CRAWLER EXCAVATOR

SERVICE MANUAL

HX210, HX220S

HYUNDAI

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8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

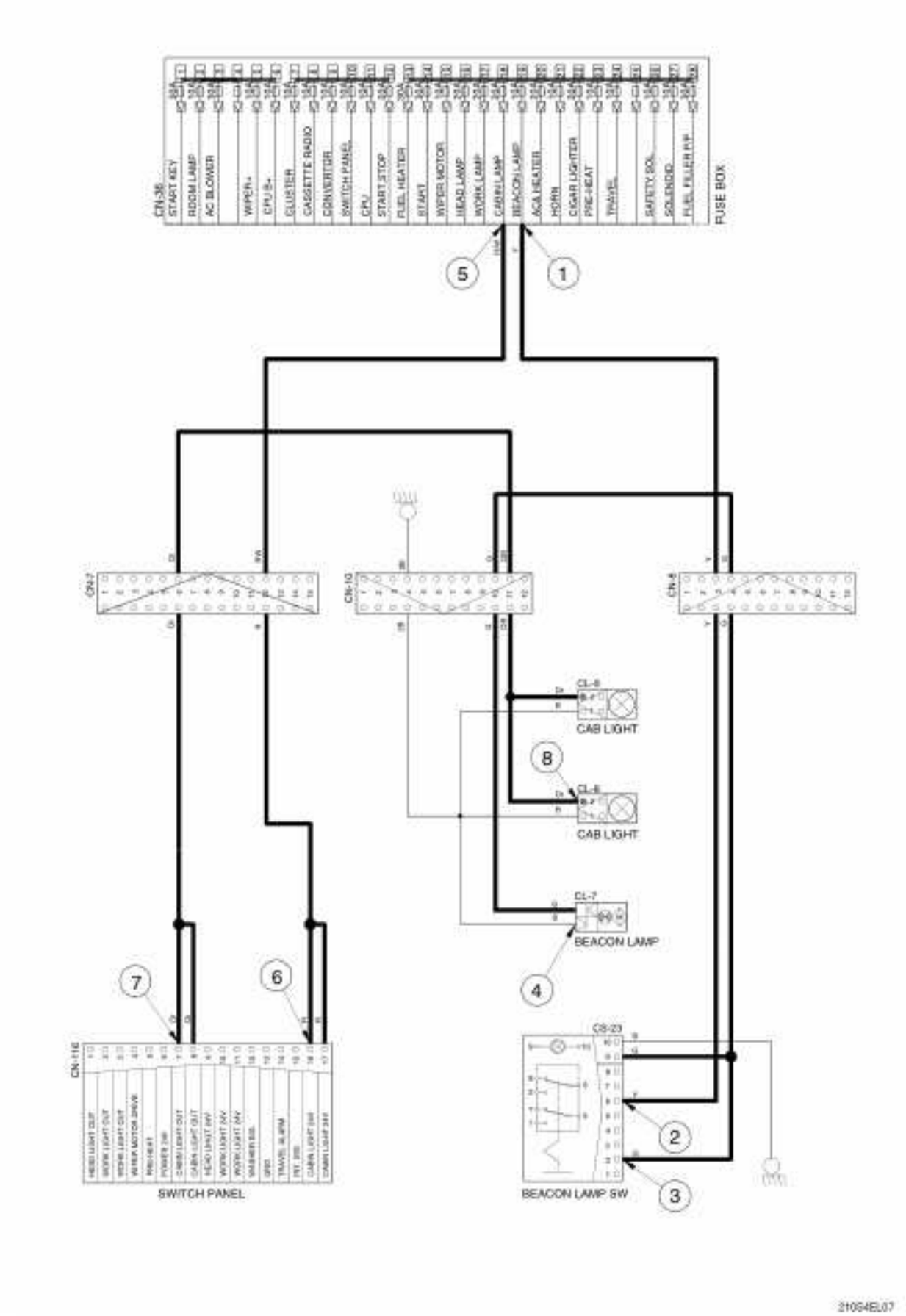
Item	Specification
Model	HD Hyundai Construction Equipment 6BTAA-5.9 (HM5.9)
Type	4-cycle, turbocharged, charge air cooled, mechanical controlled diesel engine
Cooling method	Water cooled
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder borexstroke	102 × 120 mm (4.02 " × 4.72 ")
Piston displacement	5900 cc (360 cu in)
Compression ratio	17.3 : 1
Rated gross horse power (SAE J1995)	148 Hp at 2000rpm (110 kW at 2000 rpm)
Rated net horse power (SAE J1349)	145 Hp at 2000 rpm (108 kW at 2000 rpm)
Maximum torque at 1300 rpm	64 kgf · m (463 lbf · ft)
Engine oil quantity	14 ℓ (3.8 U.S. gal) : -#1289 20 ℓ (5.3 U.S. gal) : #1290-
Dry weight	437 kg (963 lb)
High idling speed	2250 ± 50 rpm
Low idling speed	800 ± 100 rpm
Rated fuel consumption	95 g/Hp · hr at 1200 rpm
Starting motor	Lucas 24V
Alternator	Lucas 24V-75A
Battery	2×12V×100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 117 cc/rev
Maximum pressure	350 kgf/cm² (4978 psi)
Rated oil flow	2 × 234 ℓ/min (61.8 U.S. gpm/ 51.4 U.K. gpm)
Rated speed	2000 rpm

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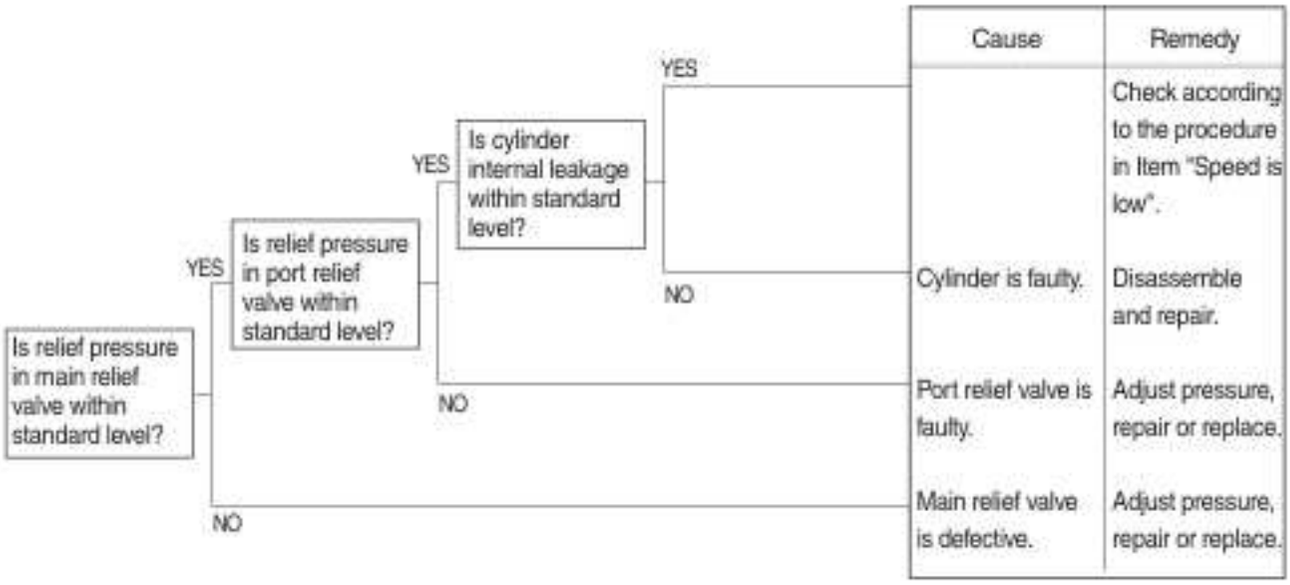
BEACON LAMP AND CAB LIGHT CIRCUIT



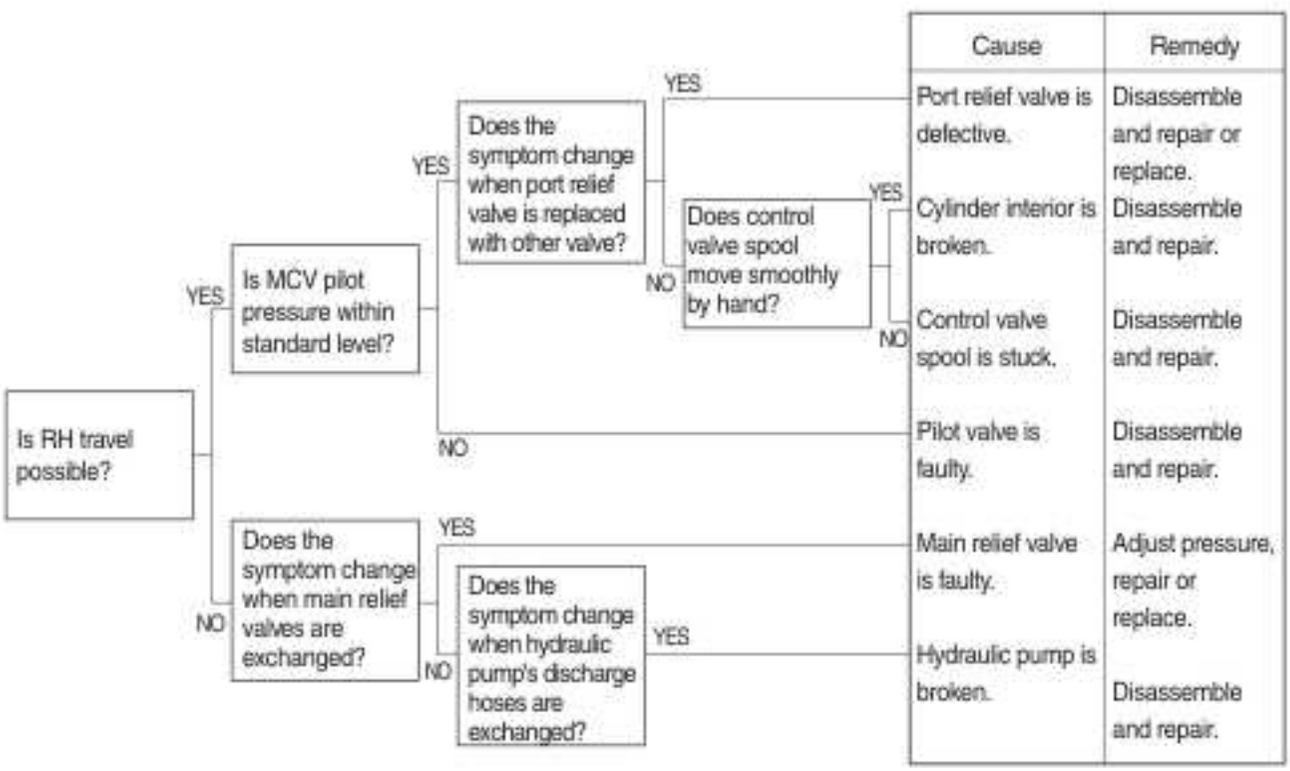
※ The circuit diagram may differ from the equipment, so please check before a repair.

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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.

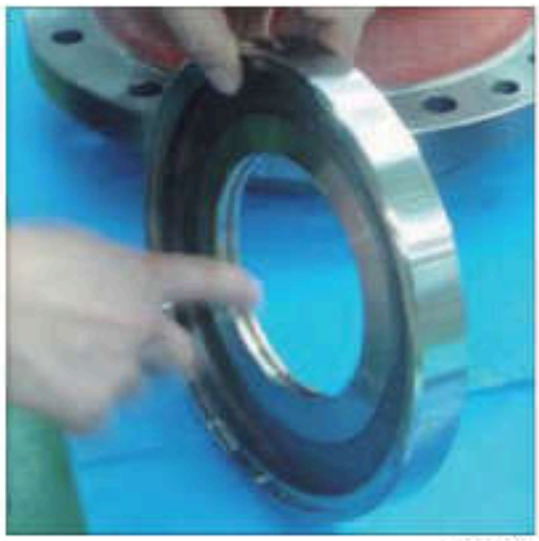


2203A6SM21

(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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(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]

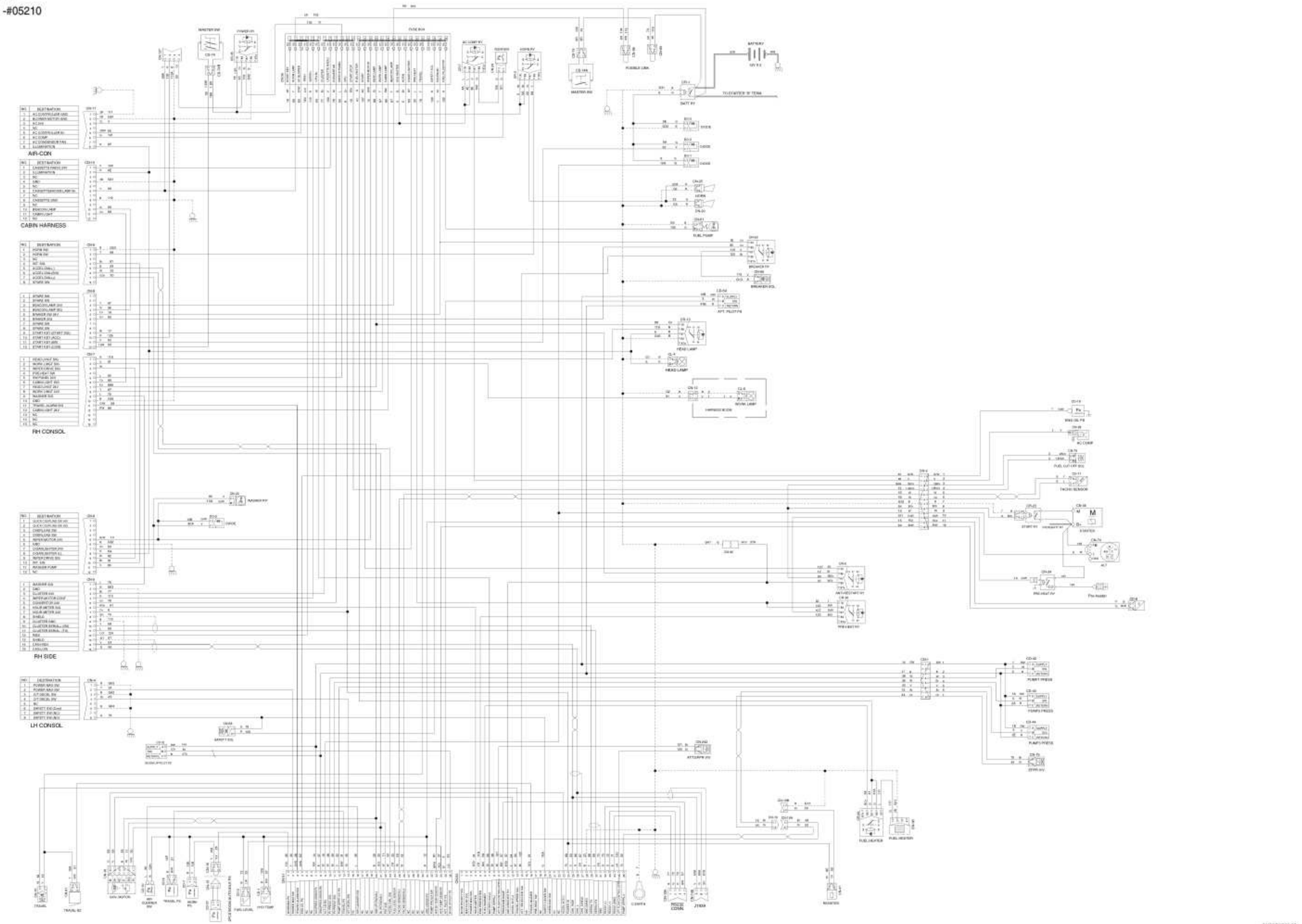




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· ELECTRICAL CIRCUIT (1/2)

- MACHINE SERIAL NO. : -#05210



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