CRAWLER EXCAVATOR

SERVICE MANUAL

HX210A L, NL

HYUNDAI

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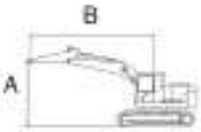
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5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX210A NL	MONO BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5650	2920	4700	500	-	-	-	-	-

- : 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)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg							*4250	*4250			*3190	*3190	6.24
	lb							*9370	*9370			*7030	*7030	(20.5)
6.0 m (19.7 ft)	kg							*4440	*4440			*2920	*2920	7.36
	lb							*9790	*9790			*6440	*6440	(24.1)
4.5 m (14.8 ft)	kg							*4950	4660	*4730	3270	*2840	*2840	8.05
	lb							*10910	10270	*10430	7210	*6260	*6260	(26.4)
3.0 m (9.8 ft)	kg					*7370	6680	*5790	4420	*5090	3170	*2880	2640	8.41
	lb					*16250	14730	*12760	9740	*11220	6990	*6350	5820	(27.6)
1.5 m (4.9 ft)	kg					*9140	6200	*6690	4190	*5640	3060	*3040	2540	8.49
	lb					*20150	13670	*14750	9240	*12210	6750	*6700	5600	(27.9)
0.0 m (0.0 ft)	kg			*6220	*6220	*10180	5940	*7360	4030	5630	2970	*3380	2590	8.30
	lb			*13710	*13710	*22440	13100	*16230	8880	12190	6550	*7410	5710	(27.2)
-1.5 m (-4.9 ft)	kg	*6700	*6700	*10680	*10680	*10430	5860	7600	3950	5500	2950	*3920	2800	7.82
	lb	*14770	*14770	*23550	*23550	*22990	12920	16760	8710	12130	6500	*8640	6170	(25.7)
-3.0 m (-9.8 ft)	kg	*11310	*11310	*14370	11030	*9920	5810	*7310	3990			*5050	3300	6.98
	lb	*24930	*24930	*31680	24320	*21870	13030	*16120	8800			*11130	7280	(22.9)
-4.5 m (-14.8 ft)	kg			*11800	11380	*8290	6120					*6180	4550	5.63
	lb			*26010	25090	*18280	13490					*13620	10030	(18.5)

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. ENGINE FAULT CODE

Fault code J1939 SPN J1939 FMI	Item	Description
111 629 12	Engine control module critical internal failure	Bad intelligent device or component
122 102 3	Intake manifold 1 pressure sensor circuit	Voltage above normal, or shorted to high source
123 102 4	Intake manifold 1 pressure sensor circuit	Voltage below normal, or shorted to low source
124 102 16	Intake manifold 1 pressure	Data valid but above normal operating range - moderately severe level
125 102 18	Intake manifold 1 pressure	Data valid but below normal operating range - moderately severe level
133 974 3	Remote accelerator pedal or lever position sensor 1 circuit	Voltage above normal, or shorted to high source
134 974 4	Remote accelerator pedal or lever position sensor 1 circuit	Voltage below normal, or shorted to low source
135 100 3	Engine oil rifle pressure 1 sensor circuit	Voltage above normal, or shorted to high source
141 100 4	Engine oil rifle pressure 1 sensor circuit	Voltage below normal, or shorted to low source
143 100 18	Engine oil rifle pressure	Data valid but below normal operating range - moderately severe level
144 110 3	Engine coolant temperature 1 sensor circuit	Voltage above normal, or shorted to high source
145 110 4	Engine coolant temperature 1 sensor circuit	Voltage below normal, or shorted to low source
146 110 16	Engine coolant temperature	Data valid but above normal operating range - moderately severe level
147 91 1	Accelerator pedal or lever position 1 sensor circuit frequency	Data valid but below normal operating range
148 91 0	Accelerator pedal or lever position sensor 1	Data valid but above normal operational range - most severe level
151 110 0	Engine coolant temperature	Data valid but above normal operational range - most severe level

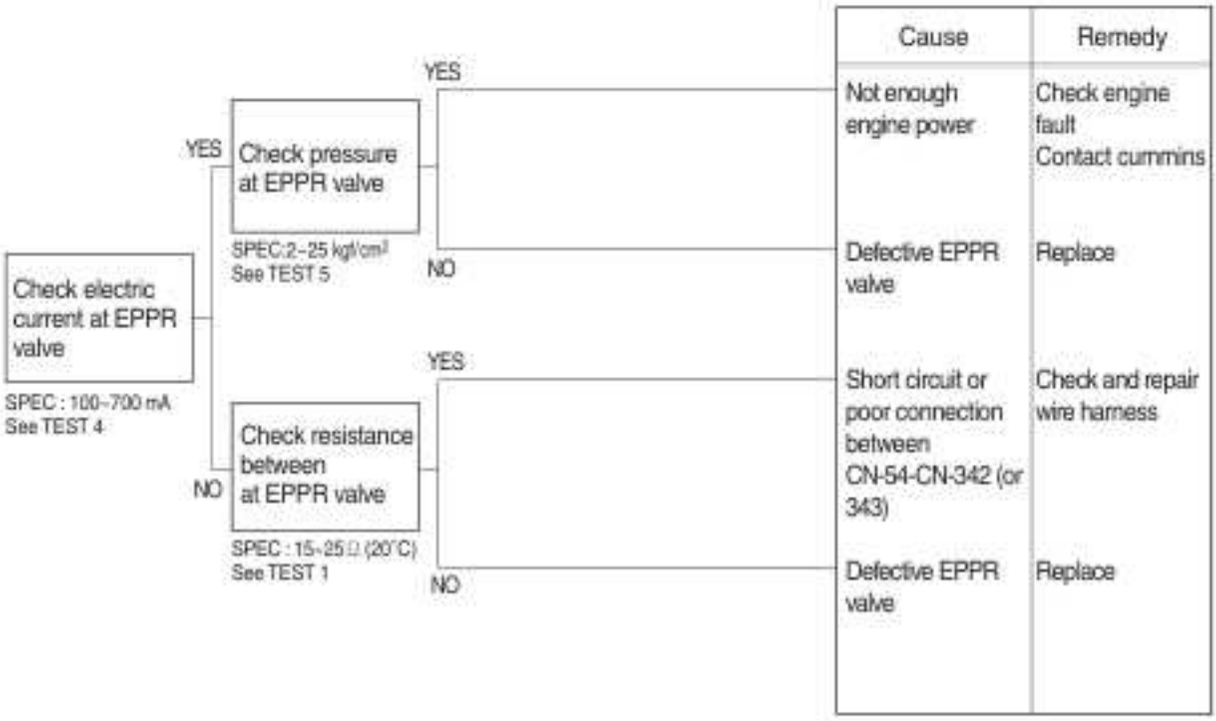
※ Some fault codes are not applied to this machine.

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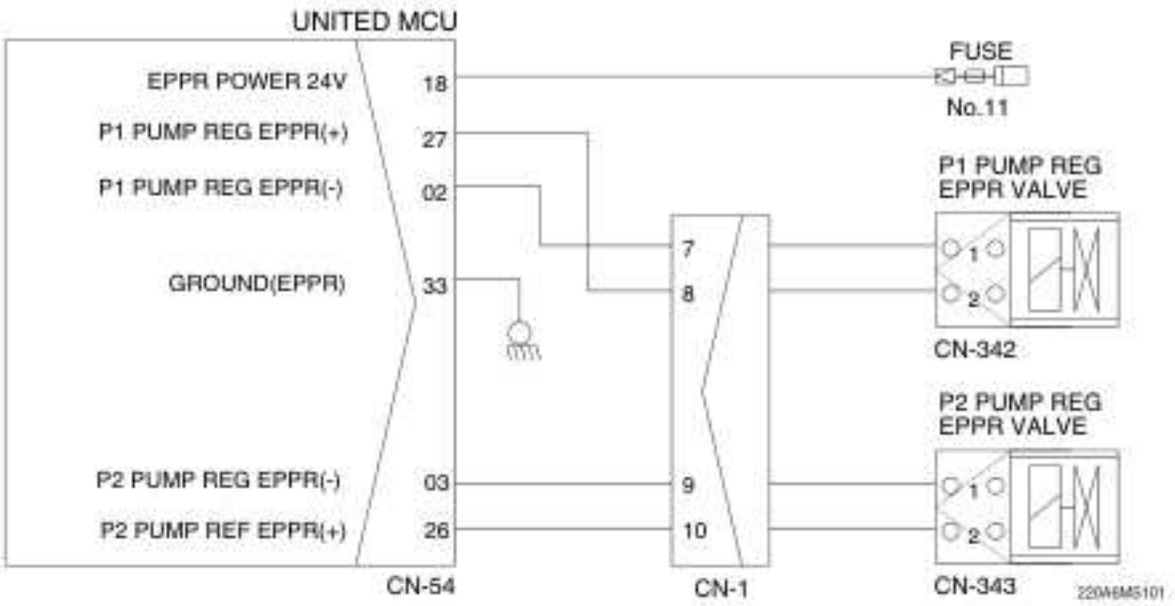
2. ENGINE STALL

※ 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.

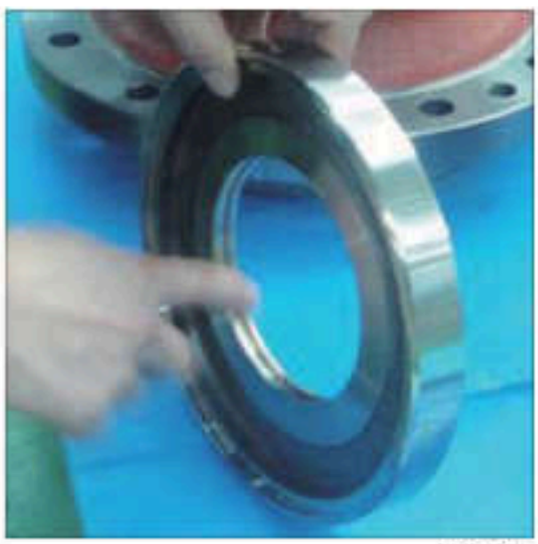


2209A03M21

(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.



2209A03M22

(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.



2209A03M23

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(3) Check whether the can gateway function abnormality.

① Check CAN data of attachment sensor line.

a. Disconnect the Deutsch 4-pin connector near the laser catcher and connect a CAN data collector (PCAN, CANoe, etc.)

b. Check whether the CAN ID data in the table below is being output.

c. If it is output at a period of 20 ms, suspect a malfunction of the CAN gateway itself.



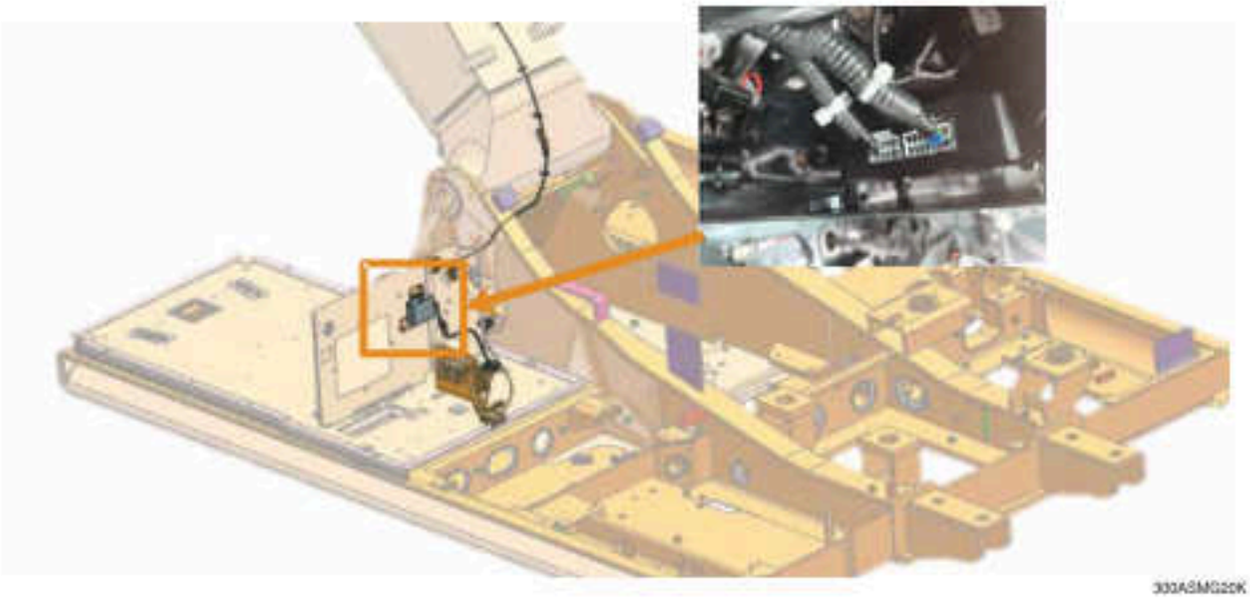
300ASMG19EC

※ CAN ID matching information for each sensor

Sensor	CAN ID
Boom sensor	0x18F029C1
Arm sensor	0x18F029C2
Bucket sensor	0x18F029C3
Body sensor	0x18F029C4

② Mounting location of CAN gateway

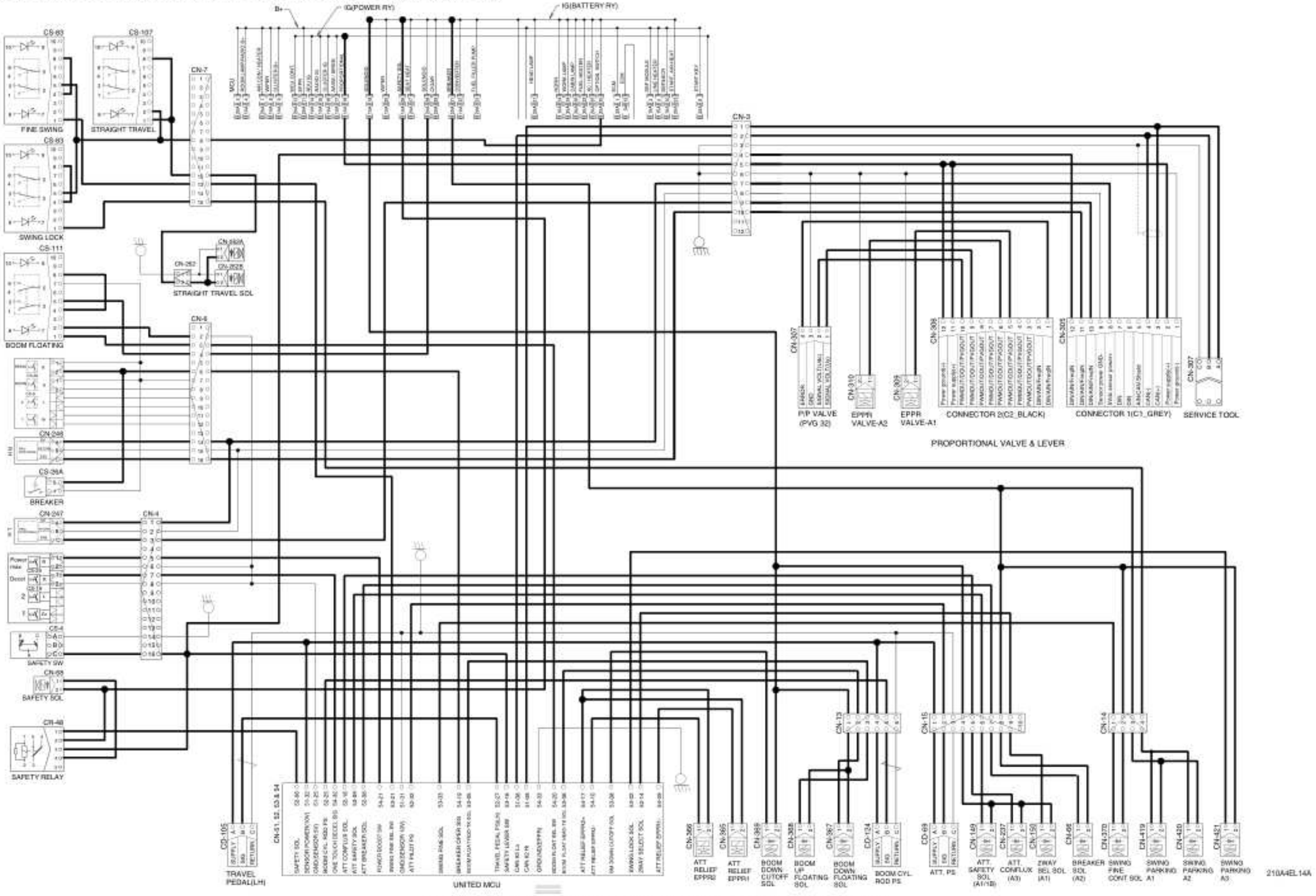
It is located near the RMCU at the bottom behind the seat in the cab.



300ASMG20K

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10. ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : -#0002)



※ The circuit diagram may differ from the equipment, so please check before a repair.

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