CRAWLER EXCAVATOR

SERVICE MANUAL

HX220L Tier 3

HYUNDAI

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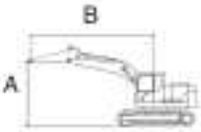
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Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
		Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
HX220LT3 LR	MONO BOOM	8500	6200	5300	800	-	-	-	-	-

· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)																		At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		10.5 m (34.4 ft)		12.0 m (39.4 ft)		13.5 m (44.3 ft)		Capacity		Reach
																						m (ft)
12.0m	kg																			*970	*970	9.79
39.4ft	lb																			*2140	*2140	(32.1)
10.5m	kg													*1530	*1530					*880	*880	11.17
34.4ft	lb													*3370	*3370					*1940	*1940	(36.6)
9.0m	kg													*2000	*2000	*1090	*1090			*930	*930	12.21
29.5ft	lb													*4410	*4410	*2400	*2400			*1830	*1830	(40.0)
7.5m	kg													*2050	*2050	*1800	*1800			*810	*810	12.99
24.6ft	lb													*4520	*4520	*3970	*3970			*1790	*1790	(42.6)
6.0m	kg													*2170	*2170	*2110	2050	*880	*880	*800	*800	13.55
19.7ft	lb													*4780	*4780	*4650	4520	*1940	*1940	*1760	*1760	(44.5)
4.5m	kg											*3530	*2530	*2350	*2350	*2220	1980	*1430	*1430	*810	*810	13.94
14.8ft	lb											*5580	*5580	*5180	*5180	*4890	4370	*3150	*3150	*1790	*1790	(45.7)
3.0m	kg					*5420	*5420	*4030	*4030	*3300	*3300	*2850	*2850	*2590	2400	*2360	1890	*1770	1500	*840	*840	14.15
9.8ft	lb					*11950	*11950	*8880	*8880	*7280	*7280	*6260	*6260	*5640	5290	*5200	4170	*3900	3310	*1850	*1850	(46.4)
1.5m	kg					*6960	*6960	*4850	*4850	*3810	3740	*3160	2870	*2780	2250	*2510	1800	*1960	1440	*880	*880	14.20
4.9ft	lb					*15340	*15340	*10710	*10710	*8400	8250	*7010	6330	*6130	4960	*5530	3970	*4320	3170	*1940	*1940	(46.6)
0.0m	kg			*2670	*2670	*6320	*6320	*5550	4630	*4260	3440	*3490	2670	*2990	2120	*2650	1710	*1970	1390	*940	*940	14.08
0.0ft	lb			*5890	*5890	*13930	*13930	*12240	10210	*9390	7580	*7690	5890	*6590	4670	*5840	3770	*4340	3060	*2070	*2070	(46.2)
-1.5m	kg	*2530	*2530	*3460	*3460	*5060	*5060	*6000	4330	*4600	3230	*3740	2510	*3170	2010	2730	1640	*1670	1350	*1040	*1040	13.81
-4.9ft	lb	*5580	*5580	*7630	*7630	*11360	*11360	*13230	9550	*10140	7120	*8250	5530	*6990	4430	6020	3620	*3680	2980	*2290	*2290	(45.3)
-3.0m	kg	*3520	*3520	*4440	*4440	*5700	6250	*6220	4180	*4810	3090	*3900	2410	3240	1940	2590	1600			*1170	*1170	13.36
-9.8ft	lb	*7760	*7760	*9790	*9790	*14770	13870	*13710	9220	*10600	6810	*8600	5310	7140	4280	5690	3530			*2580	*2580	(43.8)
-4.5m	kg	*4540	*4540	*5560	*5560	*7810	6310	*6230	4140	*4890	3040	*3950	2370	3210	1910	2580	1590			*1360	*1360	12.71
-14.8ft	lb	*10010	*10010	*12260	*12260	*17220	13910	*13730	9130	*10710	6700	*8710	5220	7080	4210	5910	3510			*3000	*3000	(41.7)
-6.0m	kg	*5640	*5640	*6840	*6840	*8000	6420	*6020	4180	*4750	3050	*3870	2370	*3200	1930					*1650	*1650	11.64
-19.7ft	lb	*12430	*12430	*15080	*15080	*17640	14150	*13270	9220	*10470	6720	*8530	5220	*7050	4250					*3640	*3640	(38.8)
-7.5m	kg	*6860	*6860	*8360	*8360	*7280	6620	*5570	4300	*4430	3130	*3580	2440	*2850	2010					*2170	1970	10.68
-24.6ft	lb	*15120	*15120	*18430	*18430	*16050	14590	*12280	9480	*9770	6900	*7890	5380	*6280	4430					*4780	4340	(35.0)
-9.0m	kg			*8410	*8410	*6130	*6130	*4760	4900	*3760	3300	*2880	2610							*2800	2560	9.13
-29.5ft	lb			*18540	*18540	*13510	*13510	*10490	9920	*8290	7280	*6350	5750							*6170	5640	(30.0)

Note 1. Lifting capacity are based on ISO 10567.

2. Lifting capacity of the HX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.

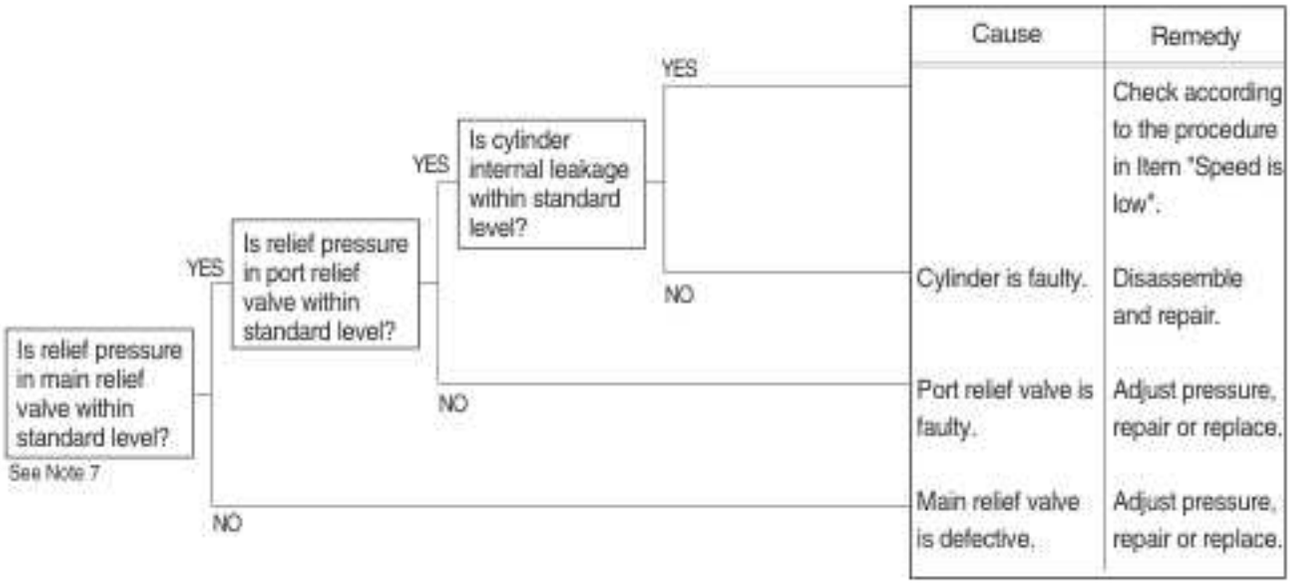
3. The Lift-point is bucket pivot mounting pin on the arm (without bucket mass).

4. *Indicates load limited by hydraulic capacity.

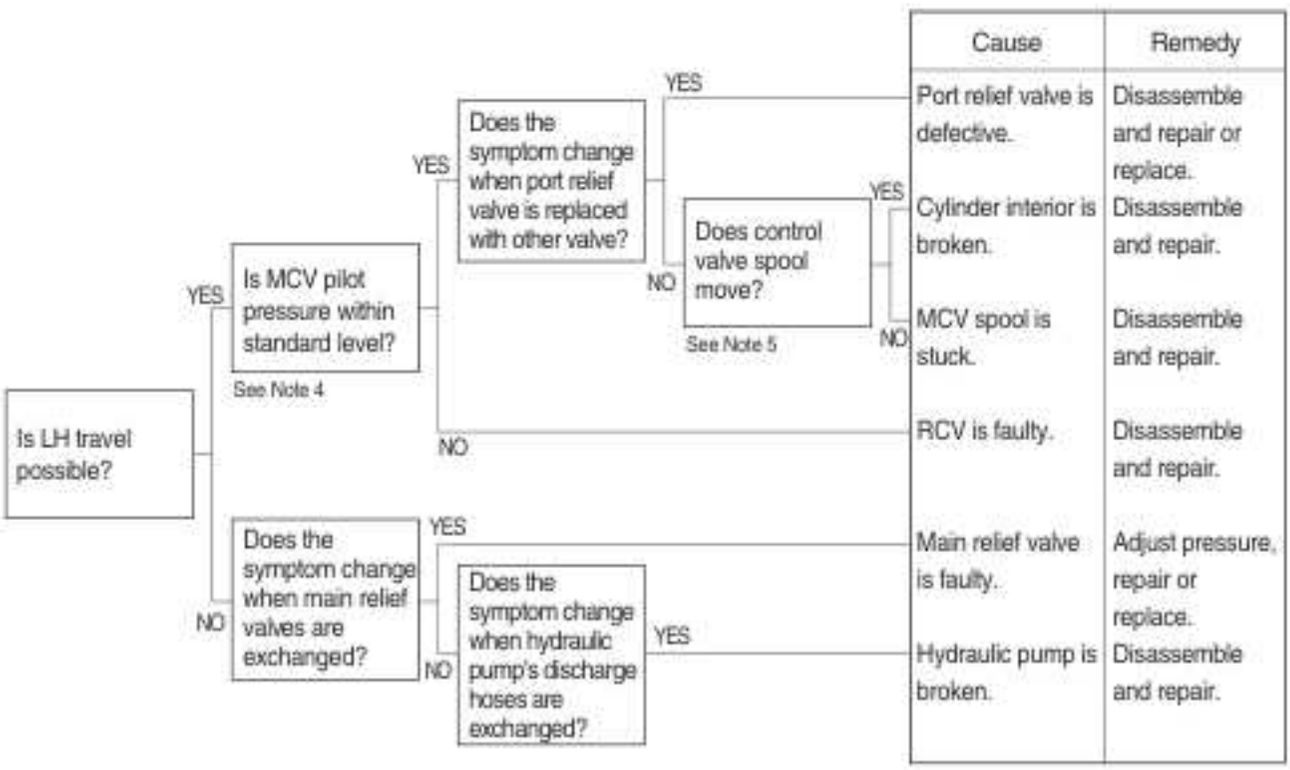
※ Lifting capacities are based upon a standard machine conditions.
Lifting capacities will vary with different work tools, ground conditions and attachments.
The difference between the weight of a work tool attachment must be subtracted.
Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.
Failure to comply to the rated load can cause possible personal injury or property damage.
Make adjustments to the rated load as necessory for non-standard configurations.

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4) BOOM, ARM OR BUCKET POWER IS WEAK



5) ONLY BUCKET OPERATION IS TOTALLY IMPOSSIBLE



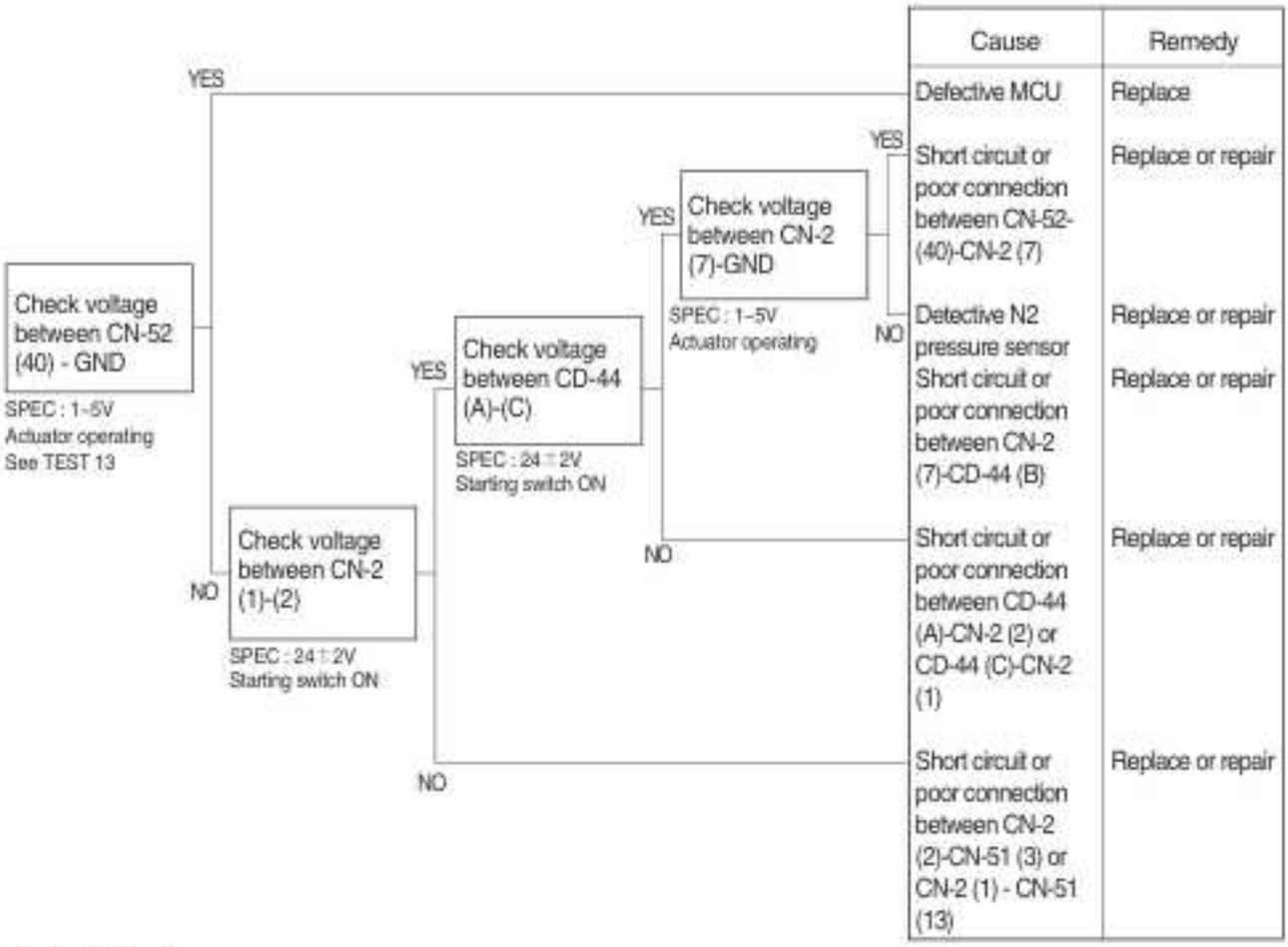
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9. MALFUNCTION OF NEGATIVE 2 PRESSURE SENSOR

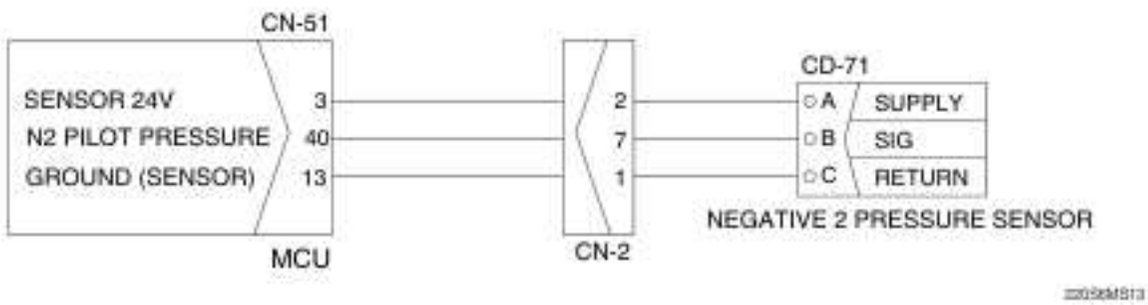
· Fault code : HCESPN 124, FMI 0~4

※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE



Wiring diagram



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3) ASSEMBLING PINION GEAR SUB ASSY

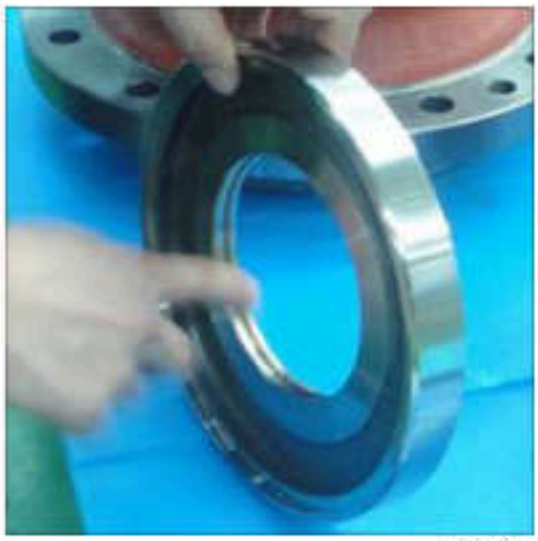
(1) Prepare drive shaft pinion gear vertical with ground.



(2) Fully apply grease (albania EP02) to O-ring groove of sleeve.

※ Be sure to maintain it vertical with ground when assembling it.

(3) Put O-ring into O-ring groove of sleeve. Fully apply grease on O-ring.



(4) Assemble taper bearing and sleeve into drive shaft using press jig.
Use special jig for pressing. Leave no space between sleeve and taper bearing.



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(13) Disassembling of check valve (Plug (27) 2EA)

① Loosen the plug (27) and remove the poppet (37), spring (38).
[Hexagon key wrench 10 mm]





(14) Main spool disassembly

① Fix the spool to the dedicated jig and take it apart.
(Spacer bolt, spring, stopper, spring seat)
[Hexagon key wrench 8 mm]

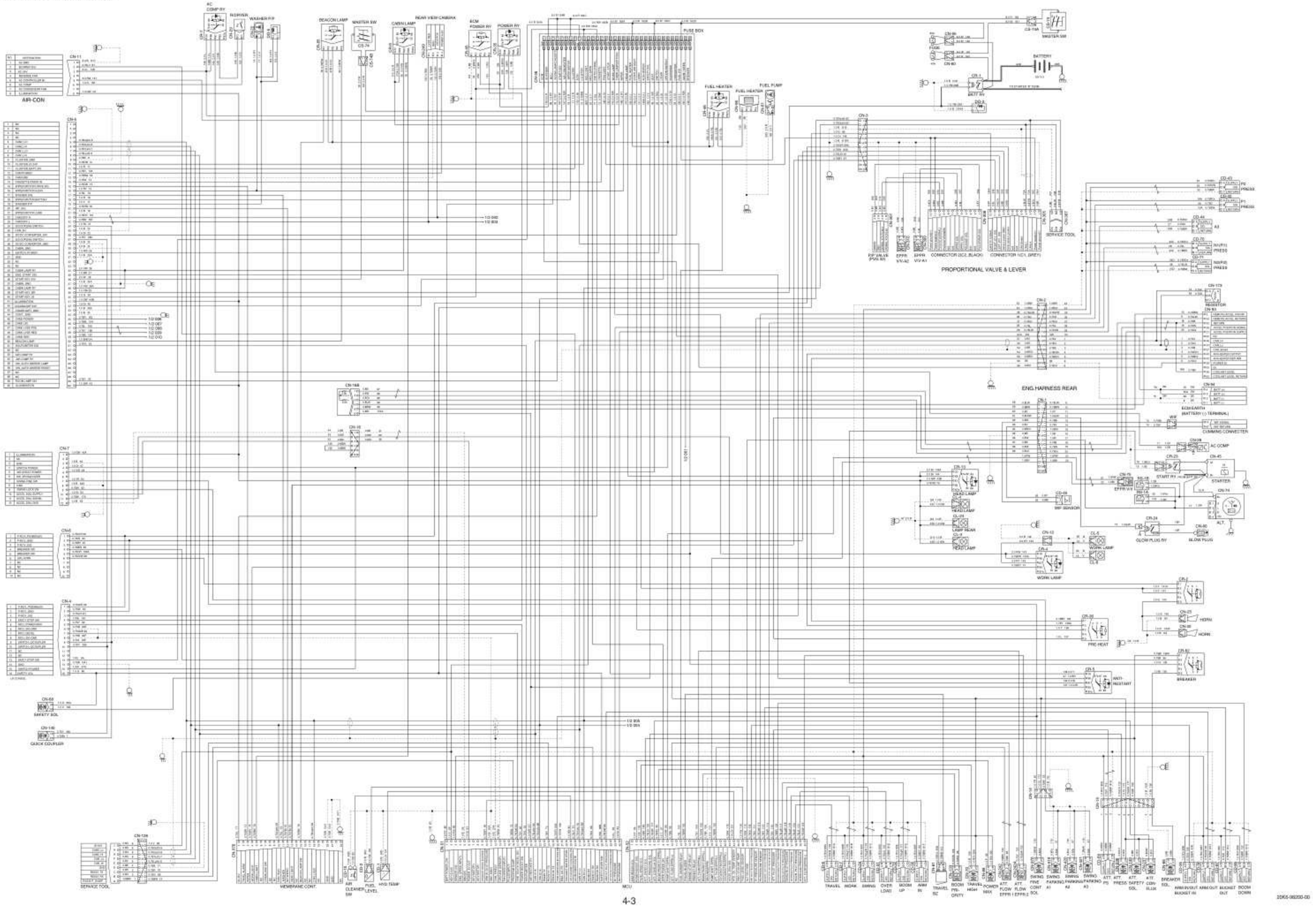




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ELECTRICAL CIRCUIT (1/2)

- MACHINE SERIAL NO. : -#00224



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