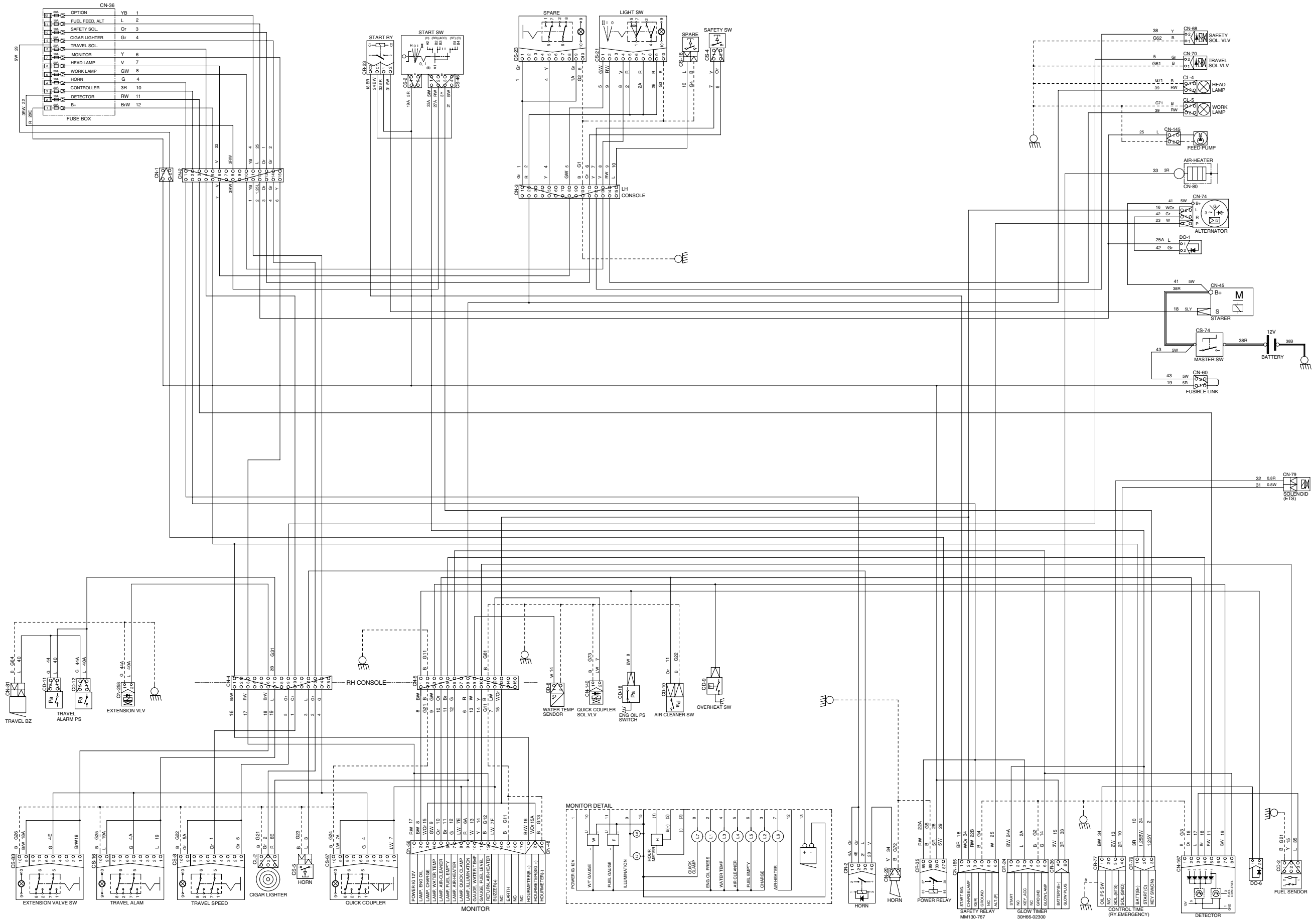


GROUP 3 ELECTRICAL CIRCUIT



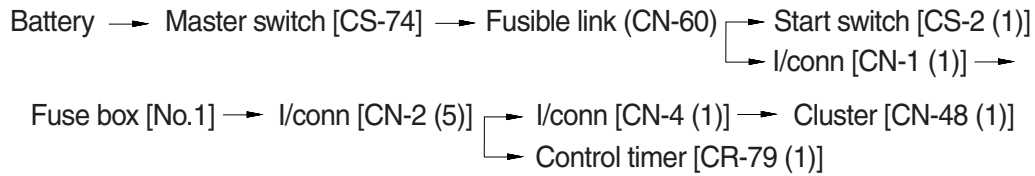
MEMORANDUM

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



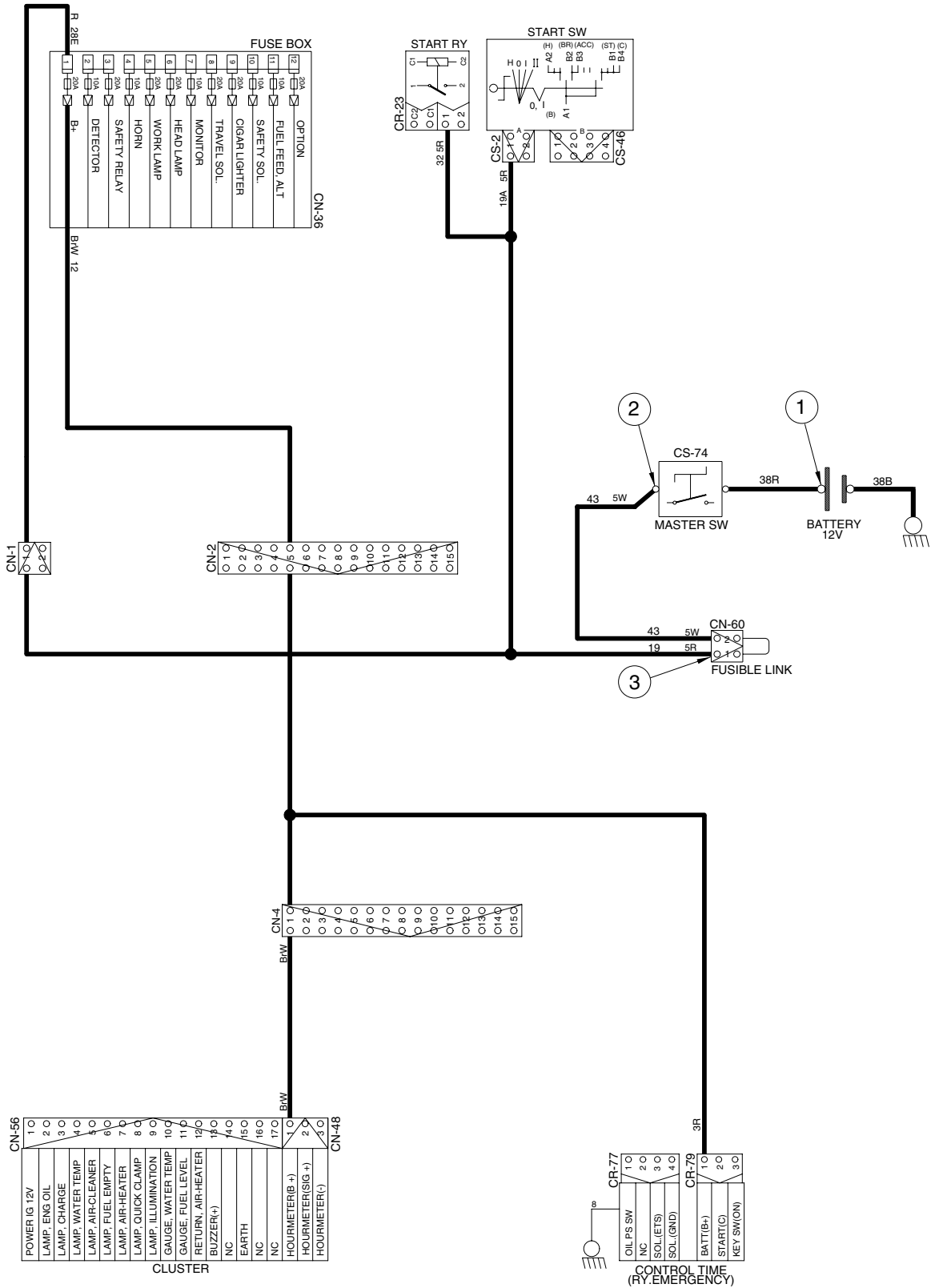
※ I/conn : Intermediate connector

2) CHECK POINT

| Engine | Start switch | Check point | Voltage |
|--------|--------------|--|-----------|
| OFF | OFF | ① - GND (Battery) ② - GND (Master switch) ③ - GND (Fusible link) | 10~12.5 V |

※ GND : Ground

POWER CIRCUIT

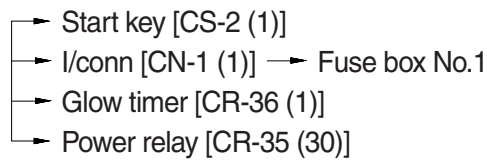


1694EL04

2. STARTING CIRCUIT

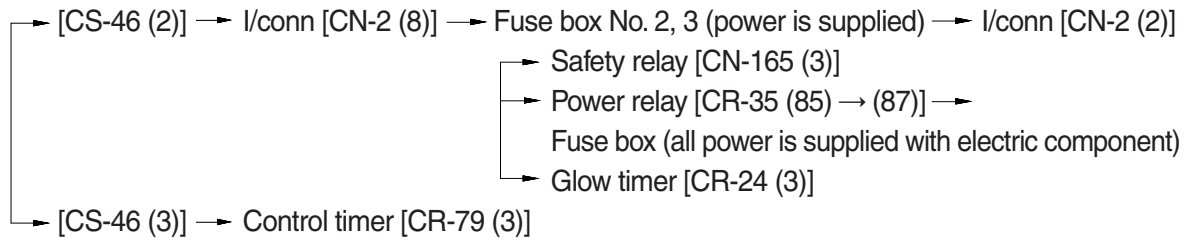
1) OPERATING FLOW

Battery(+) terminal → Master switch [CS-74] → Fusible link [CN-60]



※ Start switch : ON

Start switch ON



※ Start switch : START

Start switch START [CS-46 (4)] → Start relay [CR-23 (C1) → (2)] → Starter [CN-45 (S)] → Start motor operating

2) CHECK POINT

| Engine | Start switch | Check point | Voltage |
|-----------|--------------|--|-----------|
| Operating | Start | ① - GND (Battery) ② - GND (Start key) ③ - GND (Starter B ⁺) ④ - GND (Starter M) | 10~12.5 V |

※ GND : Ground

3. CHARGING CIRCUIT

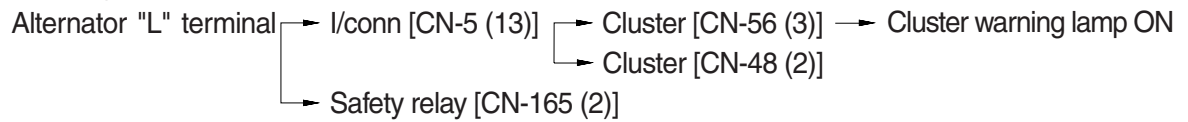
When the starter is activated and the engine is started, the operator releases the key switch to the ON position.

Charging current generated by operating alternator flows into the battery.

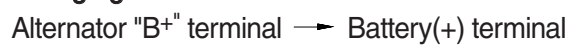
The current also flows from alternator to each electrical component and controller through the fuse box.

1) OPERATING FLOW

(1) Warning flow



(2) Charging flow

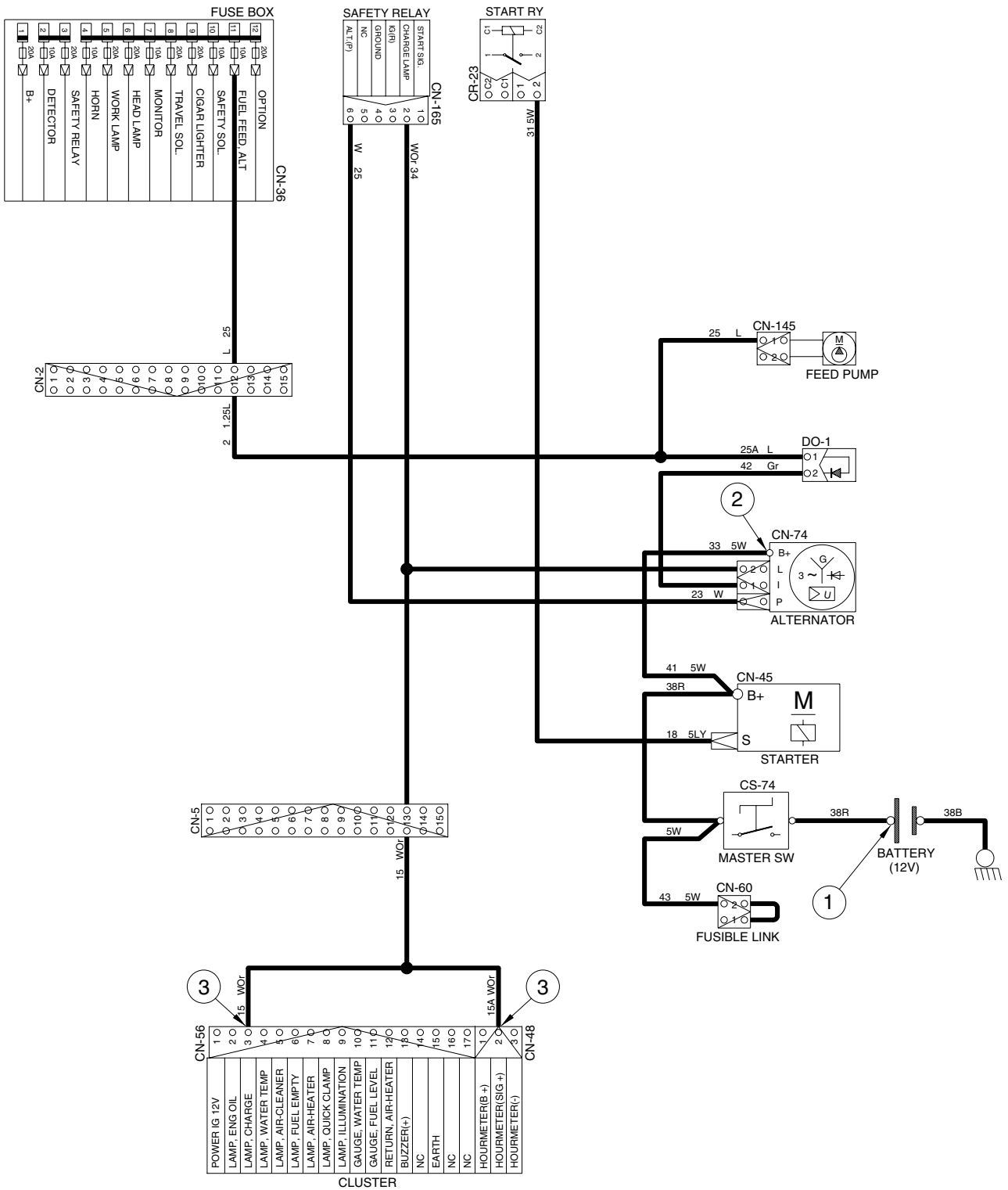


2) CHECK POINT

| Engine | Start switch | Check point | Voltage |
|--------|--------------|--|-----------|
| ON | ON | ① - GND (Battery voltage) ② - GND (Alternator B ⁺ terminal) ③ - GND (Cluster) | 10~12.5 V |

※ GND : Ground

CHARGING CIRCUIT



1694EL06

4. HEAD AND WORK LIGHT CIRCUIT

1) OPERATING FLOW

Fuse box (No.6) → I/conn [CN-2 (6)] → I/conn [CN-3 (8)] → Light switch [CS-21 (1)]

Fuse box (No.5) → I/conn [CN-2 (10)] → I/conn [CN-3 (13)] → Light switch [CS-21 (4)]

(1) Main light switch ON : 1st step

Cabin light switch ON [CS-21 (5,7)] → I/conn [CN-3 (2)] →

- I/conn [CN-5 (8)]
 - Cluster illumination ON [CN-56 (9)]
 - Cigar light illumination ON [CL-2]
- Head light ON [CL-4(1)]

(2) Main light switch ON : 2nd step

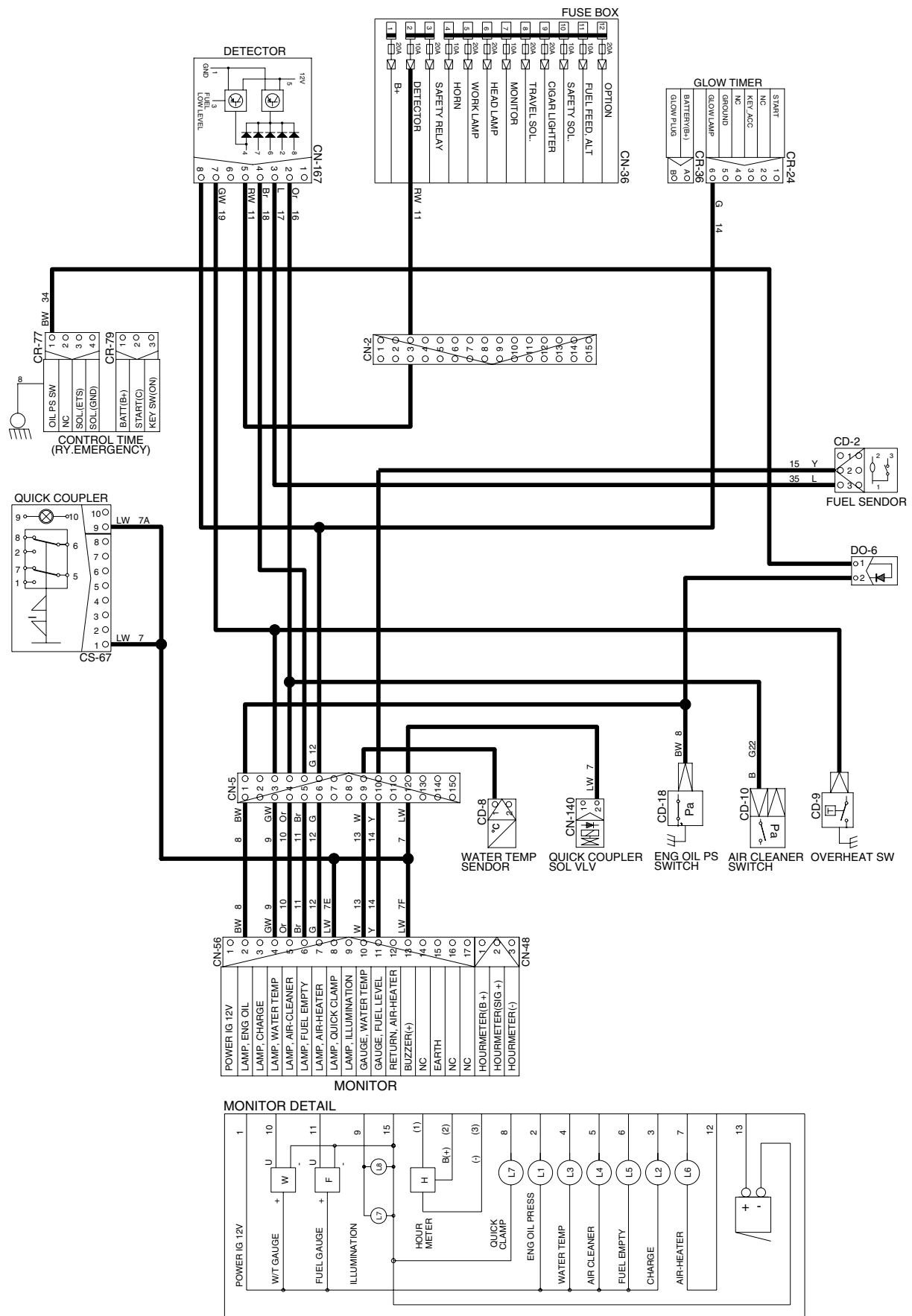
Work light switch ON [CS-21 (2)] → I/conn [CN-3 (14)] → Work light ON [CL-5 (2)]

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 (Head light) ⑤ - GND (Fuse box) ⑥ - GND (Switch power input) ⑦ - GND (Switch power output) ⑧ - GND (Work light) | 10~12.5 V |

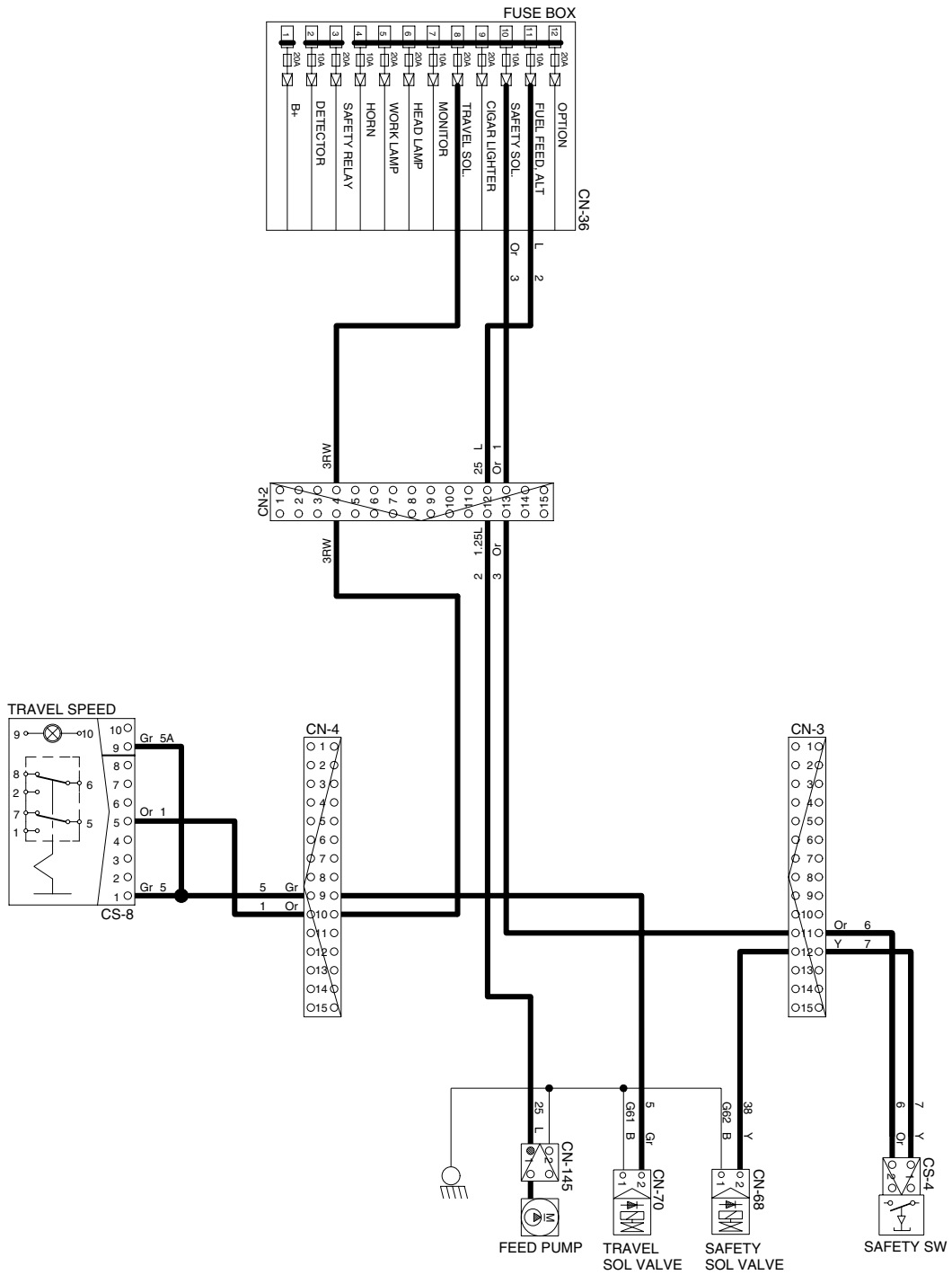
※ GND : Ground

MONITORING CIRCUIT



1694EL08

ELECTRIC CIRCUIT FOR HYDRAULIC



1694EL09