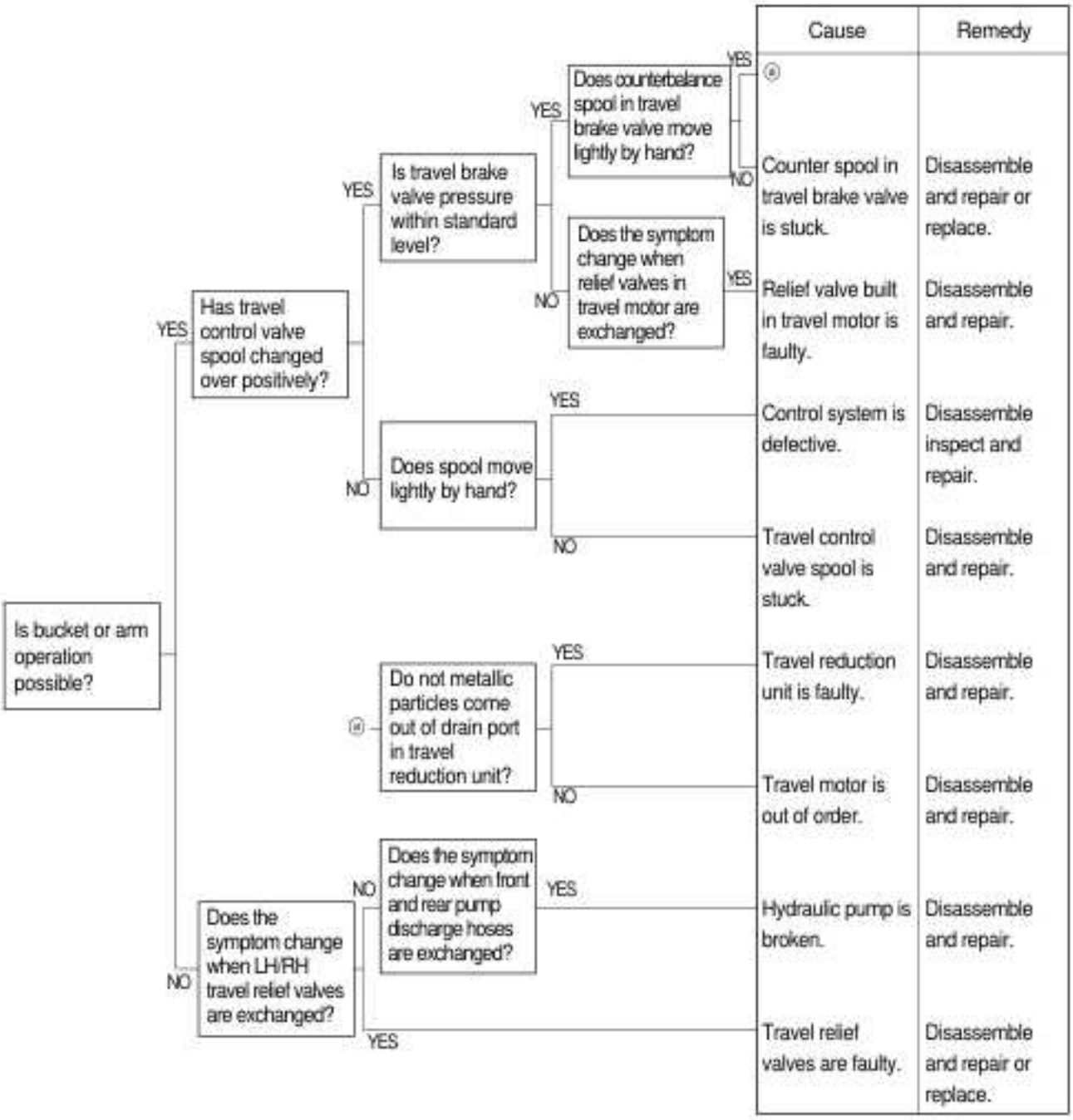
9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R180LC-7	Option	500mm(20")	0.50kgf/cm²(7.11psi)	51	2750mm(9' 0")
	Standard	600mm(24")	0.42kgf/cm²(5.97psi)	51	2850mm(9' 4")
	Option	700mm(28")	0.36kgf/cm²(5.12psi)	51	2950mm(9' 8")
	Option	800mm(32")	0.32kgf/cm²(4.55psi)	51	3050mm(10' 0")

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5. TRAVEL SYSTEM

1) TRAVEL DOES NOT FUNCTION AT ALL ON ONE SIDE

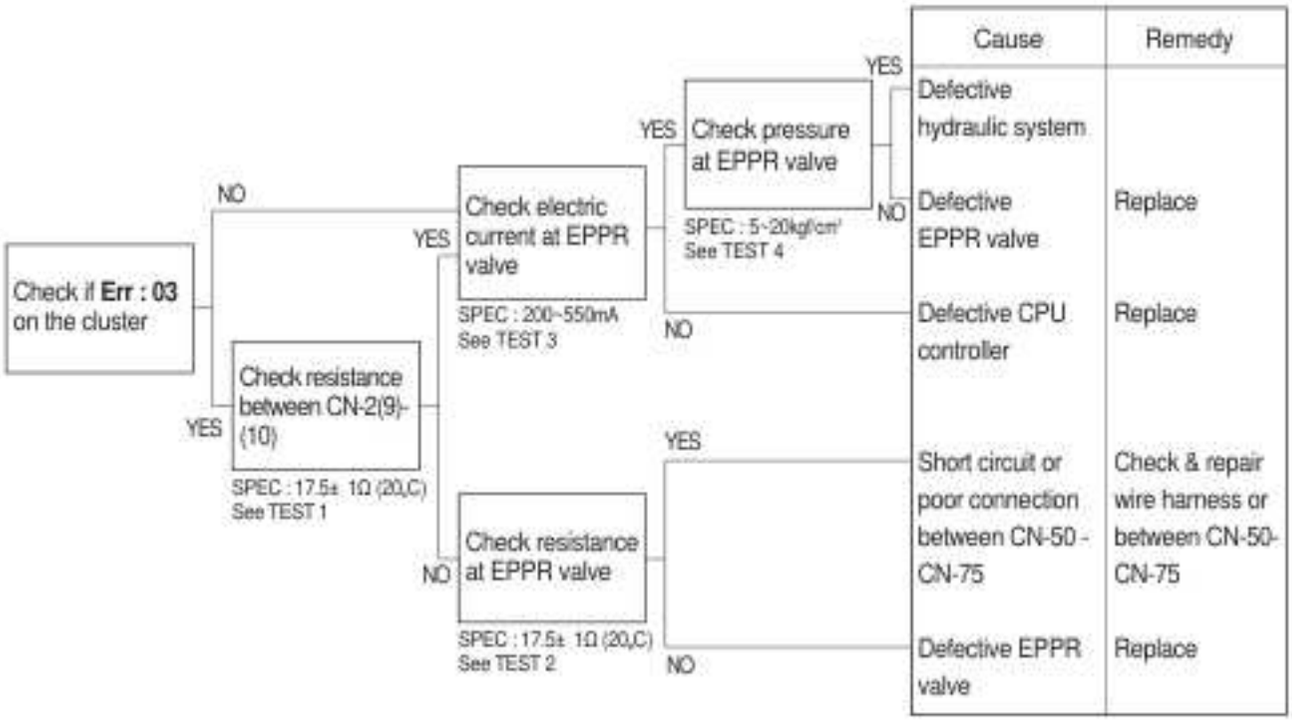


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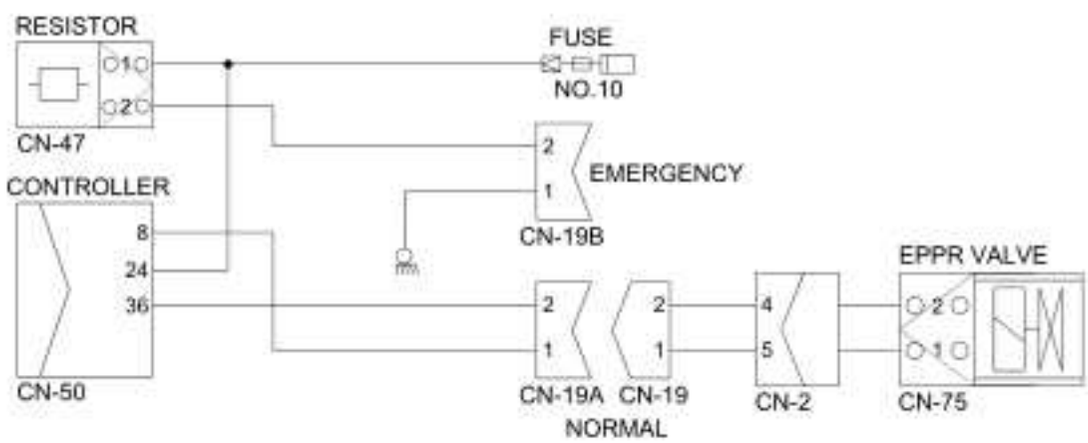
1. ALL ACTUATORS SPEED ARE SLOW

※ Boom, Arm, Bucket, Swing and travel speed are slow, but engine speed is good.
※ Spec : M-mode 2200± 50rpm H-mode 2000± 50rpm S-mode 1900± 50rpm
※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE

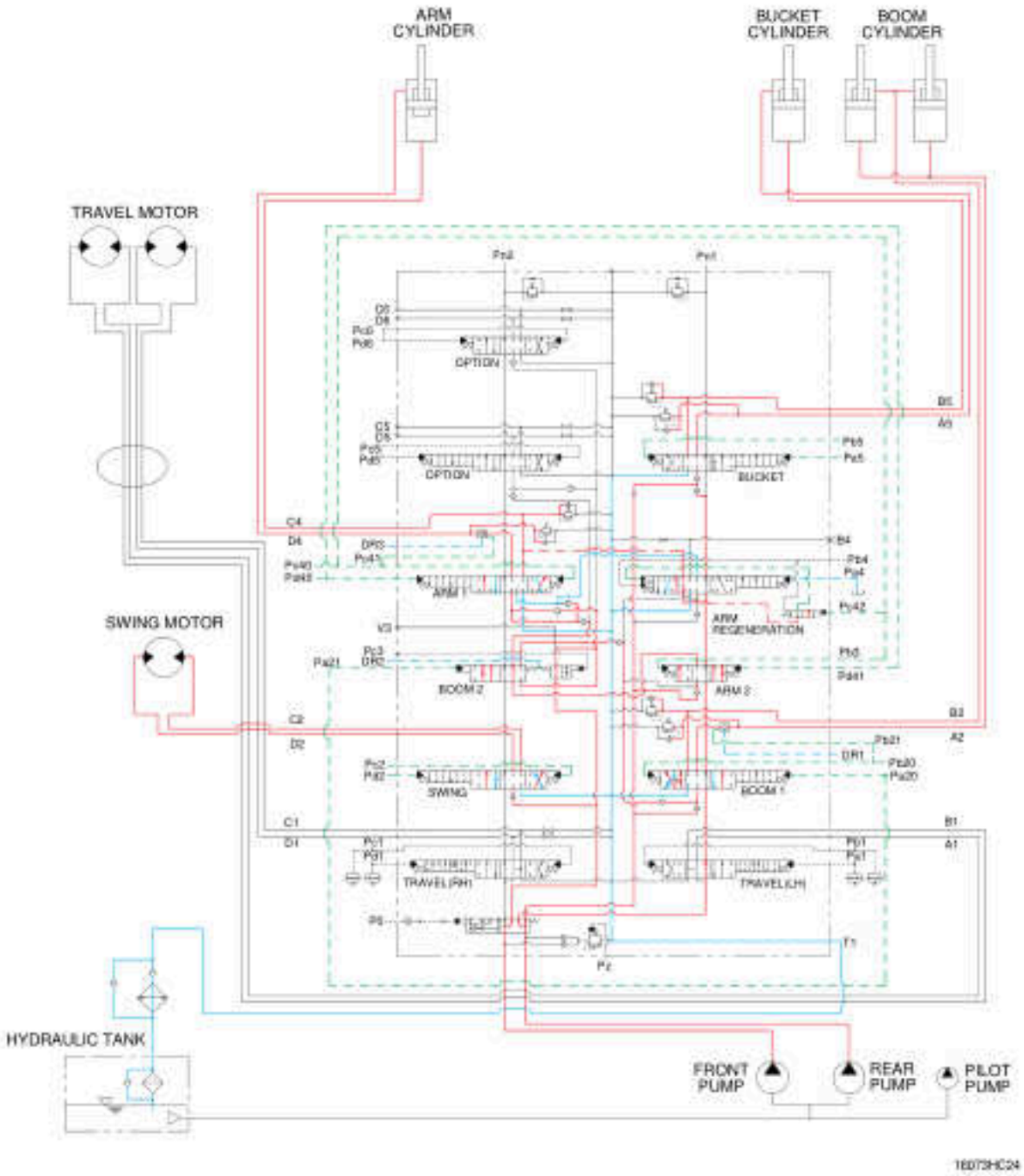


Wiring diagram



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5. COMBINED SWING, BOOM, ARM AND BUCKET OPERATION



When the swing, boom, arm and bucket functions are operated, simultaneously each spool in the main control valve is moved to the functional position by the pilot oil pressure from the remote control valve.

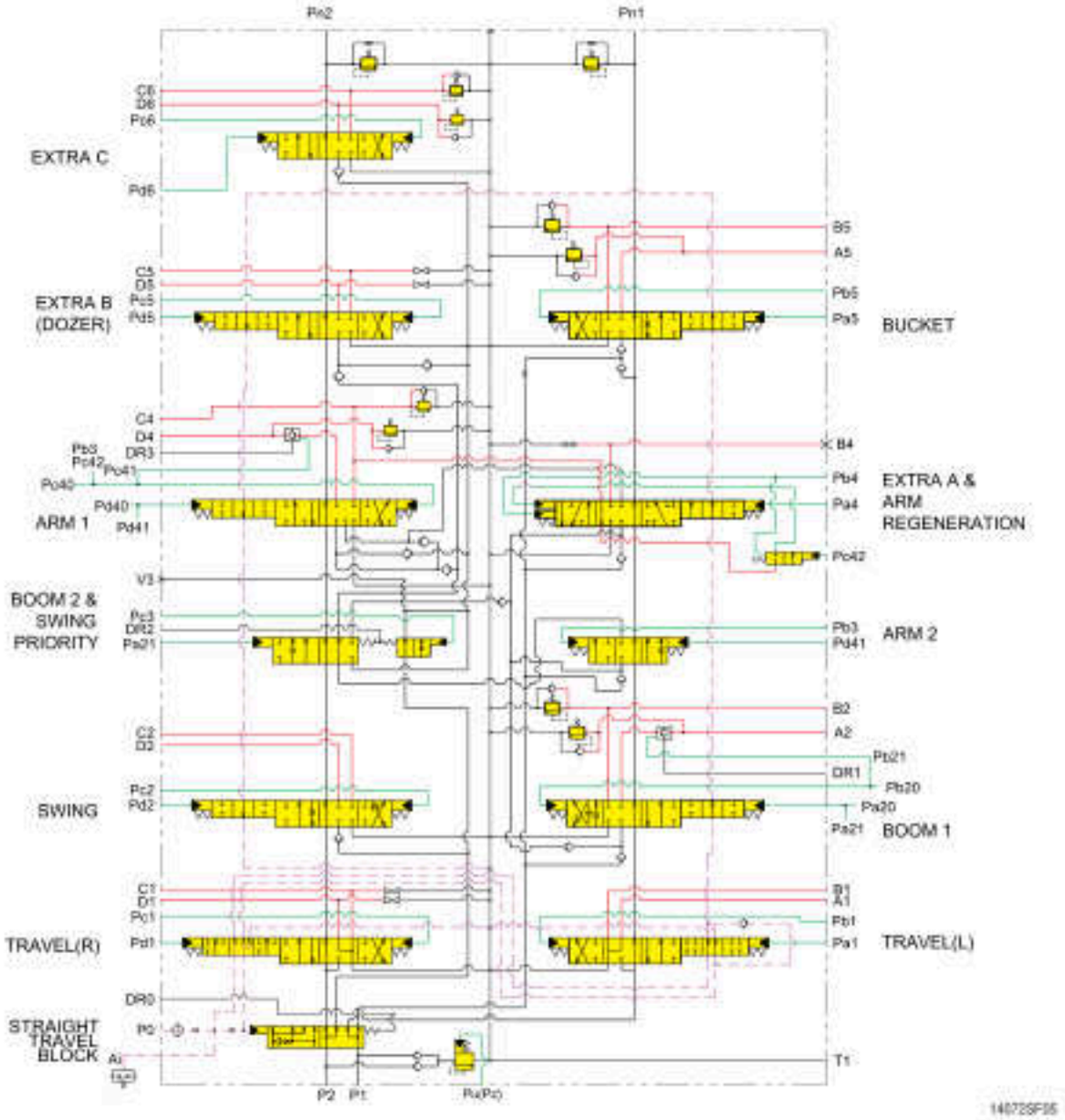
The oil from the front pump flows into the swing motor, boom cylinders and arm cylinder through the swing spool, boom 2 spool, arm 1 spool, and the parallel and confluence oil passage.

The oil from the rear pump flows into the boom cylinders, arm cylinder and bucket cylinder through the boom 1 spool, arm 2 spool, bucket spool and the parallel and confluence oil passage.

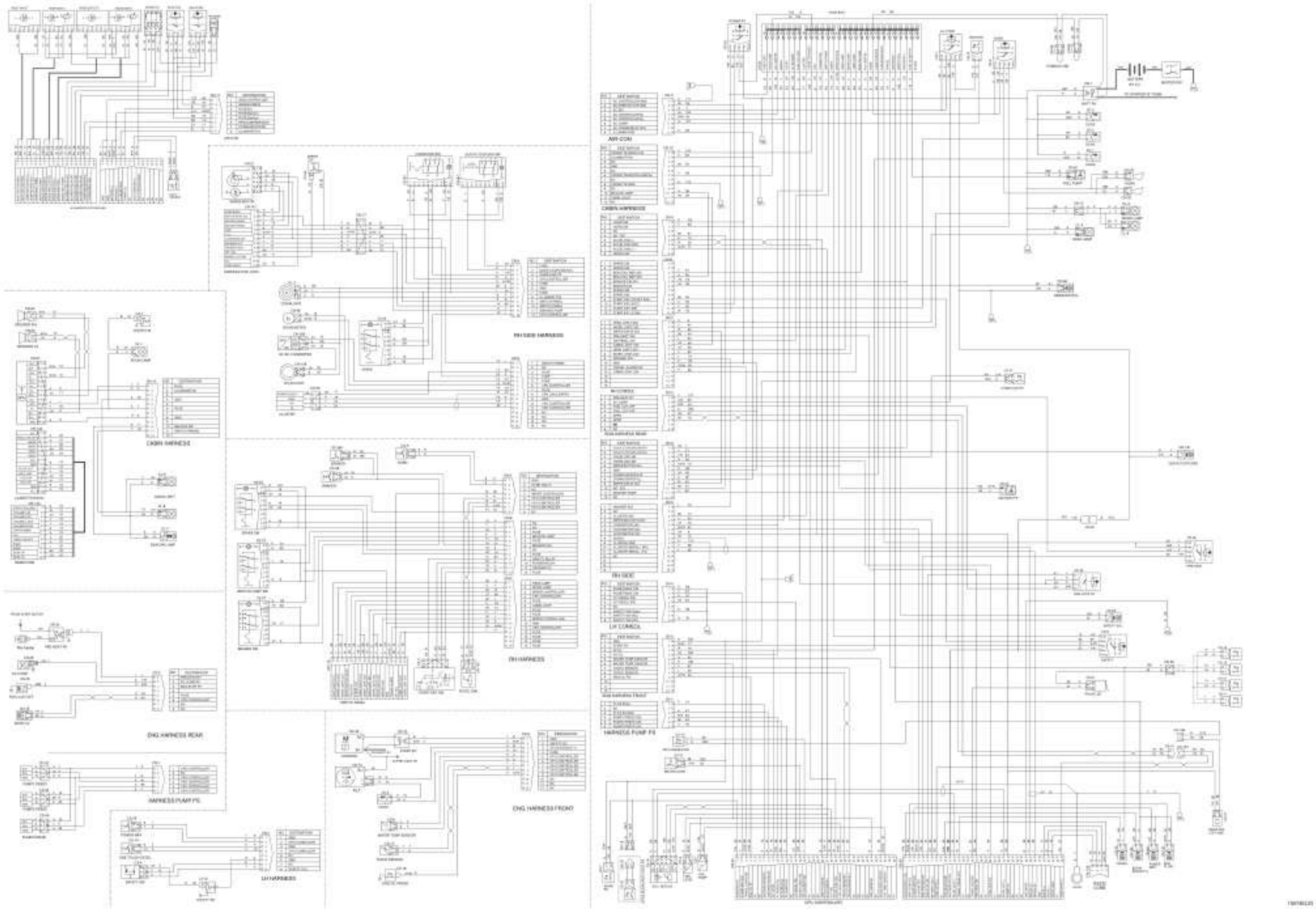
The superstructure swings and the boom, arm and bucket are operated.

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2. HYDRAULIC CIRCUIT



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