CRAWLER EXCAVATOR

SERVICE MANUAL

HX130LCR

HYUNDAI

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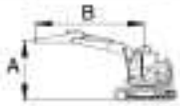
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Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX130LCR	2PCS	4556	1960	2350	500	-	-	-	-

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



Lift-point height (A)		Lift-point radius (B) 1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		At max. reach Capacity		Reach
												m (ft)
6.0m	kg					*3290	3160			*2660	*2660	4.68
19.7ft	lb					*7250	6970			*5860	*5860	(15.4)
4.5m	kg			*3660	*3660	*3290	3140			*2350	2040	5.78
14.8ft	lb			*8070	*8070	*7250	6920			*5180	4500	(19.0)
3.0m	kg			*5610	5540	*3910	2960	2730	1880	*2290	1710	6.35
9.8ft	lb			*12370	12210	*8620	6530	6020	4140	*5050	3770	(20.8)
1.5m	kg					4100	2750	2650	1810	2330	1590	6.53
4.9ft	lb					9040	6060	5840	3990	5140	3510	(21.4)
0.0m	kg			*4620	*4620	3960	2620	2590	1750	2390	1620	6.35
0.0ft	lb			*10190	*10190	8730	5780	5710	3860	5270	3570	(20.8)
-1.5m	kg			*7520	4790	3930	2590			2740	1850	5.78
-4.9ft	lb			*16580	10560	8660	5710			6040	4080	(19.0)
-3.0m	kg			*6200	4930	4040	2690					
-9.8ft	lb			*13670	10870	8910	5930					

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX130LCR	2PCS	4556	2260	2350	500	Down	-	-	-

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



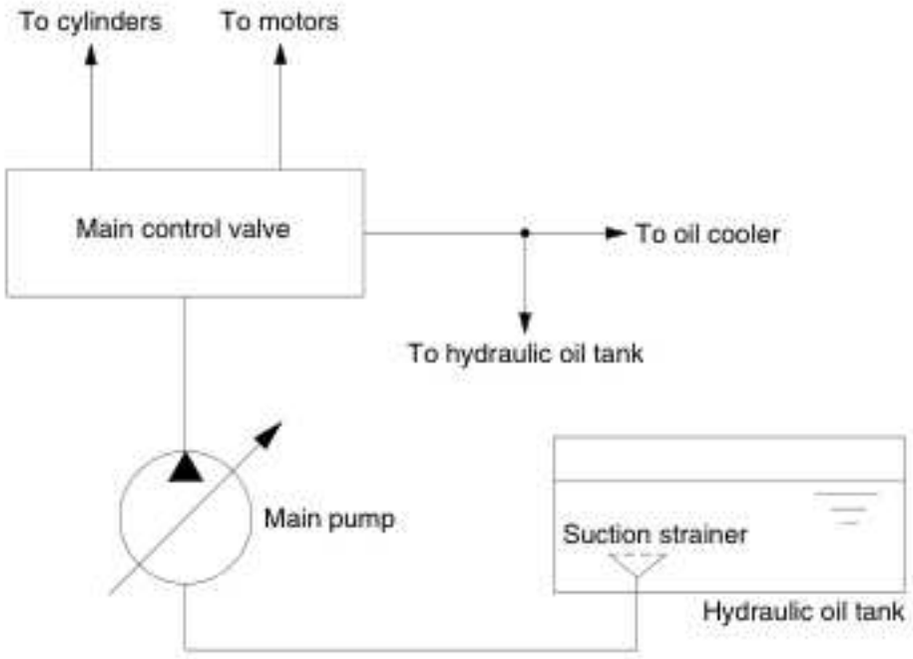
Lift-point height (A)		Lift-point radius (B) 1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		At max. reach Capacity		Reach
												m (ft)
7.5m	kg			*3530	*3530					*3290	*3290	3.08
24.6ft	lb			*7780	*7780					*7250	*7250	(10.1)
6.0m	kg					*2940	*2940			*2380	*2380	5.07
19.7ft	lb					*6480	*6480			*5250	*5250	(16.6)
4.5m	kg					*3050	*3050	*2620	2230	*2140	*2140	6.10
14.8ft	lb					*6720	*6720	*5780	4920	*4720	*4720	(20.0)
3.0m	kg			*5110	*5110	*3700	3420	*3200	2180	*2090	1840	6.64
9.8ft	lb			*11270	*11270	*8160	7540	*7050	4810	*4610	4060	(21.8)
1.5m	kg					*4510	3200	*3520	2100	*2160	1720	6.81
4.9ft	lb					*9940	7050	*7760	4630	*4760	3790	(22.4)
0.0m	kg			*4950	*4950	*5060	3040	*3760	2030	*2390	1760	6.64
0.0ft	lb			*10910	*10910	*11160	6700	*8290	4480	*5270	3880	(21.8)
-1.5m	kg			*7690	5590	*5110	2990	*3630	2020	*2870	1980	6.10
-4.9ft	lb			*16950	12320	*11270	6590	*8000	4450	*6330	4370	(20.0)
-3.0m	kg			*6580	5710	*4400	3060			*3610	2610	5.07
-9.8ft	lb			*14510	12590	*9700	6750			*7960	5750	(16.6)

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GROUP 2 MAIN CIRCUIT

The main hydraulic circuit consists of suction circuit, delivery circuit, return circuit and drain circuit.
The hydraulic system consists of one main pump, one control valve, one swing motor, four cylinders and two travel motors.
The swash plate type variable displacement axial piston pump is used as the main pump and is driven by the engine at ratio 1.0 of engine speed.

1. SUCTION AND DELIVERY CIRCUIT



The pumps receive oil from the hydraulic tank through a suction strainer. The discharged oil from the pump flows into the control valve and goes out the tank ports.
The oil discharged from the main pump flows to the actuators through the main control valve.
The main control valve controls the hydraulic functions.
The return oil from the actuators flows to the hydraulic tank through the main control valve and the oil cooler.

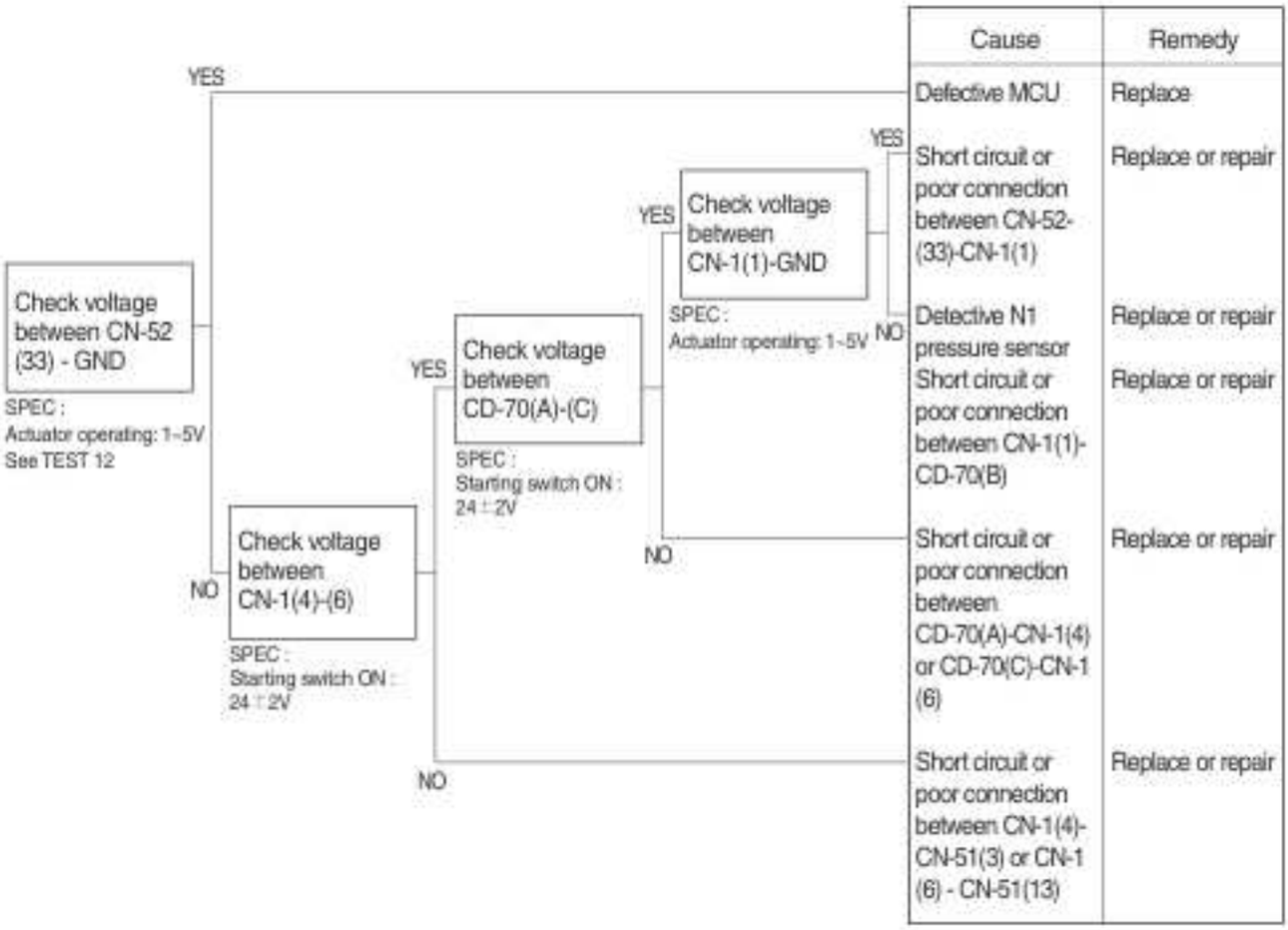
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8. MALFUNCTION OF NEGATIVE 1 PRESSURE SENSOR

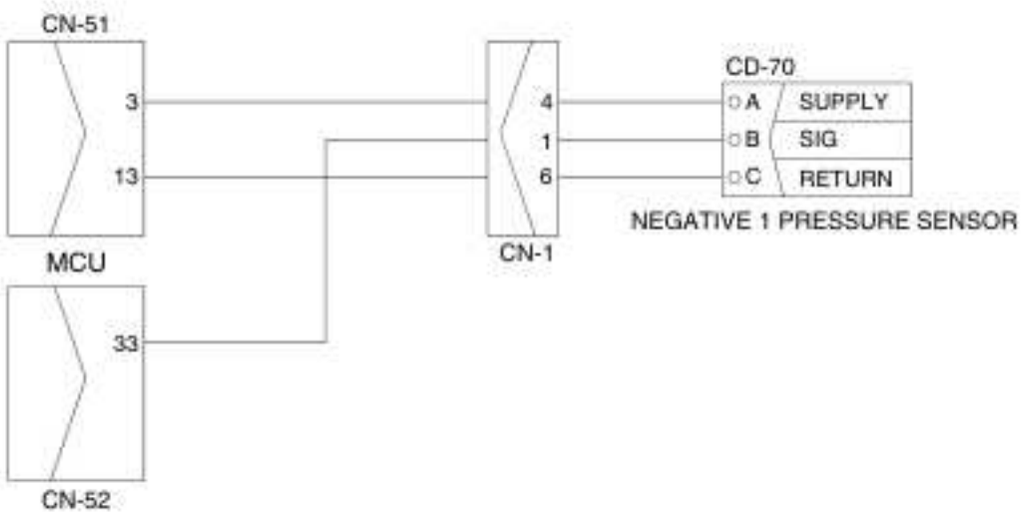
· Fault code : HCESPN 123, FMI 0~4

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

1) INSPECTION PROCEDURE



Wiring diagram



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(3) Fit tilting bush (214) of swash plate (212) to tilting pin (531), and fit swash plate (212) with shoe plate (211) to swash plate support (251) correctly.

※ Confirm with fingers of both hands that swash plate can be removed smoothly.

※ Apply grease to sliding sections of swash plate (212) and swash plate support (251), and drive shaft (111, 113) can be fitted easily.

※ Take care not to damage shoe plate (211) surface.



140Z98MP24

(4) To pump casing (271, 272), fit drive shaft (111, 113) set with bearing (123), bearing spacer (127) and stop ring (824).



140Z98MP25

(5) In assemble of front pump, assemble seal cover (F) (261) to pump casing (271) and fix it with hexagon socket head bolt (406).

※ Apply grease lightly to oil seal in seal cover (F) (261).

※ For assemble oil seal (774), taking full care not to damage it.



140Z98MP26

(6) Assemble piston cylinder subassembly [cylinder (141), piston subassembly (151, 152), set plate (153), spherical bush (156) and cylinder spring (157)]. Fitting spline phases of cylinder, spherical bush (156) and drive shaft (111, 113), insert piston cylinder subassembly into pump casing (271, 272).



140Z98MP27

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(19) Shrink fit taper roller bearing (3) on drive shaft, complete drive shaft sub assembly.



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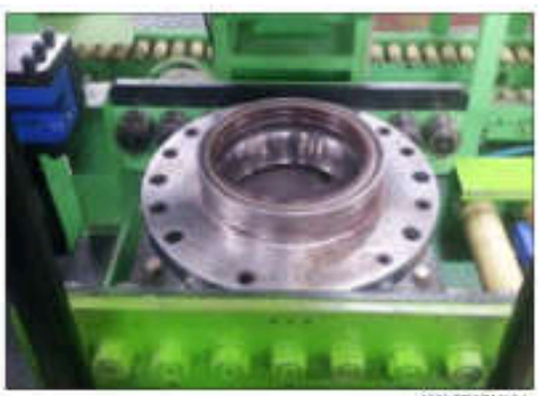
Casing assembly

(20) Press outer ring of the taper bearing in the casing (8) by using the jig.



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(21) Press in oil seal (27) by using the jig.
※ Be careful of the direction of the assembly.



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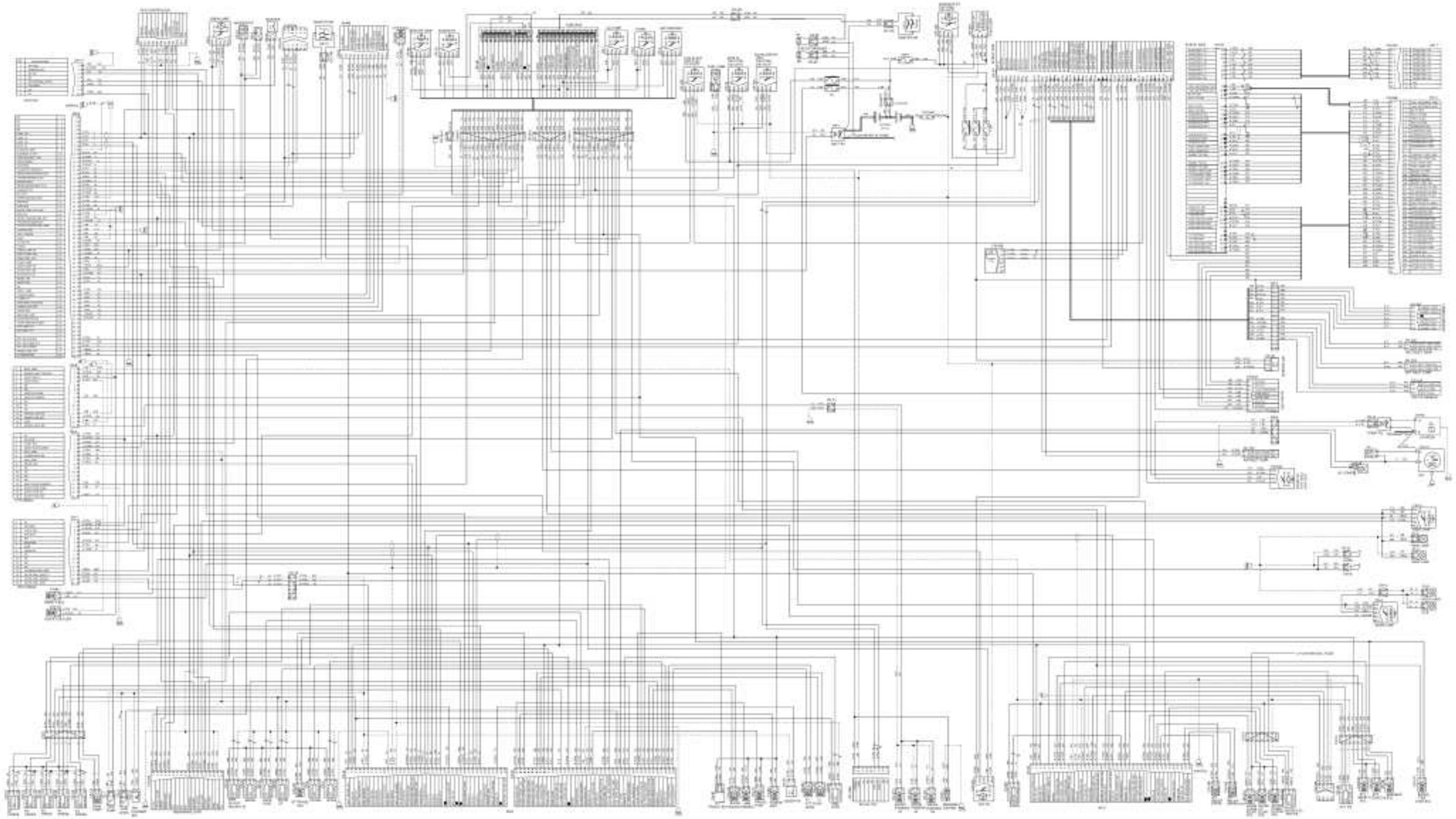
(22) Assemble drive shaft sub assembly.
※ Be careful of damage of oil seal.



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· ELECTRICAL CIRCUIT (1/4, SERIAL NO. : -#0333)



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