CRAWLER EXCAVATOR

SERVICE MANUAL

R160LC-7

HYUNDAI

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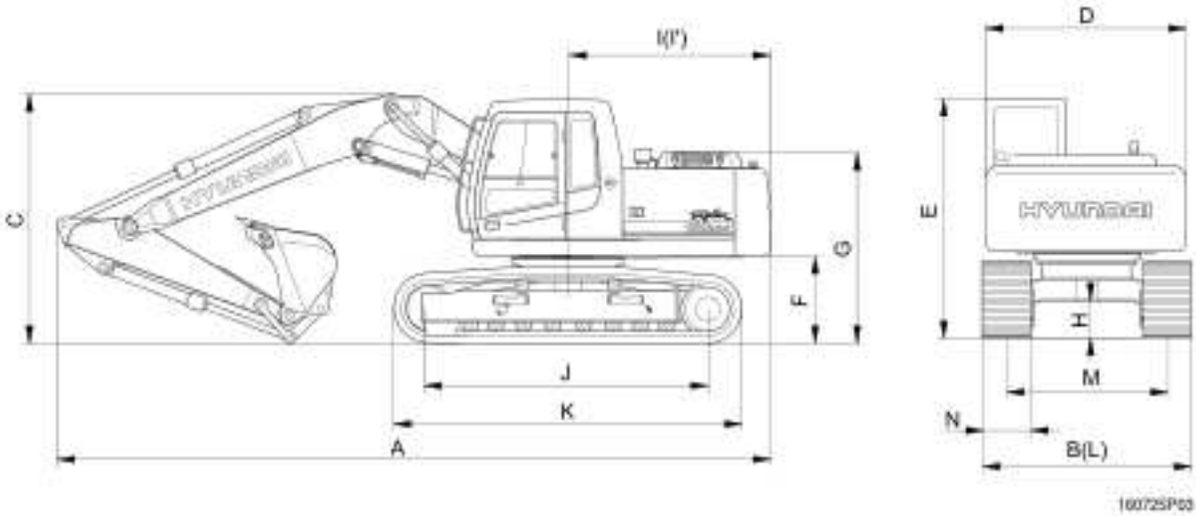
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2) 5.1m(16' 9") HYDRAULIC ADJUSTABLE BOOM, 2.6m(8' 6") ARM



Description		Unit	Specification
Operating weight		kg(lb)	17400(38360)
Bucket capacity(SAE heaped), standard		$m^3(yd^3)$	0.70(0.92)
Overall length	A	mm(ft-in)	8570(28' 1")
Overall width, with 600mm shoe	B		2590(8' 6")
Overall height	C		2820(9' 3")
Superstructure width	D		2475(8' 1")
Overall height of cab	E		2915(9' 7")
Ground clearance of counterweight	F		1035(3' 5")
Engine cover height	G		2295(7' 6")
Minimum ground clearance	H		460(1' 6")
Rear-end distance	I		2530(8' 4")
Rear-end swing radius	I'		2480(8' 2")
Distance between tumblers	J		3190(10' 6")
Undercarriage length	K		3980(13' 1")
Undercarriage width	L		2590(8' 6")
Track gauge	M		1990(6' 6")
Track shoe width, standard	N		600(24")
Travel speed(Low/high)		km/hr(mph)	3.7/5.6(2.3/3.5)
Swing speed		rpm	12.1
Gradeability		Degree(%)	30(58)
Ground pressure(600mm shoe)		kgf/cm^2(psi)	0.42(5.97)

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GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	-	6	Pump pressure harness	S816-006002	S816-106002
CN-2	AMP	8	Engine rear harness	S816-008002	S816-108002
CN-3	AMP	12	Engine front harness	S816-012002	S816-112002
CN-4	AMP	8	Cabin LH wire harness	S816-008002	S816-108002
CN-5	-	15	RH side harness	-	2-85262-1
CN-6	AMP	12	RH side harness	S816-012002	S816-112002
CN-7	-	15	Cabin RH wire harness	-	2-85262-1
CN-8	AMP	12	Cabin RH wire harness	S816-012002	S816-112002
CN-9	AMP	8	Cabin RH wire harness	S816-008002	S816-108002
CN-10	DEUTSCH	12	Frame harness	DT06-12S	DT06-12P
CN-11	DEUTSCH	8	Cabin LH wire harness	DT06-8S	-
CN-12	DEUTSCH	2	Work lamp harness	DT06-2S-P012	DT04-2P-P012
CN-13	DEUTSCH	2	Quick coupling harness	DT06-2S-P012	DT04-2P-P012
CN-15	KET	2	Two way	S814-002100	S814-102100
CN-17	DEUTSCH	8	Wipe harness	DT06-8S	DT04-8P
CN-19	-	2	EPPR control	S816-102002	-
CN-19A	-	2	Normal control	S816-002002	-
CN-19B	-	2	Emergency control	S816-002002	-
CN-20	MOLEX	2	Horn	36825-0211	-
CN-21	AMP	6	Wiper motor	925276-0	-
CN-22	-	2	Washer tank	MG640605	-
CN-23	KET	2	LH speaker	MG610070	7322-1520
CN-24	KET	2	RH speaker	MG610070	7322-1520
CN-25	MOLEX	2	Horn	36825-0211	-
CN-27	AMP	14	Cassette radio	173852	AMP14P
CN-28	-	1	Air-con comp	MWP-01F-B	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-45	RING TERM	1	Starter	S820-510000	-
CN-47	AMP	2	Emergency resistor	S810-002202	-
CN-48	-	2	Hour meter	S810-002202	-
CN-50	AMP	36	CPU	3441110	-
CN-51	AMP	36	CPU	3441110	-
CN-56	DEUTSCH	4	Cluster	-	DT04-4P
CN-60	-	2	Fusible link	7122-4125-50	-
CN-61	DEUTSCH	2	Fuel filler pump	DT06-2S-P012	DT01-2P-P012
CN-66	DEUTSCH	2	Breaker solenoid valve	DT06-2S-P012	DT01-2P-P012
CN-68	DEUTSCH	2	Safety solenoid valve	DT06-2S-P012	-
CN-70	DEUTSCH	2	Travel speed solenoid valve	DT06-2S-P012	-

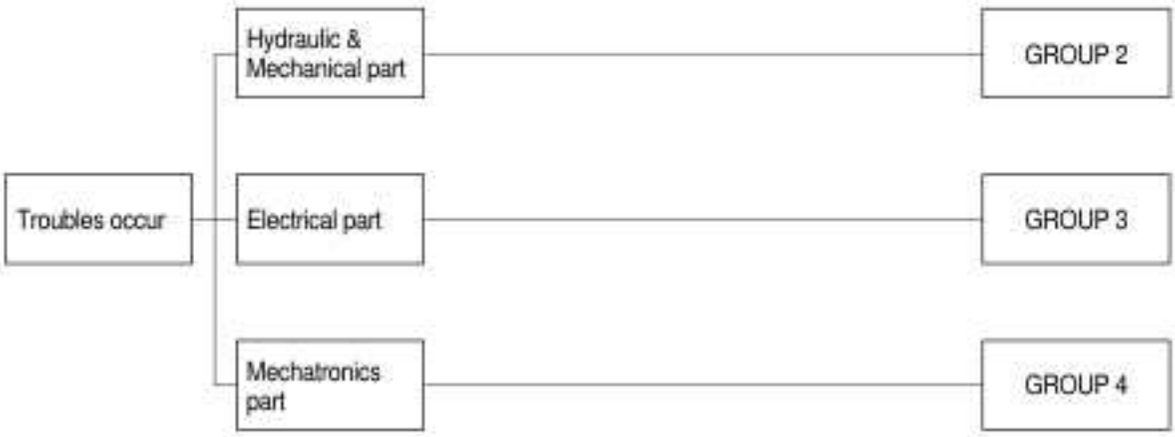
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GROUP 1 BEFORE TROUBLESHOOTING

1. INTRODUCTION

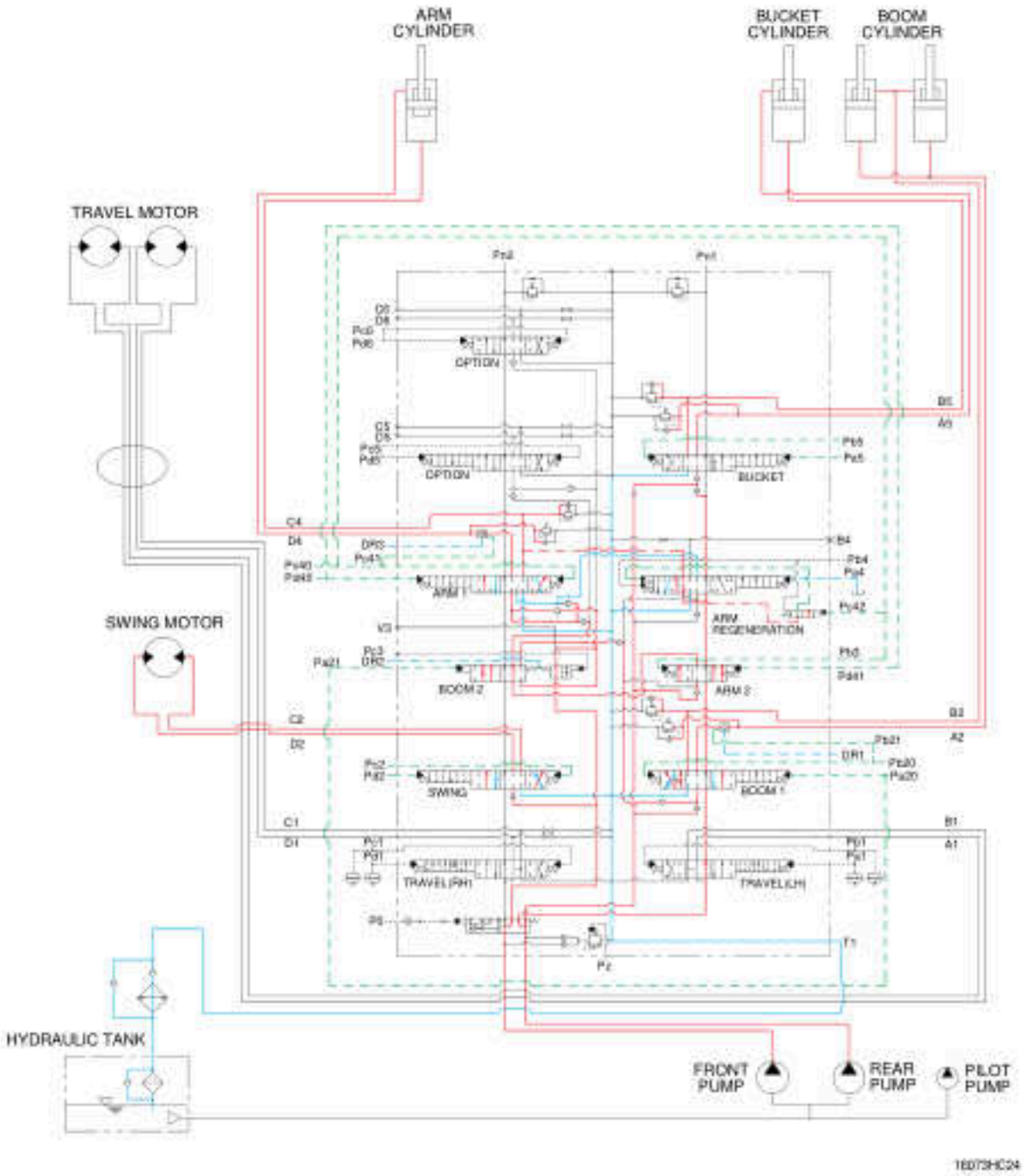
When a trouble is occurred in the machine, this section will help an operator to maintain the machine with easy.

The trouble of machine is parted Hydraulic & Mechanical system, Electrical system and Mechatronics system. At each system part, an operator can check the machine according to the troubleshooting process 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.

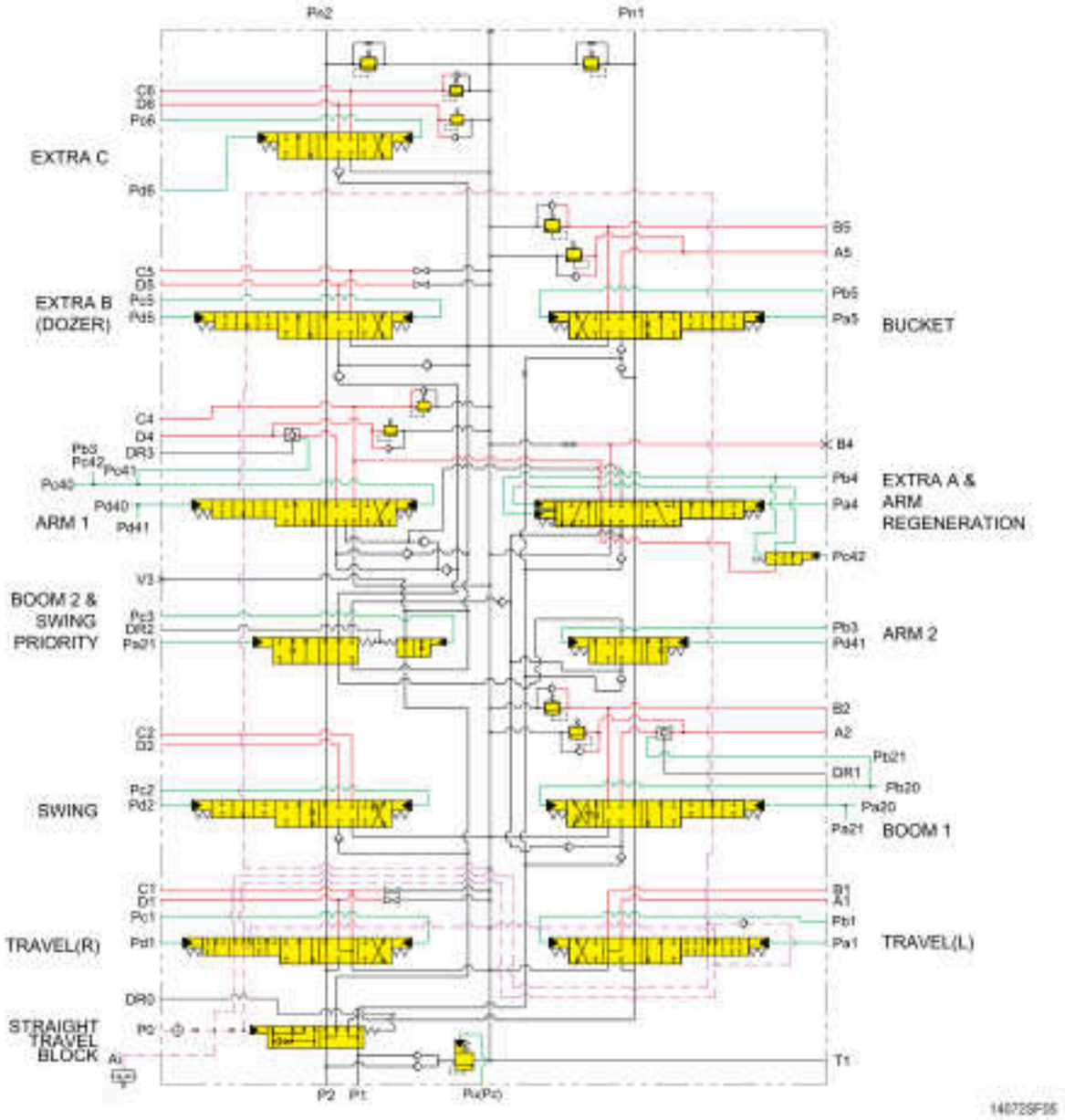
The oil from the front pump flows into the swing motor, boom cylinders and arm cylinder through the swing spool, boom 2 spool, arm 1 spool, and the parallel and confluence oil passage.

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.

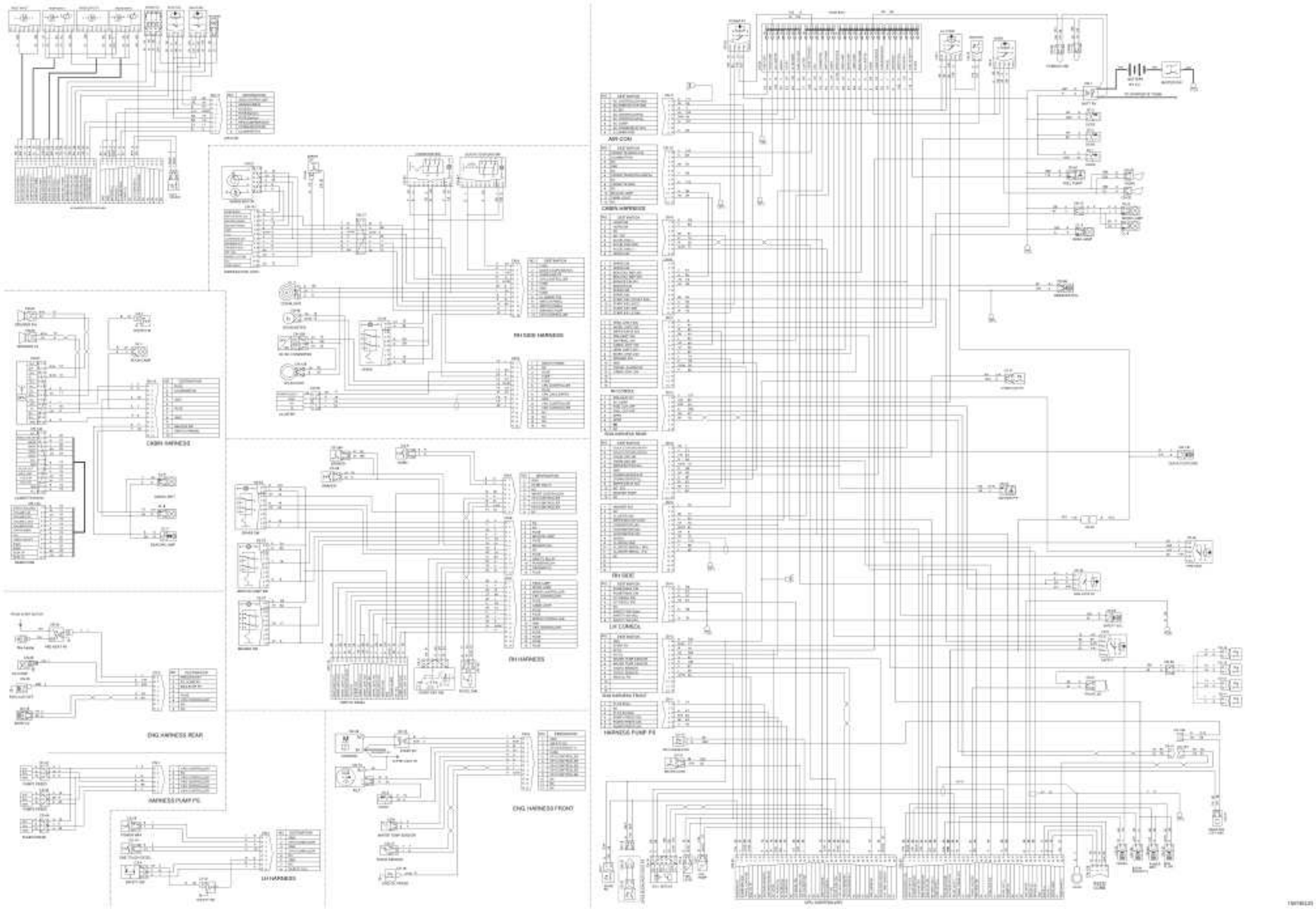
The superstructure swings and the boom, arm and bucket are operated.

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2. HYDRAULIC CIRCUIT



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