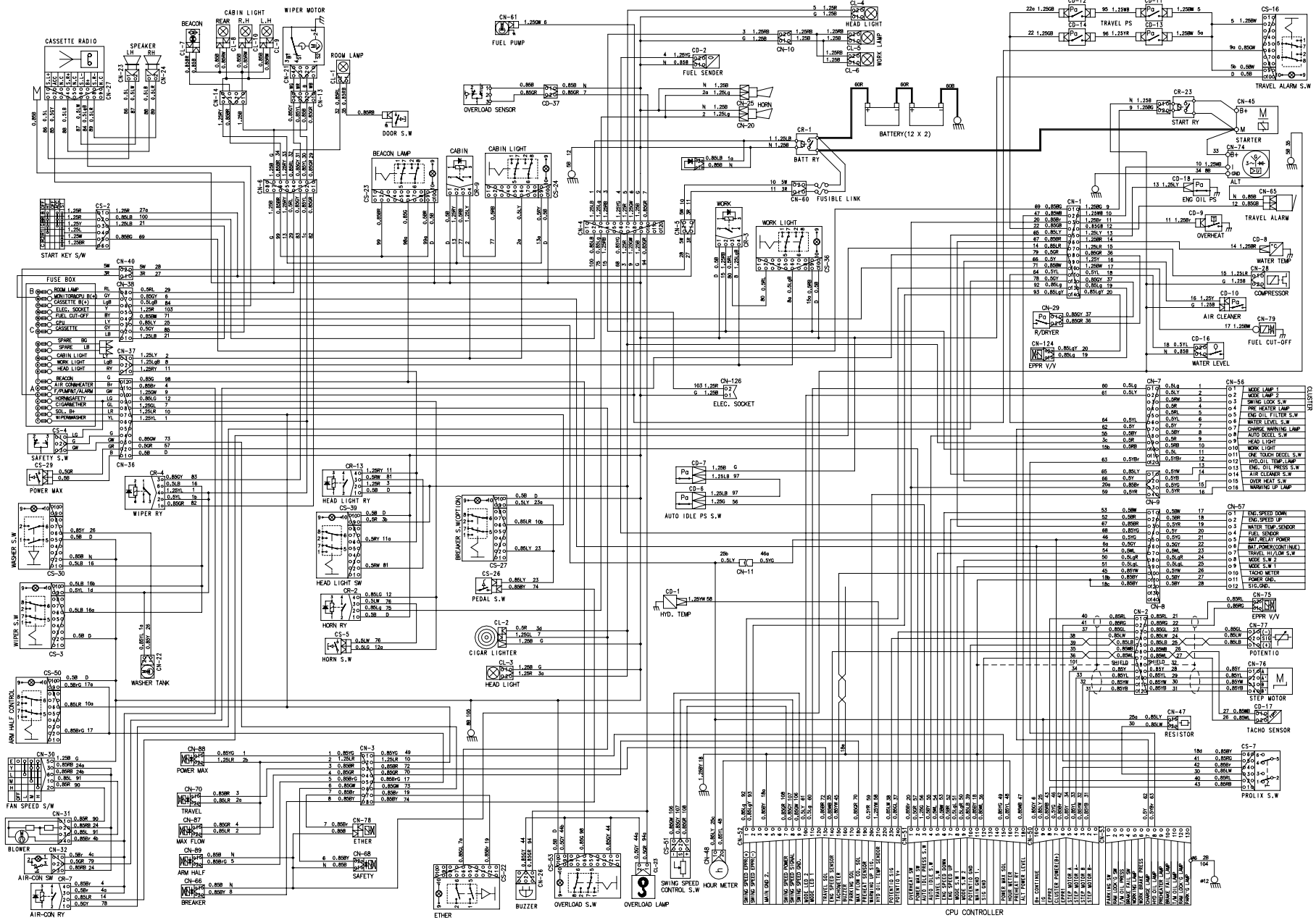
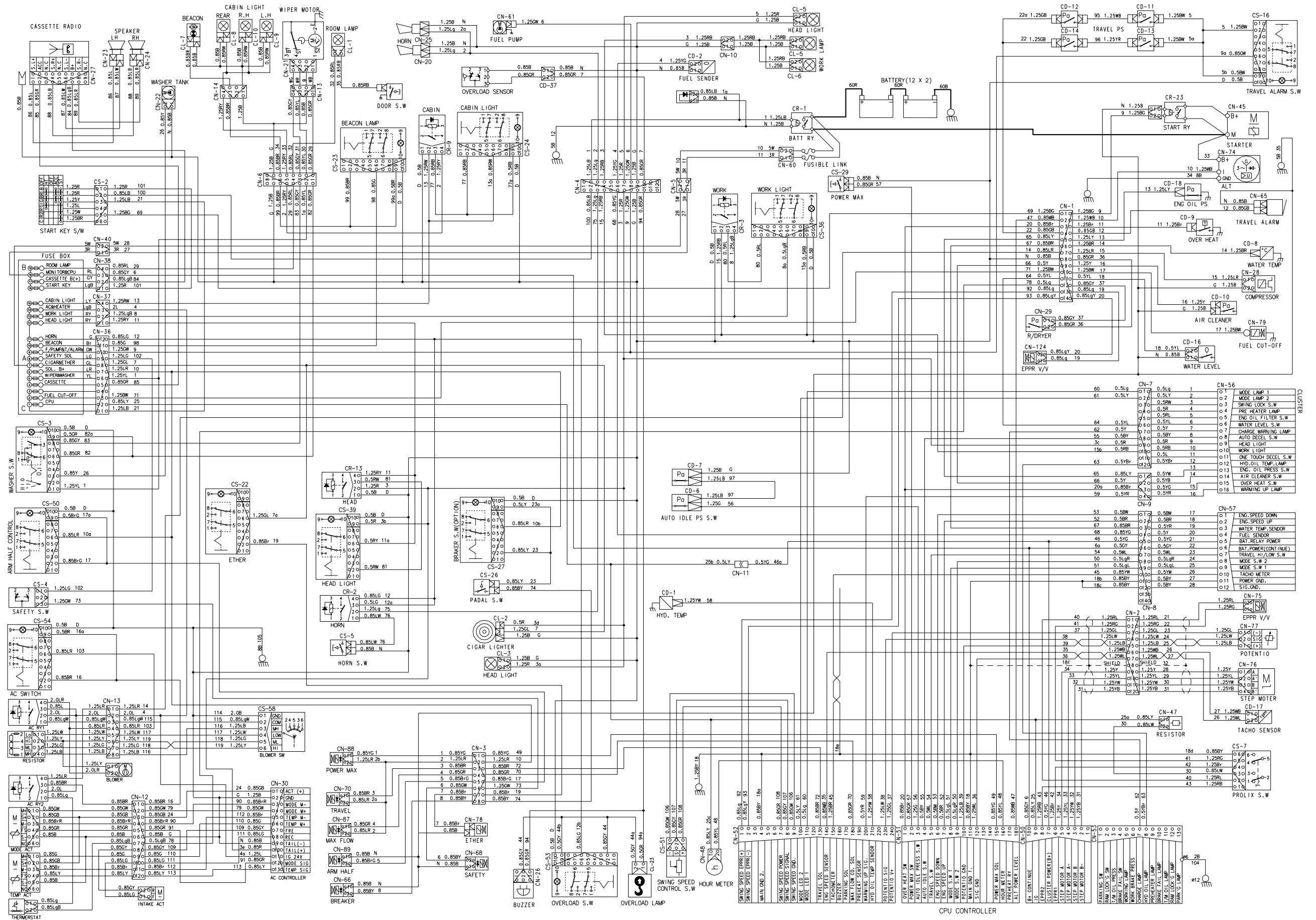


GROUP 2 ELECTRICAL CIRCUIT



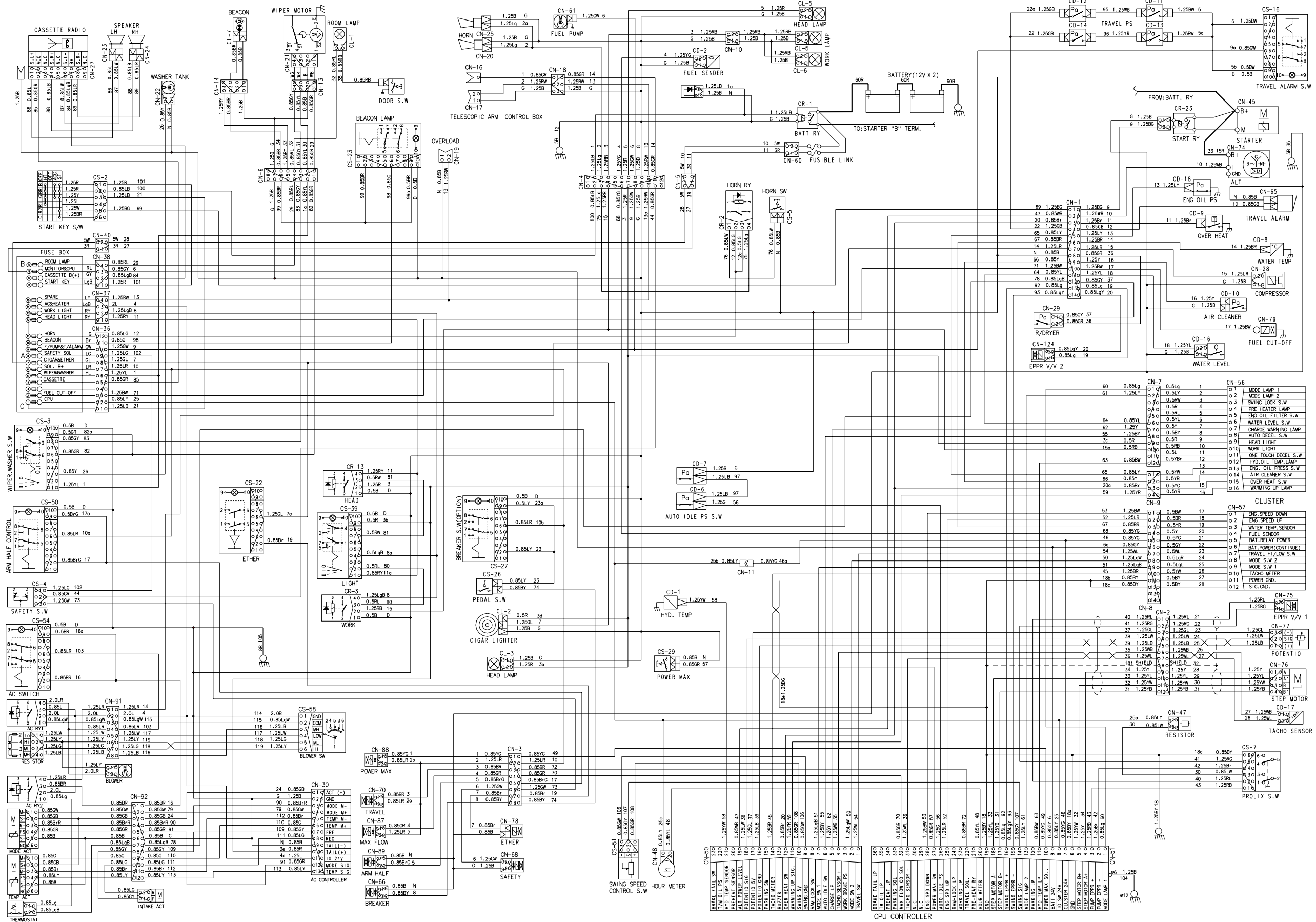
R210LC-3 (#0227 ~ #0549)
 NEW AIRCONDITIONER SYSTEM



R210LC-3 (#0550~)

WATER PROOF CONNECTION SYSTEM

R210LC-3

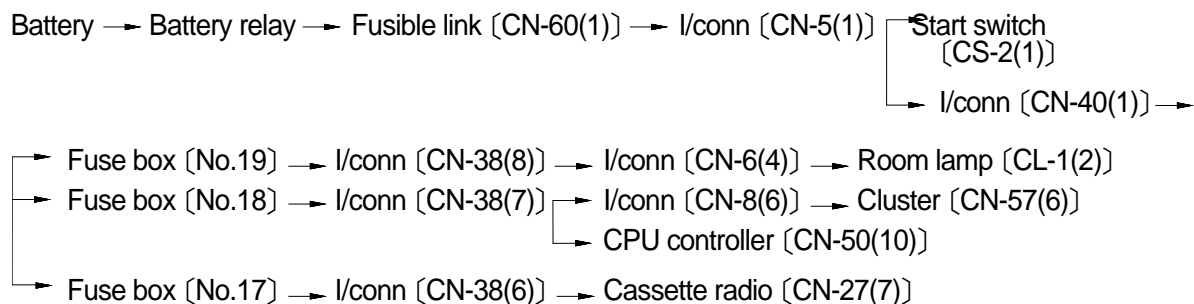


1. POWER CIRCUIT

The negative terminal of battery is grounded to the machine chassis.

When the start switch is in the OFF position, the current flows from the positive battery terminal as shown below.

1) OPERATING FLOW

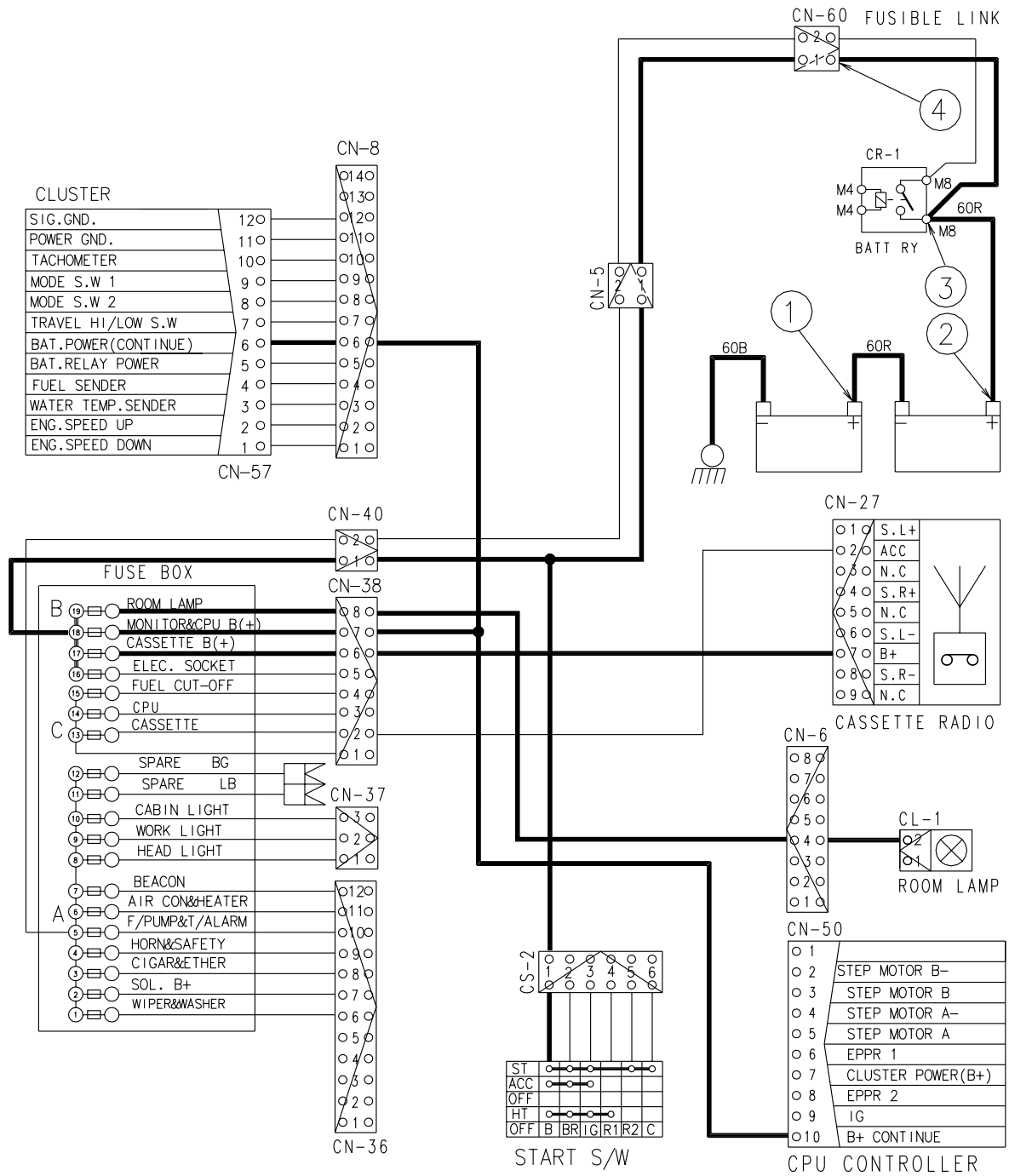


2) CHECK POINT

Engine	Start switch	Check point	Voltage
OFF	OFF	① - GND (Battery 1 EA) ② - GND (Battery 2 EA) ③ - GND (Battery 2 EA) ④ - GND (Fusible link)	10 ~ 12.5V 20 ~ 25V 20 ~ 25V 20 ~ 25V

※ GND : Ground

POWER CIRCUIT



2. STARTING CIRCUIT

1) OPERATING FLOW

Battery(+) terminal → Battery relay(M8, B⁺ terminal) → Fusible link [CN-60(1)]
 → I/conn [CN-5(1)] → Start switch [CS-2(1)]

※ Start switch : ON

→ Start switch ON [CS-2(2)] → I/conn [CN-4(2)] → Battery relay [M4 terminal]
 → Battery relay operating(All power is supplied with the electric component)
 → Start switch ON [CS-2(3)] → I/conn [CN-38(1)]
 → Fuse box(No. 13)
 → Fuse box(No. 14)
 → Fuse box(No. 15) → I/conn [CN-38(4)] → I/conn [CN-1(10)]
 → Fuel cut-off [CN-79]

※ Start switch : START

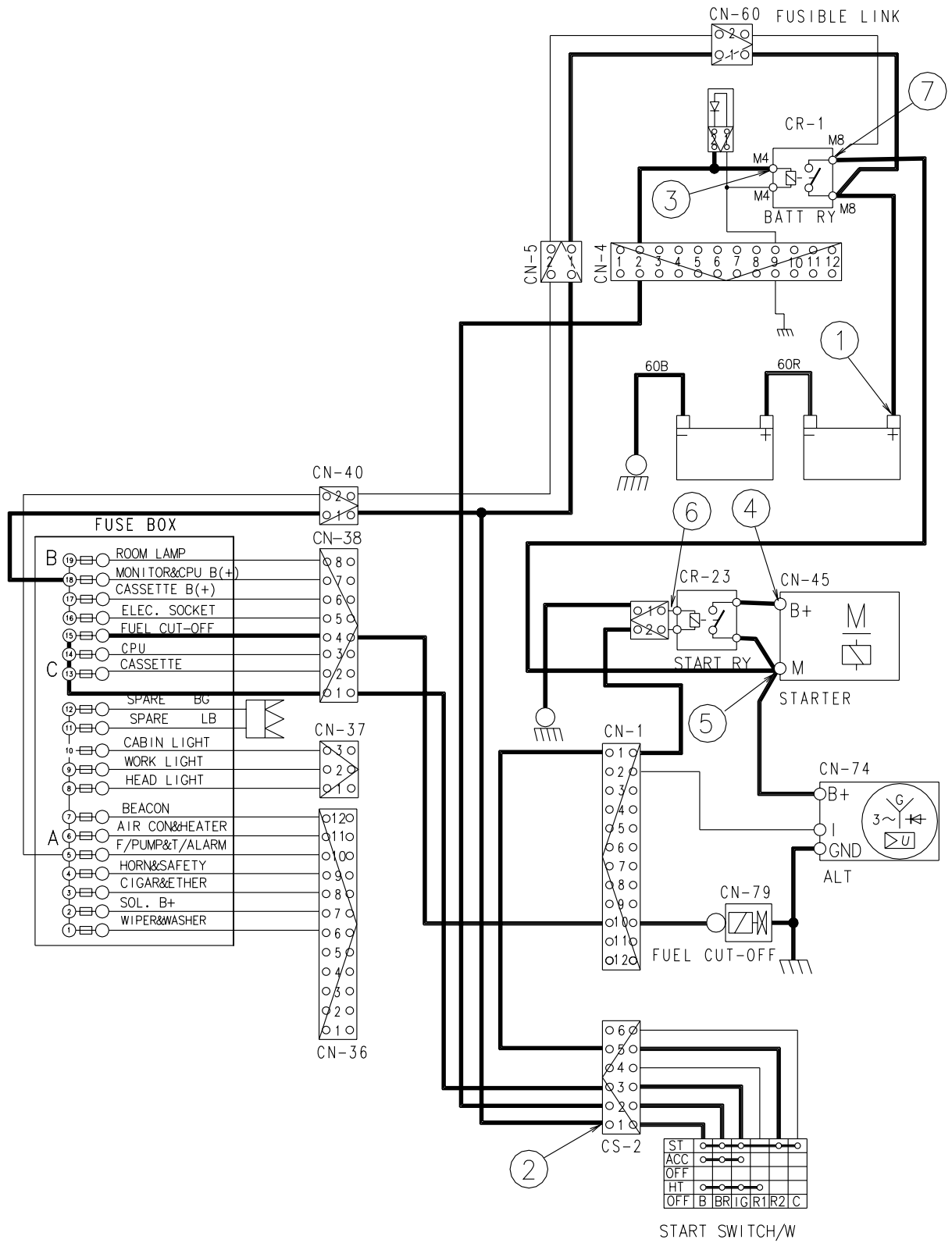
Start switch START [CS-2(5)] → I/conn [CN-1(1)] → Start relay [CR-23(1)]

2) CHECK POINT

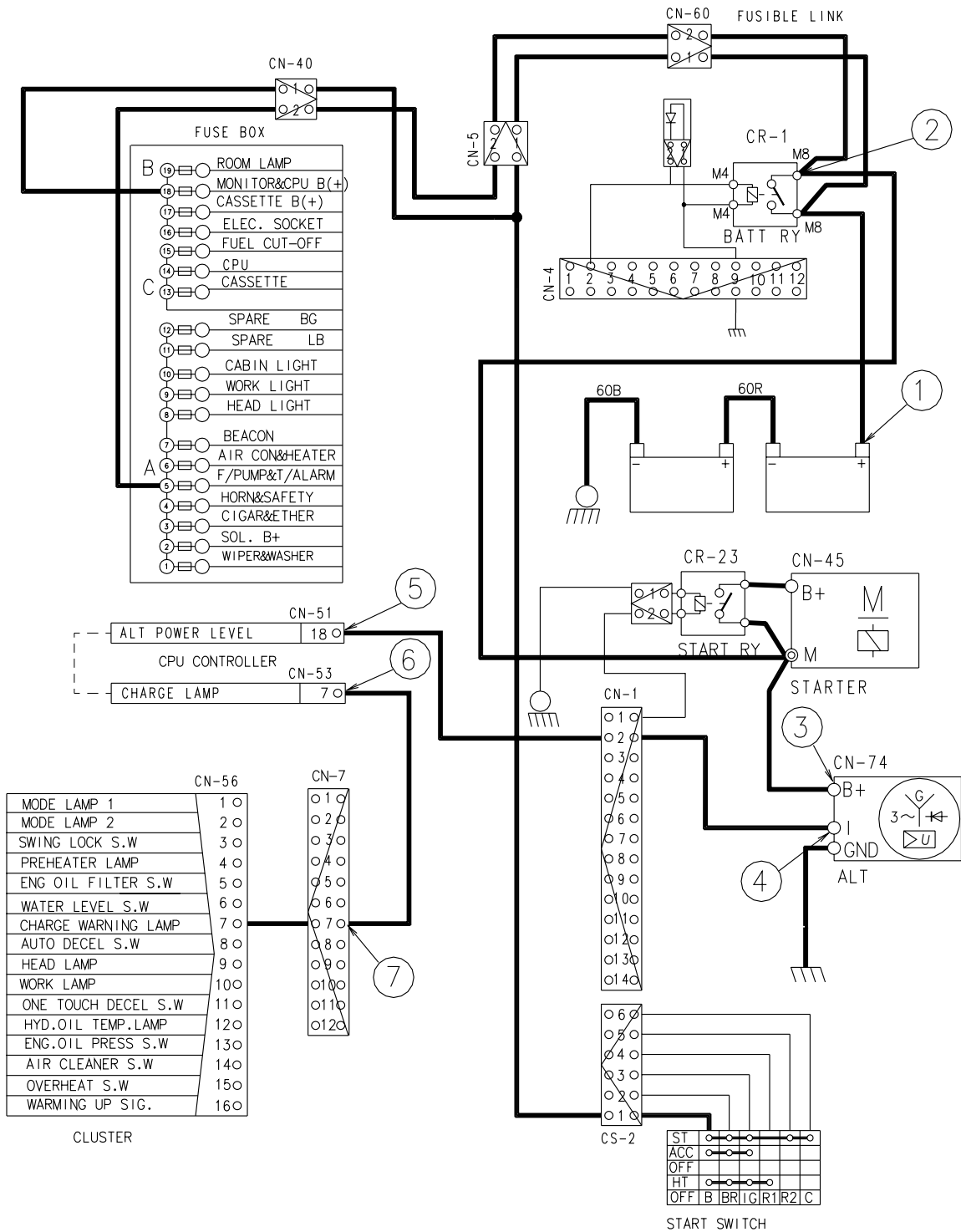
Engine	Start switch	Check point	Voltage
Operating	Start	① - GND (Battery) ② - GND (Start key) ③ - GND (Battery relay M4) ④ - GND (Start B+) ⑤ - GND (Start M) ⑥ - GND (Start relay) ⑦ - GND (Battery relay M8)	20 ~ 25V

※ GND : Ground

STARTING CIRCUIT



CHARGING CIRCUIT



4. HEAD LAMP CIRCUIT

1) OPERATING FLOW

Fuse box (No.8) → I/conn [CN-37(1)] → Head lamp switch [CS-39(6)]
 → Head lamp relay [CR-13(4)]

※ When lamp switch ON

Head lamp switch ON [CS-39(2)] → Head lamp relay [CR-13(3) → (1)] → Ground
 [CR-13(4) → (2)] →

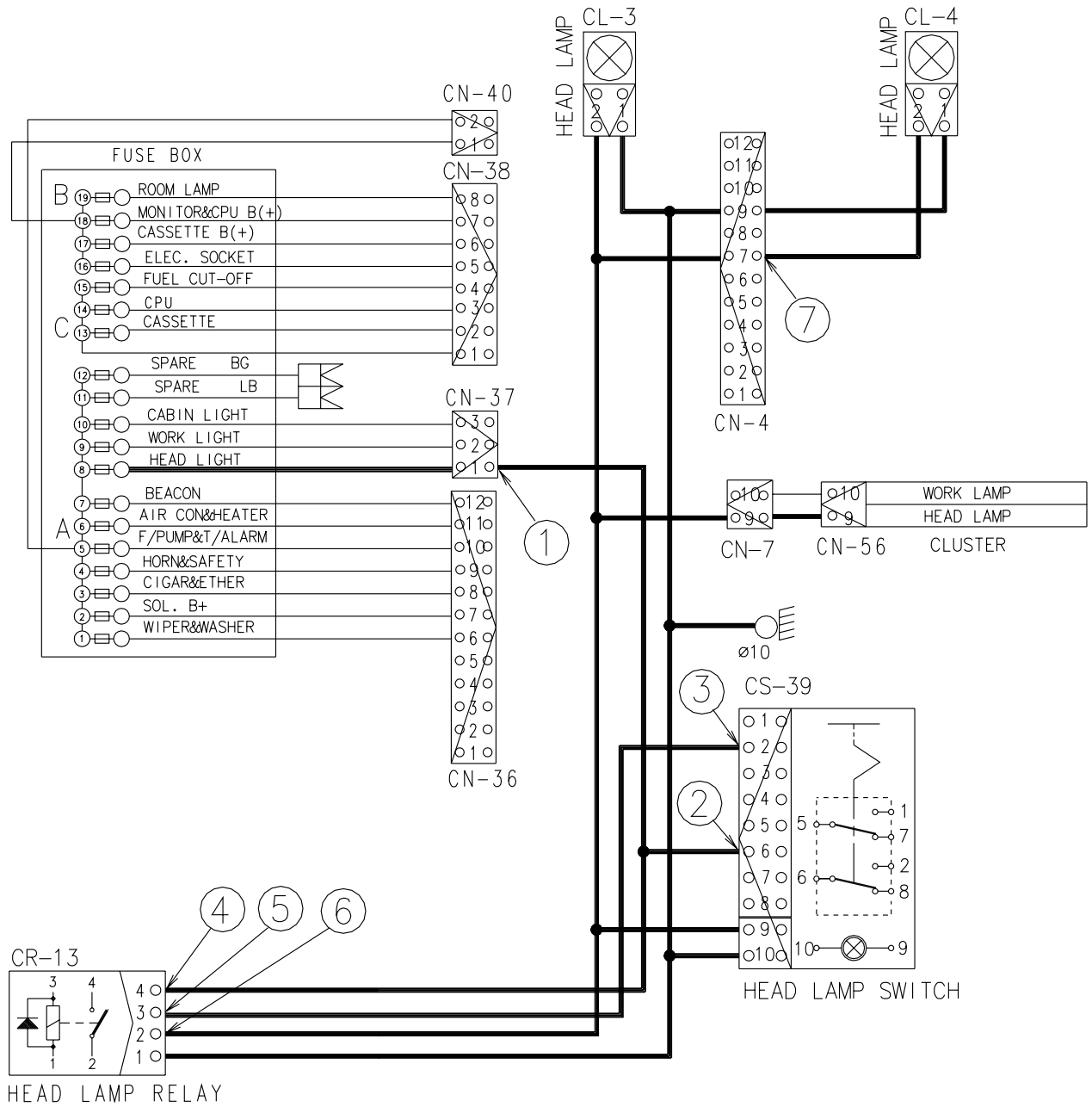
→ Head lamp switch lamp ON [CS-39(9)]
 → Head lamp ON [CL-3(2)]
 → I/conn [CN-4(7)] → Head lamp ON [CL-4(2)]
 → I/conn [CN-7(9)] → Cluster head lamp [CN-56(9)]

2) CHECK POINT

Engine	Key switch	Check point	Voltage
STOP	ON	① - GND (Fuse box) ② - GND (Switch power input) ③ - GND (Switch power output) ④ - GND (Relay input) ⑤ - GND (Relay coil) ⑥ - GND (Relay output) ⑦ - GND (Head lamp)	20 ~ 25V

※ GND : Ground

HEAD LAMP CIRCUIT



5. WORK LAMP CIRCUIT

1) OPERATING FLOW

Fuse box (No.9) → I/conn [CN-37(2)] → Work lamp switch [CS-36(6)]
 → Work lamp relay [CR-3(4)]

※ When work lamp switch ON

Work lamp switch ON [CS-36(2)] → Work lamp relay [CR-3(3) → (1)] → Ground
 [CR-3(4) → (2)] →

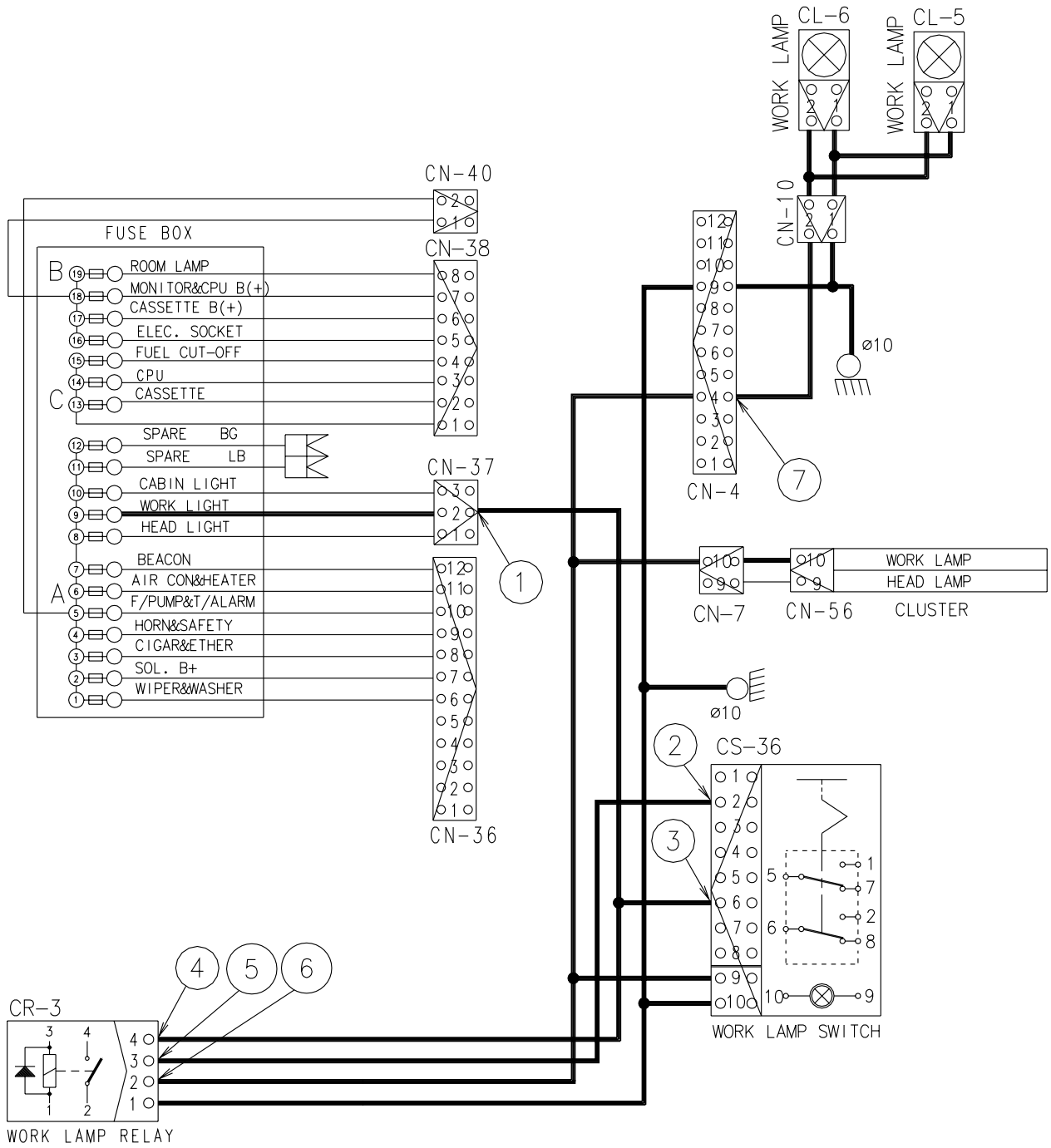
→ Work lamp switch lamp ON [CS-36(9)]
 → I/conn [CN-7(10)] → Cluster work lamp ON [CN-56(10)]
 → I/conn [CN-4(4)] → I/conn [CN-10(2)] → Work lamp ON [CL-5(2), CL-6(2)]

2) CHECK POINT

Engine	Key switch	Check point	Voltage
STOP	ON	① - GND (Fuse box) ② - GND (Switch power input) ③ - GND (Switch power output) ④ - GND (Relay input) ⑤ - GND (Relay coil) ⑥ - GND (Relay output) ⑦ - GND (Work lamp)	20 ~ 25V

※ GND : Ground

WORK LAMP CIRCUIT



6. CAB LAMP CIRCUIT

1) OPERATING FLOW

Fuse box (No.10) → I/conn [CN-37(3)] → Cab lamp relay [CR-9(4)]
 → Cab lamp switch [CS-24(6)]

※ When Lamp switch ON

Lamp switch ON [CS-24(2)] → Cab lamp relay [CR-9(3) → (1)] → Ground
 [CR-9(4) → (2)] →

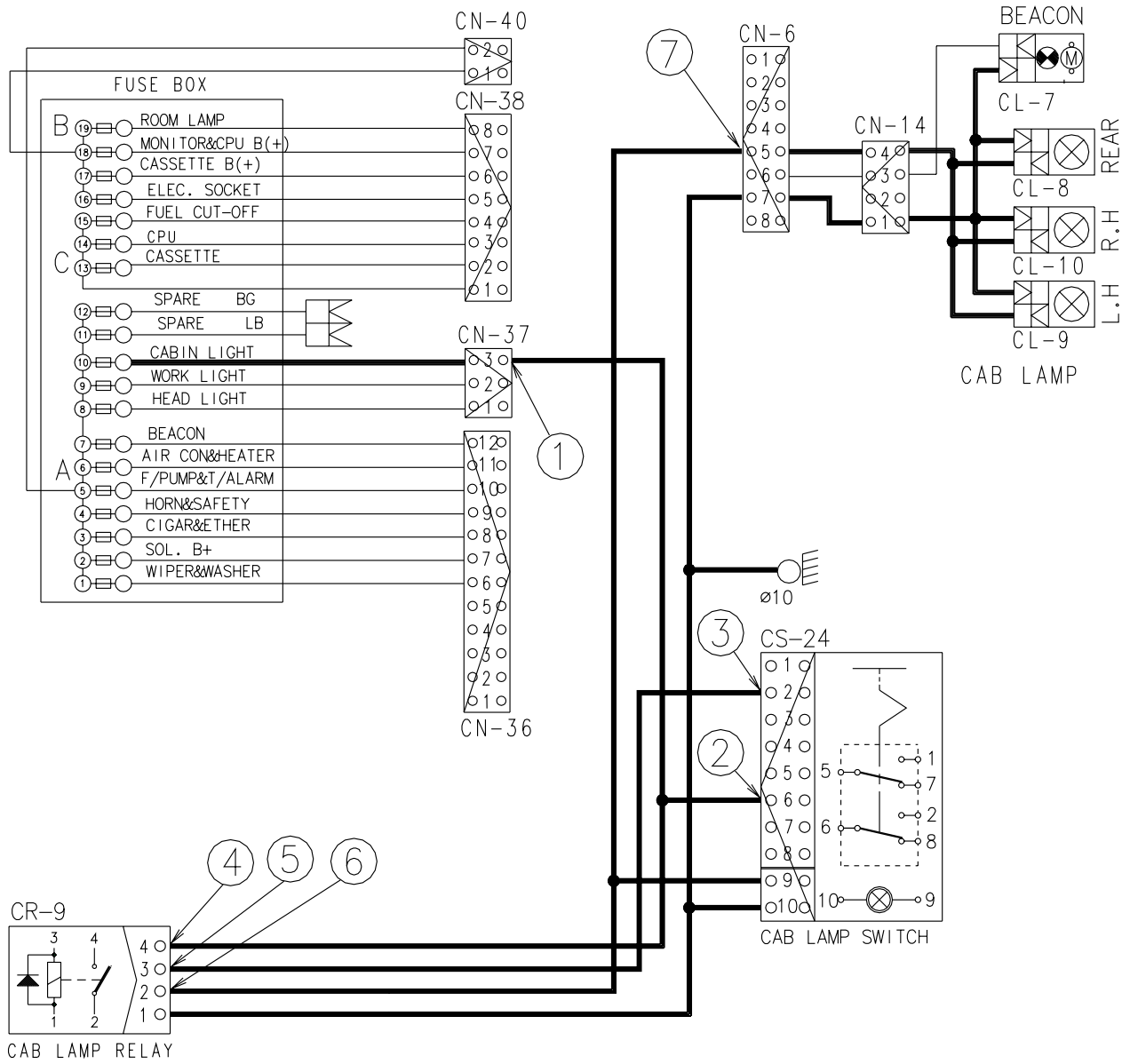
→ Cab lamp switch lamp ON [CS-24(9)]
 → I/conn [CN-6(5)] → I/conn [CN-14(4)] →
 Cab lamp ON [CL-8(rear), CL-10(RH), CL-9(LH)]

2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (Fuse box) ② - GND (Switch power input) ③ - GND (Switch power output) ④ - GND (Relay input) ⑤ - GND (Relay coil) ⑥ - GND (Relay output) ⑦ - GND (Cab lamp)	20 ~ 25V

※ GND : Ground

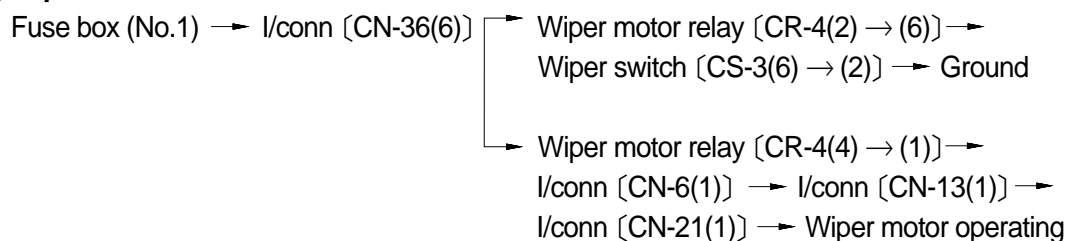
CAB LAMP CIRCUIT



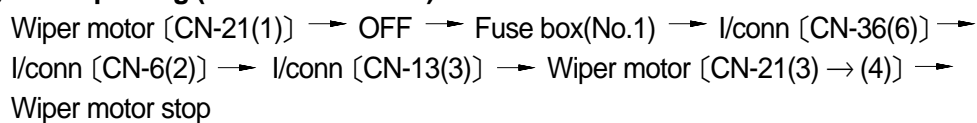
7. WIPER MOTOR CIRCUIT

1) OPERATING FLOW

(1) Wiper motor switch ON



(2) Auto - parking (When switch OFF)

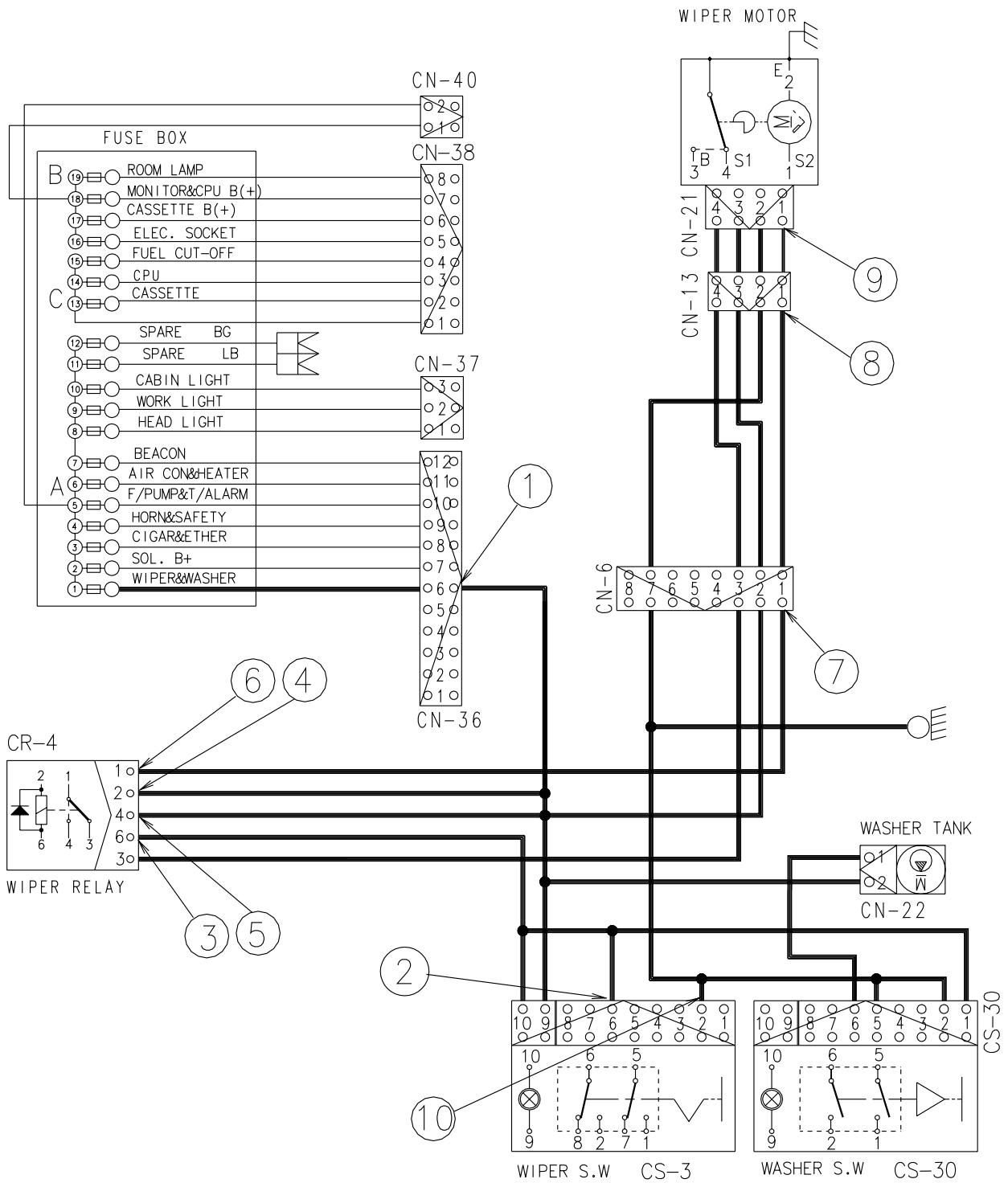


2) CHECK POINT

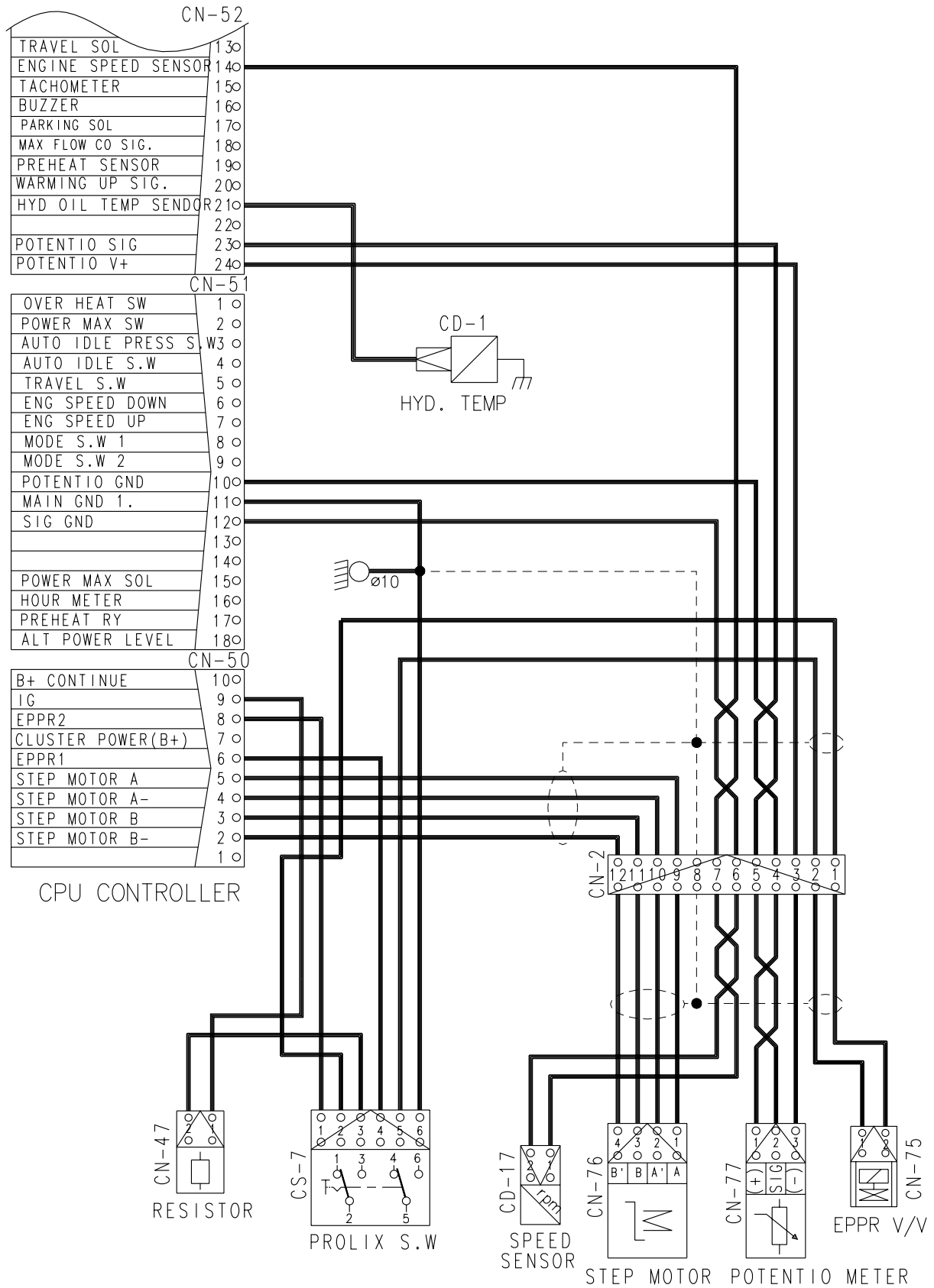
Engine	Key switch	Check point	Voltage
OFF	ON	① - GND (Fuse box) ② - GND (Switch input) ③ - GND (Relay) ④ - GND (Relay coil) ⑤ - GND (Relay input) ⑥ - GND (Relay) ⑦ - GND (Wiper power input) ⑧ - GND (Wiper power input) ⑨ - GND (Wiper motor) ⑩ - GND (Switch output)	20 ~ 25V

※ GND : Ground

WIPER MOTOR CIRCUIT



CONTROLLER CIRCUIT



MONITORING CIRCUIT

