CRAWLER EXCAVATOR

SERVICE MANUAL

HX160, HX180A L

HYUNDAI

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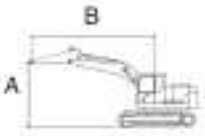
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Model	Type	Boom	Arm	Counterweight	Shoe	Wheel	Dozer		Outrigger	
HX180A LD	2-PIECE BOOM	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		5097	2600	3250	600	-	Down	-	-	-

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



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		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			*4310	*4310					*3570	*3570	5.00
	lb			*9500	*9500					*7870	*7870	(16.4)
6.0 m (19.7 ft)	kg					*4130	*4130			*3050	*3050	6.39
	lb					*9110	*9110			*6720	*6720	(21.0)
4.5 m (14.8 ft)	kg			*4680	*4680	*4250	*4250			*2870	*2870	7.20
	lb			*10320	*10320	*9370	*9370			*6330	*6330	(23.6)
3.0 m (9.8 ft)	kg			*5870	*5870	*4750	4170	*3660	2970	*2850	*2850	7.63
	lb			*12940	*12940	*10470	9190	*8070	6550	*6280	*6280	(25.0)
1.5 m (4.9 ft)	kg			*7130	6000	*5330	4000	*4480	2900	*2970	2770	7.75
	lb			*15720	13230	*11750	8820	*9880	6390	*6550	6110	(25.4)
0.0 m (0.0 ft)	kg			*7880	5780	*5760	3880	*3840	2860	*3250	2830	7.56
	lb			*17370	12740	*12700	8550	*8470	6310	*7170	6240	(24.8)
-1.5 m (-4.9 ft)	kg	*8290	*8290	*7950	5710	*5810	3830			*3800	3110	7.05
	lb	*18280	*18280	*17530	12590	*12810	8440			*8380	6860	(23.1)
-3.0 m (-9.8 ft)	kg			*7200	5780							
	lb			*15870	12740							

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 with your local HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

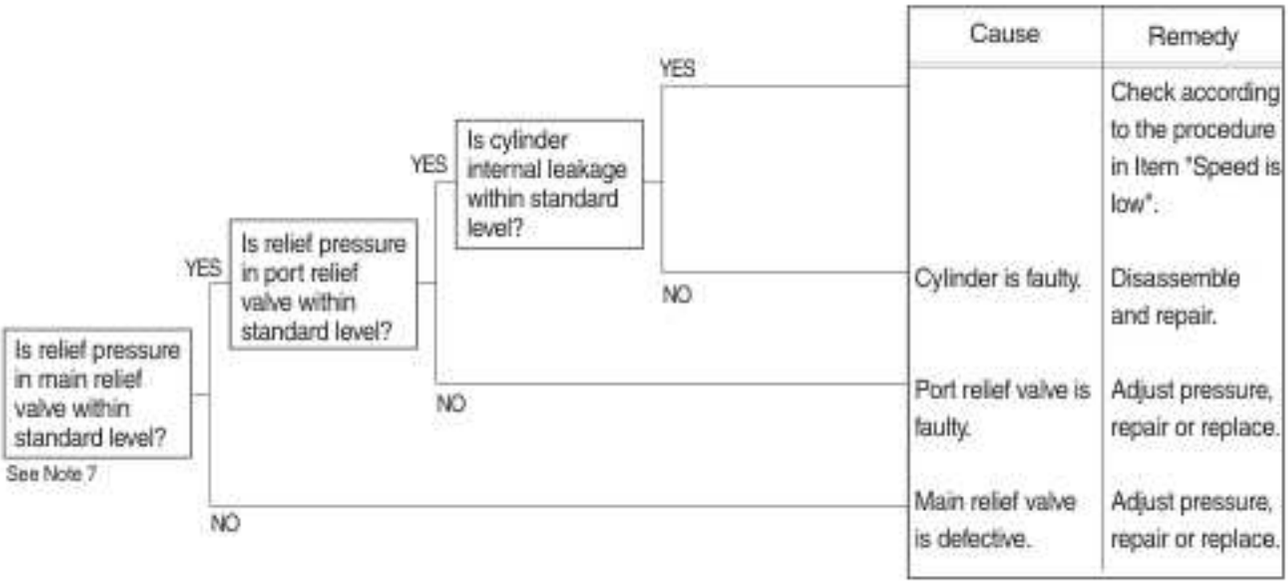
⚠ Failure to comply to the rated load can cause serious injury, death, or property damage. Make adjustments to the rated load as necessory for non-standard configurations.

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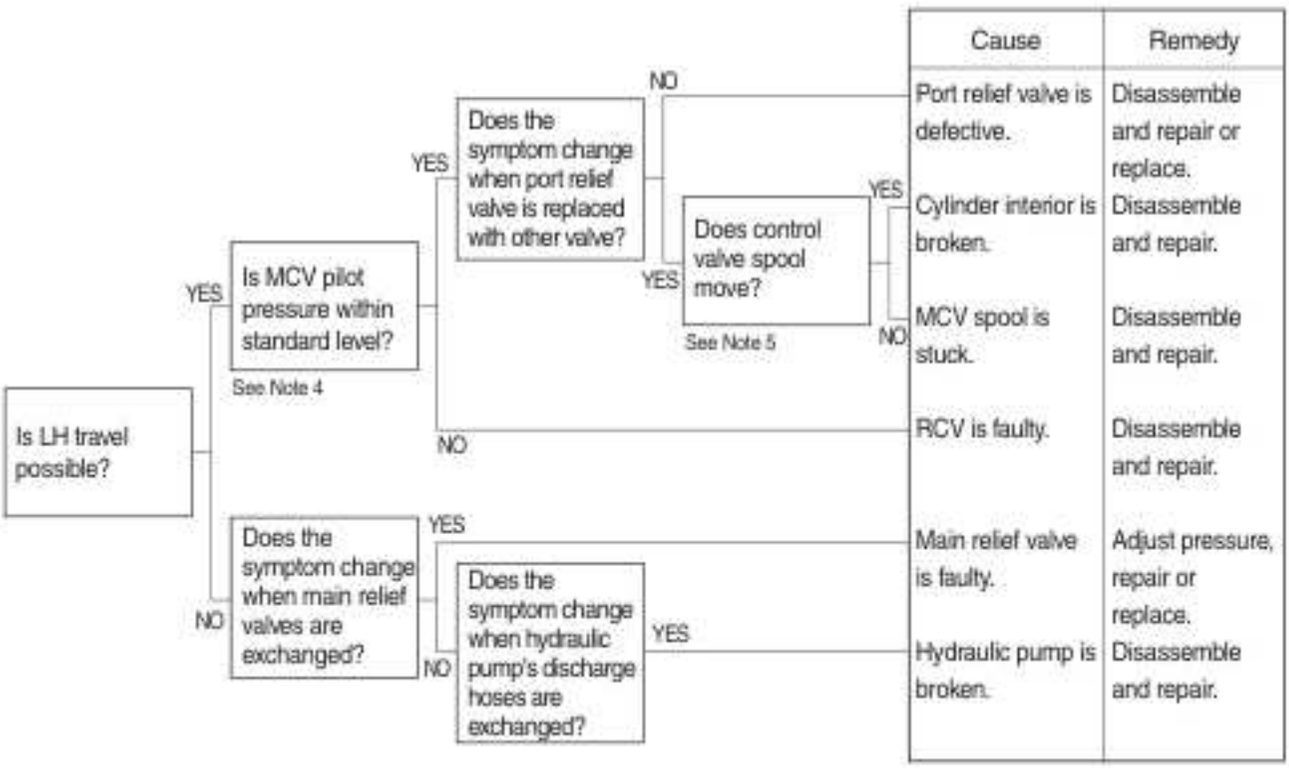
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-246	DEUTSCH	3	Proportional valve-RH	DT06-3S	DT04-3P
CN-246A	DEUTSCH	4	Preheater harness-timer	DT06-4S-EP06	-
CN-246B	DEUTSCH	4	Preheater harness-timer	-	DT04-4P-EP06
CN-247	DEUTSCH	3	Proportional valve-LH	DT06-3S	DT04-3P
CN-249	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-E005
CN-260	MTA	2	Preheater harness-fuse 15A	03 01305	-
CN-261	MTA	2	Preheater harness-fuse 5A	03 01305	-
CN-262	DEUTSCH	2	I/conn (Frame harness - S/travel harness)	DT06-2S-EP06	DT04-2P-E005
CN-262A	DEUTSCH	2	Straight travel solenoid 1	DT06-2S-EP06	-
CN-262B	DEUTSCH	2	Straight travel solenoid 2	DT06-2S-EP06	-
CN-263A	DEUTSCH	2	2 PCS & dozer solenoid	DT06-2S-EP06	DT04-2P-E005
CN-263B	DEUTSCH	2	2 PCS & dozer solenoid	DT06-2S-EP06	DT04-2P-E005
CN-265	FCI	8	Controller	22.1000.30.10	-
CN-267	MOLEX	10	Easy start timer	15-97-5101	-
CN-269	TE	2	Dosing pump	963040-3	-
CN-305	DEUTSCH	12	Proportional-connector 1	DTM06-12SA	-
CN-306	DEUTSCH	12	Proportional-connector 2	DTM06-12SB	-
CN-307	DEUTSCH	3	Proportional-service tool	DT06-3S-EP06	DT06-3P-E005
CN-308	DEUTSCH	4	Proportional-valve	DT06-4S-EP06	DT04-4P
CN-308A	DEUTSCH	4	Proportional-valve	DT06-4S-EP06	DT04-4P
CN-309	DEUTSCH	2	Proportional-EPPR valve-A2	DT06-2S-EP06	-
CN-310	DEUTSCH	2	Proportional-EPPR valve-A1	DT06-2S-EP06	-
CN-363	AMP	12	Jog dial module	174045-2	-
CN-365	DEUTSCH	2	Attach EPPR valve-LH	DT06-2S-EP06	-
CN-365A	DEUTSCH	3	Attach relief exit	DT06-3S-EP06	DT04-3P-E005
CN-366	DEUTSCH	2	Attach EPPR valve-RH	DT06-2S-EP06	-
CN-370	DEUTSCH	2	Swing fine control solenoid	DT06-2S-EP06	DT04-2P-E005
CN-376	AMP	34	Membrane controller	4-1437290-1	-
CN-378	DEUTSCH	2	P2 EPPR solenoid (A2)	DT06-2S-EP06	-
CN-379	-	12	SCR Supply module	F16-001	-
CN-380	DEUTSCH	2	DEF tank level sensor	DT06-4S-EP06	-
CN-381	DEUTSCH	2	DEF line heater 1	DT06-2S-EP06	-
CN-382	DEUTSCH	2	DEF line heater 2	DT06-2S-EP06	-
CN-383	DEUTSCH	2	DEF line heater 3	DT06-2S-EP06	-
CN-384	DEUTSCH	2	Coolant valve	1-967325-3	-
CN-385	-	7	Fan clutch	965570	-
CN-401	TE	35	AAVM controller	776164-1	-
CN-402	DEUTSCH	6	Front view camera	DT06-6S-P021	DT04-6P-P021
CN-403	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-E005

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4) BOOM, ARM OR BUCKET POWER IS WEAK



5) ONLY BUCKET OPERATION IS TOTALLY IMPOSSIBLE



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3) ASSEMBLING PINION GEAR SUB ASSY

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

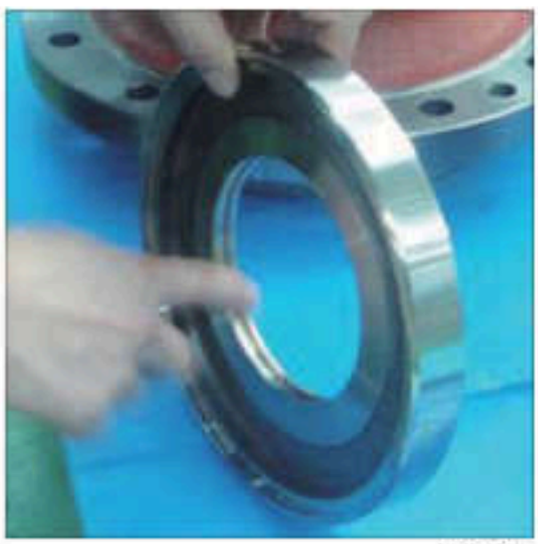


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(2) Fully apply grease (albania EP02) to O-ring groove of sleeve.

※ 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.



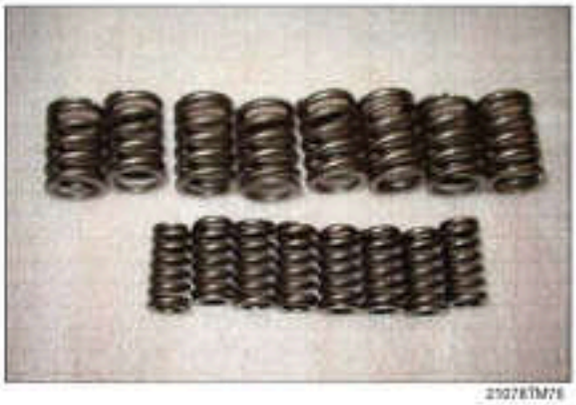
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(4) Assemble taper bearing and sleeve into drive shaft using press jig.
Use special jig for pressing. Leave no space between sleeve and taper bearing.



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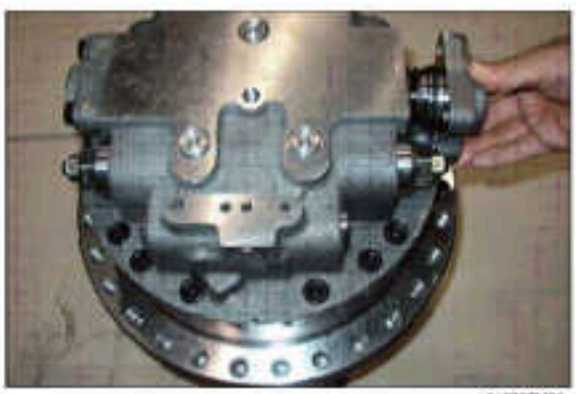
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21) Assemble valve plate (70) into rear cover (29).



22) After assembling shaft casing (1) and rear cover (29).
Assemble spool assembly (30), spring (38), spool (39), cover (37) after then complete assembly with wrench bolt (45).

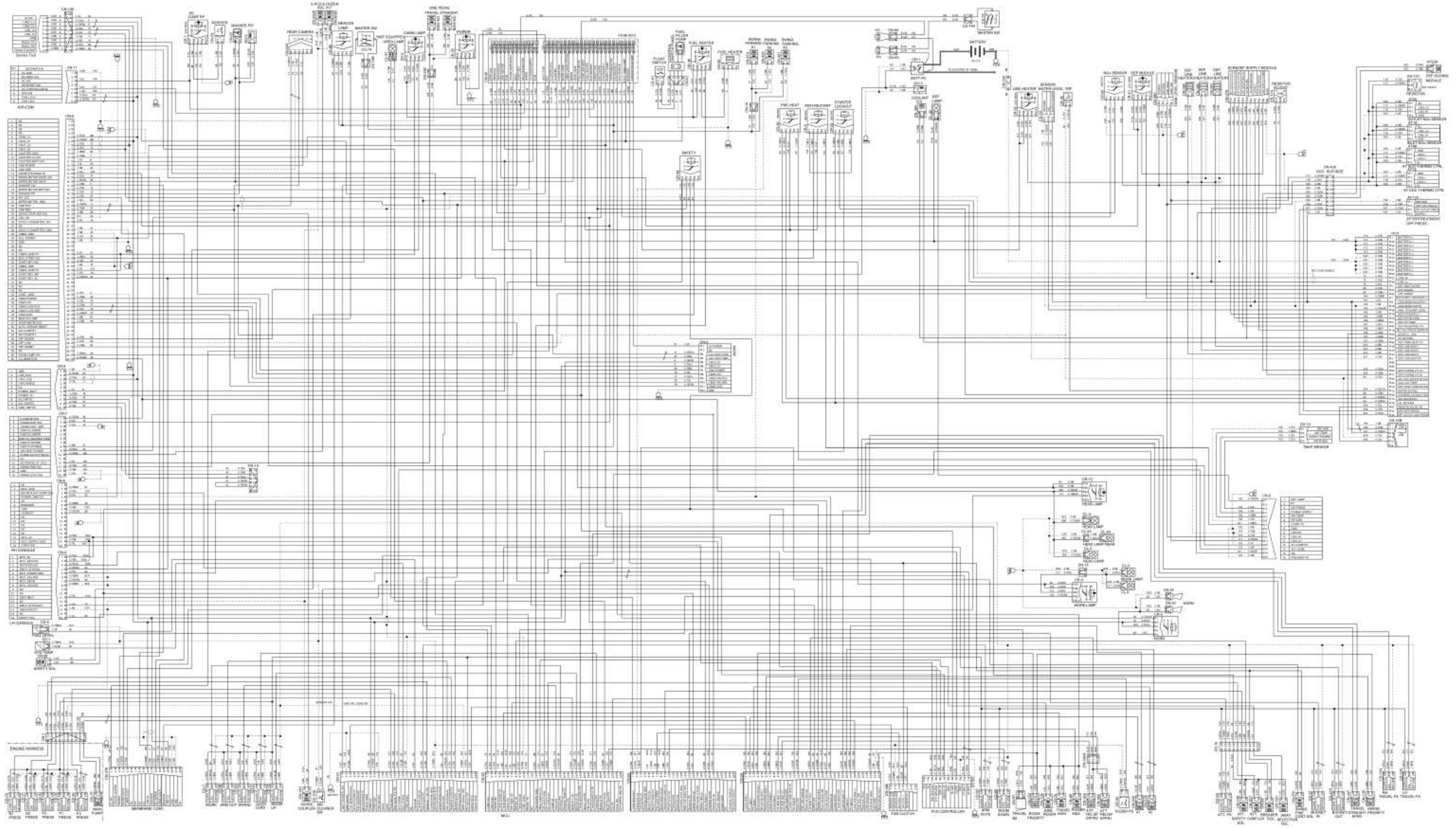


23) Finish assembly.



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· ELECTRICAL CIRCUIT (1/3)



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