

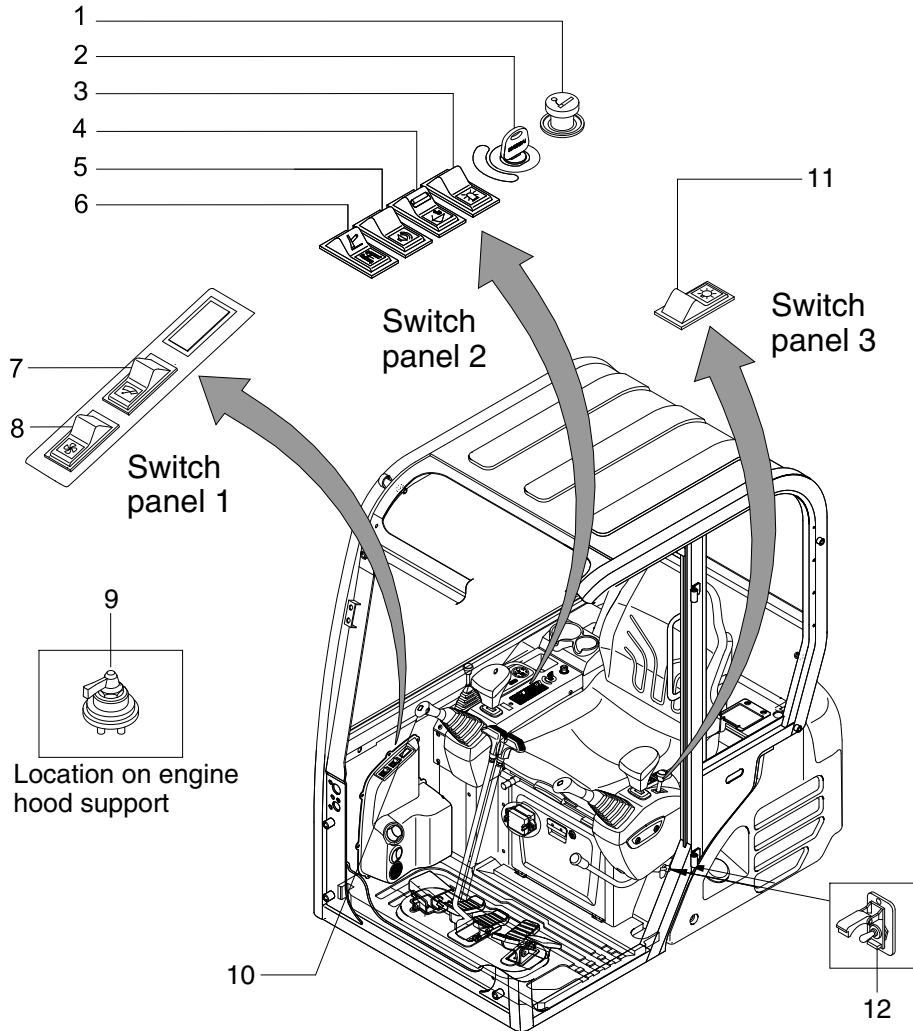
SECTION 4 ELECTRICAL SYSTEM

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SECTION 4 ELECTRICAL SYSTEM

GROUP 1 COMPONENT LOCATION

1. LOCATION 1



- | | | | |
|---|---------------------|----|------------------------------|
| 1 | Socket | 7 | Washer / wiper switch |
| 2 | Start switch | 8 | Heater switch |
| 3 | Beacon switch | 9 | Master switch |
| 4 | Quick clamp switch | 10 | Horn switch |
| 5 | Travel alarm switch | 11 | Main light switch |
| 6 | Select switch | 12 | Emergency engine stop switch |

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MEMORANDUM

GROUP 2 MONITORING SYSTEM

1. OUTLINE

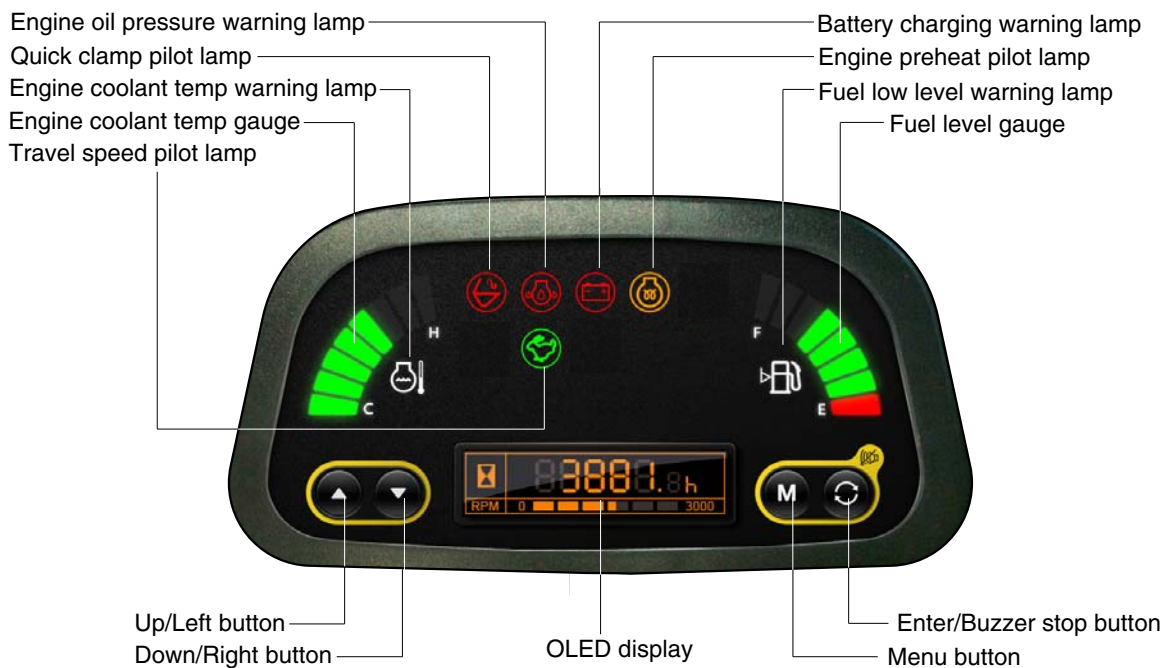
Monitoring system consists of the monitor part and switch part.

The monitor part gives warnings when any abnormality occurs in the machine and informs the condition of the machine.

Various select switches are built into the monitor panel, which act as the control portion of the machine control system.

2. CLUSTER

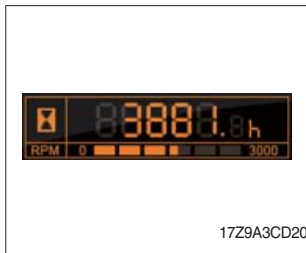
1) MONITOR PANEL



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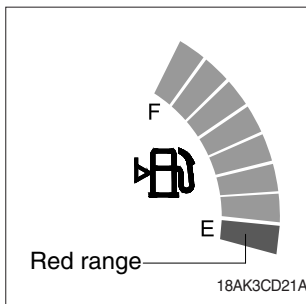
2) GAUGES AND DISPLAYS



(1) Service meter



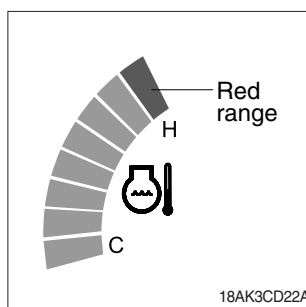
- ① This meter shows the total operation hours of the machine.
- ② Always ensure the operating condition of the meter during the machine operation.
Inspect and service the machine based on hours as indicated in chapter 6, maintenance.


(2) Fuel gauge



- ① This gauge indicates the amount of fuel in the fuel tank.
- ② Fill the fuel when the red range or warning lamp  ON.
* If the gauge illuminates the red range or warning lamp  ON even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.

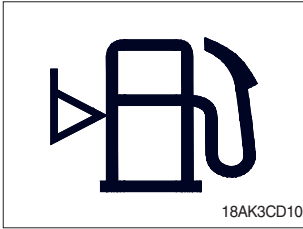
(3) Engine coolant temperature gauge



- ① This indicates the temperature of coolant.
· Red range : Above 115°C (239°F)
- ② When the red range pointed or warning lamp  ON, engine do not abruptly stop but run it at medium speed to allow it to cool gradually, then stop it.
Check the radiator and engine.
* If the engine is stopped without cooled down running, the temperature of engine parts will rise suddenly, this could cause severe engine trouble.

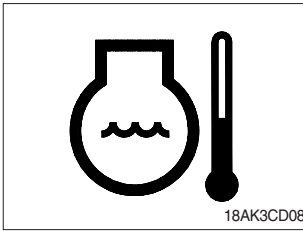
3) WARNING AND PILOT LAMPS

(1) Fuel low level warning lamp



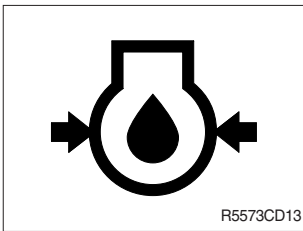
- ① This lamp blinks and buzzer sounds when the level of fuel is below 5.0 l (1.3 U.S. gal).
- ② Fill the fuel immediately when the lamp blinks.

(2) Engine coolant temperature warning lamp



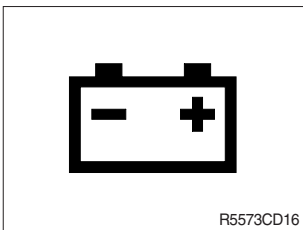
- ① This lamp blinks and buzzer sounds when the temperature of coolant is over the normal temperature 110°C (230°F) .
- ② Check the cooling system when the lamp blinks.

(3) Engine oil pressure warning lamp



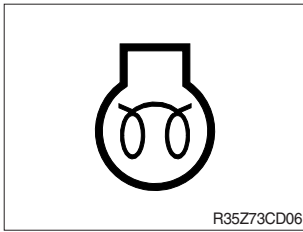
- ① This lamp blinks and buzzer sounds after starting the engine because of the low oil pressure.
- ② If the lamp blinks during engine operation, shut OFF engine immediately. Check oil level.

(4) Battery charging warning lamp



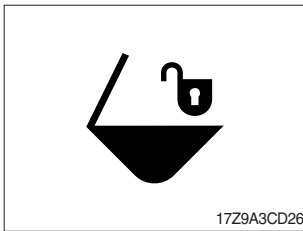
- ① This lamp blinks and buzzer sounds when the starting switch is ON, it is turned OFF after starting the engine.
- ② Check the battery charging circuit when this lamp blinks during engine operation.

(5) Engine preheat pilot lamp



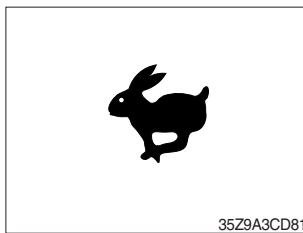
- ① When the start switch turn to HEAT position, pilot lamp comes ON.
- ② Refer to the page 4-4 for details.

(6) Quick clamp lock pilot lamp



- ① When the quick clamp switch turned ON, this lamp turn ON and the buzzer sounds.
- ② This lamp turned OFF and the buzzer stop when the quick clamp switch turned OFF.

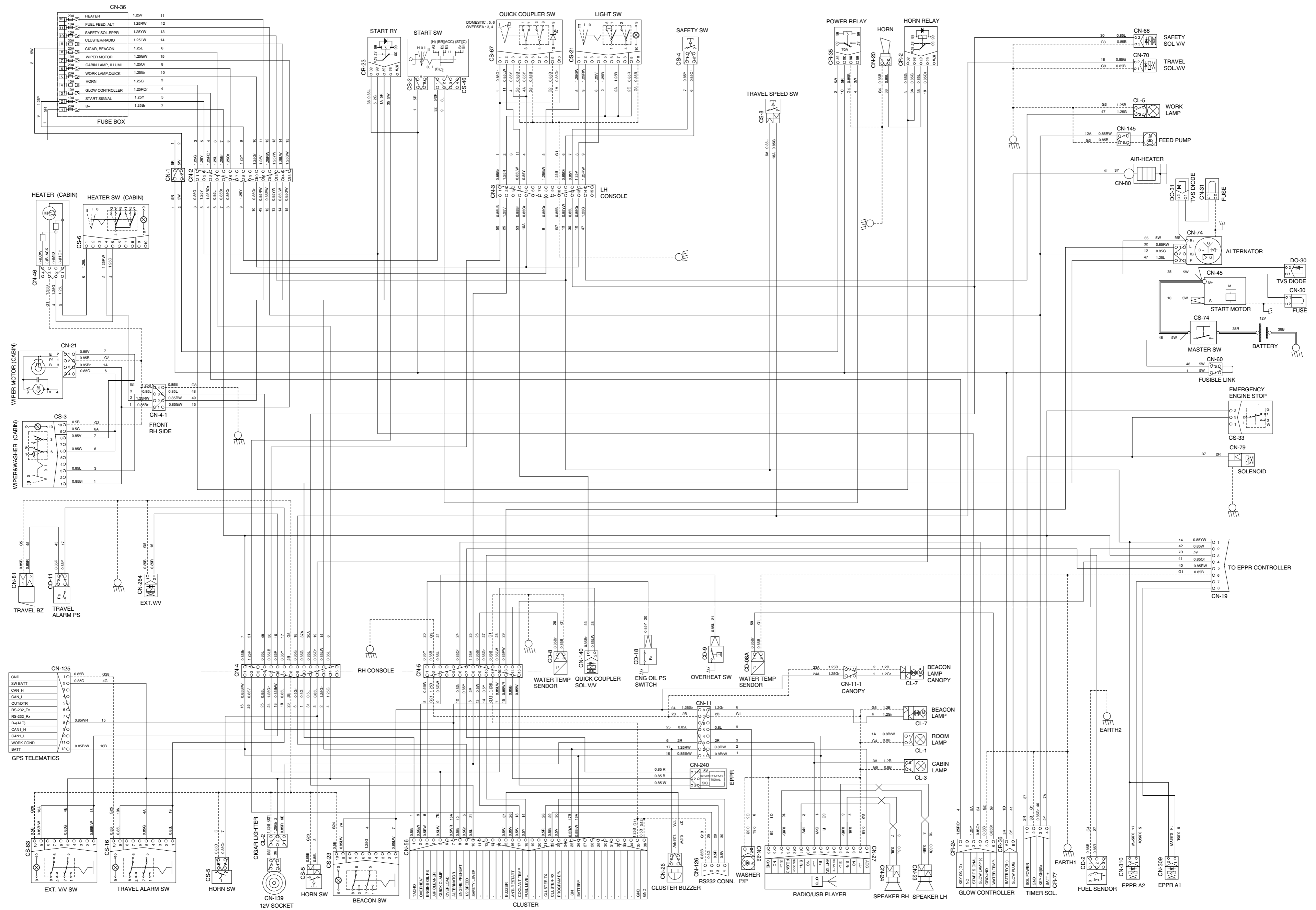
(7) Travel speed pilot lamp



- ① When this lamp turned ON, the machine travel high speed.
- ② Refer to the travel speed control switch in page 3-9 for details.

GROUP 3 ELECTRICAL CIRCUIT

ELECTRICAL CIRCUIT



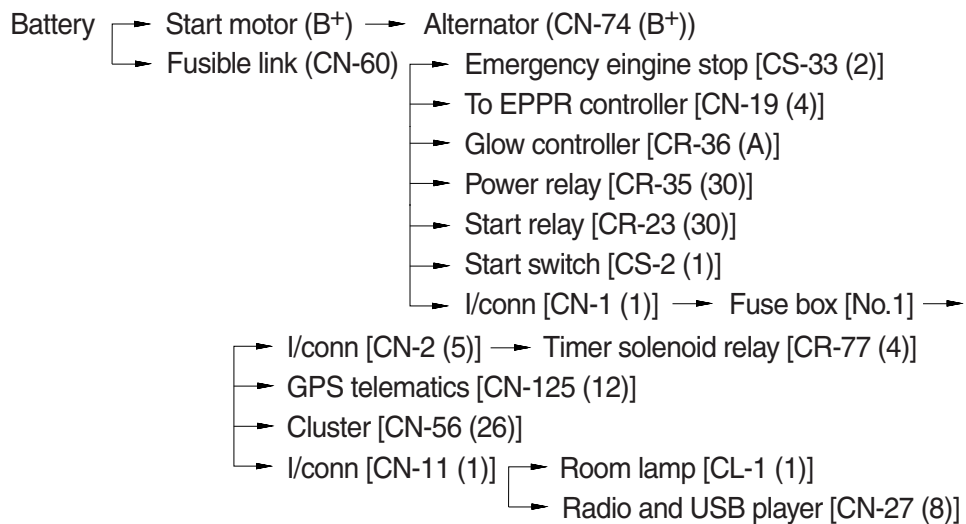
MEMORANDUM

1. POWER CIRCUIT

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

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

1) OPERATING FLOW



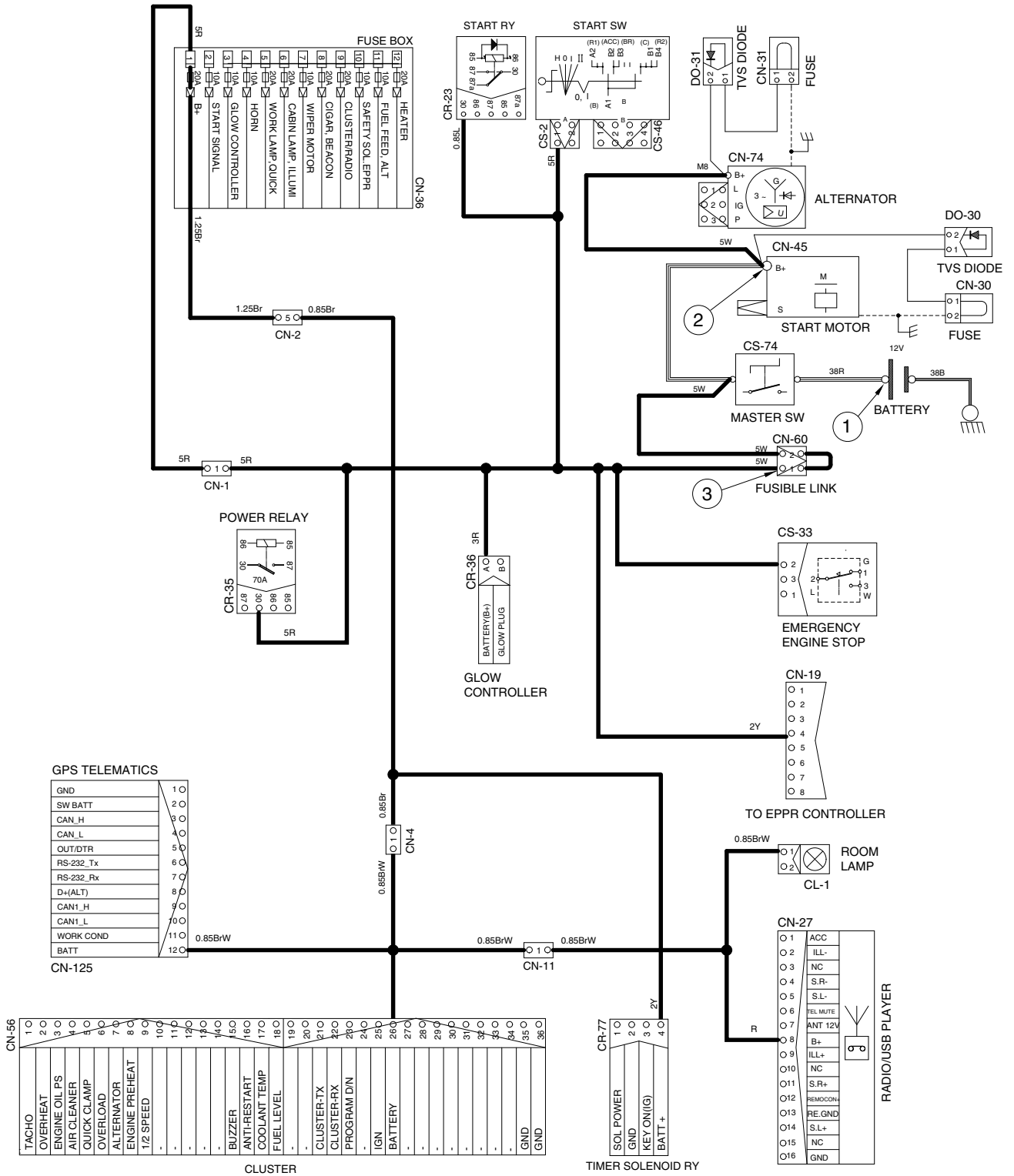
※ I/conn : Intermediate connector

2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	OFF	① - GND (Battery) ② - GND (Start motor B ⁺) ③ - GND (Fusible link)	10~12.5 V

※ GND : Ground

POWER CIRCUIT

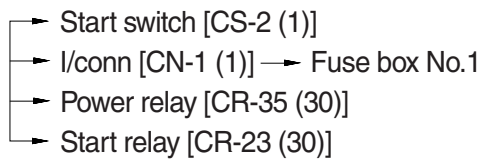


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2. STARTING CIRCUIT

1) OPERATING FLOW

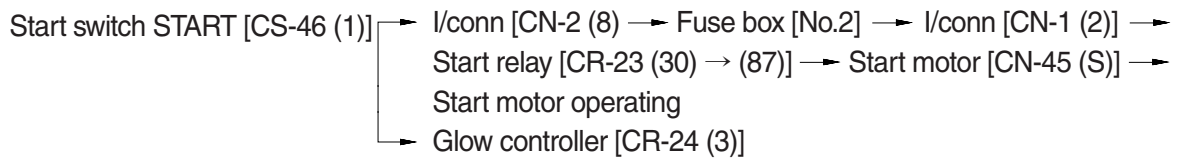
Battery(+) terminal → Master switch [CS-74] → Fusible link [CN-60]



(1) Start switch : ON

Start switch [CS-46 (2)] → Power relay [CR-35 (30) → (87)] → I/conn [CN-1 (2)]
 → Fuse box [all power is supplied with electric component]

(2) Start switch : START

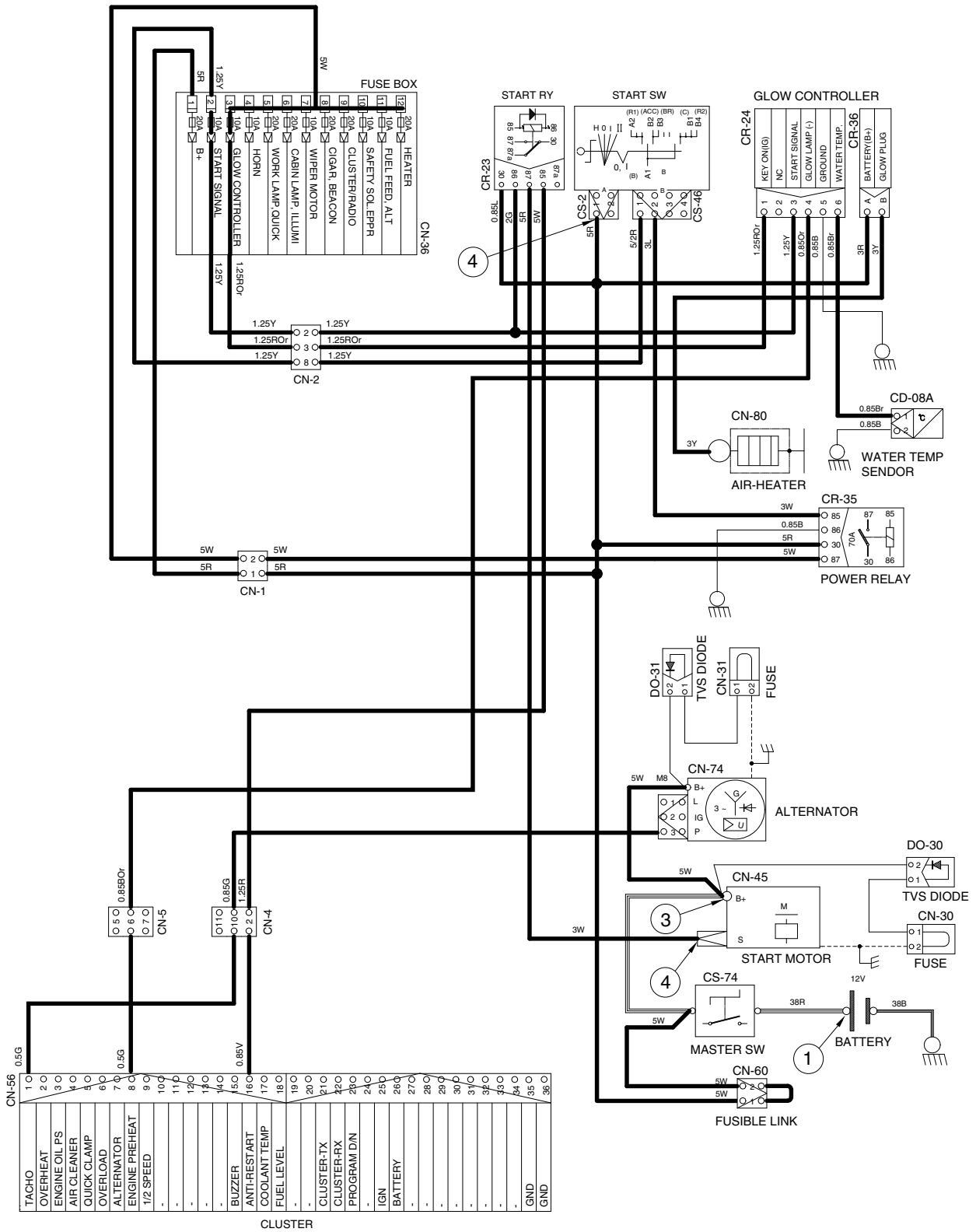


2) CHECK POINT

Engine	Start switch	Check point	Voltage
Operating	Start	① - GND (Battery) ② - GND (Start switch) ③ - GND (Start motor B ⁺) ④ - GND (Start motor S)	10~12.5 V

※ GND : Ground

STARTING CIRCUIT



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3. CHARGING CIRCUIT

When the start motor is activated and the engine is started, the operator releases the start switch to the ON position.

Charging current generated by operating the 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

Alternator "L" terminal → I/conn [CN-5 (13)] → Cluster [CN-56 (7)] → Cluster warning lamp ON
 → GPS telematic [CN-125 (8)]

(2) Charging flow

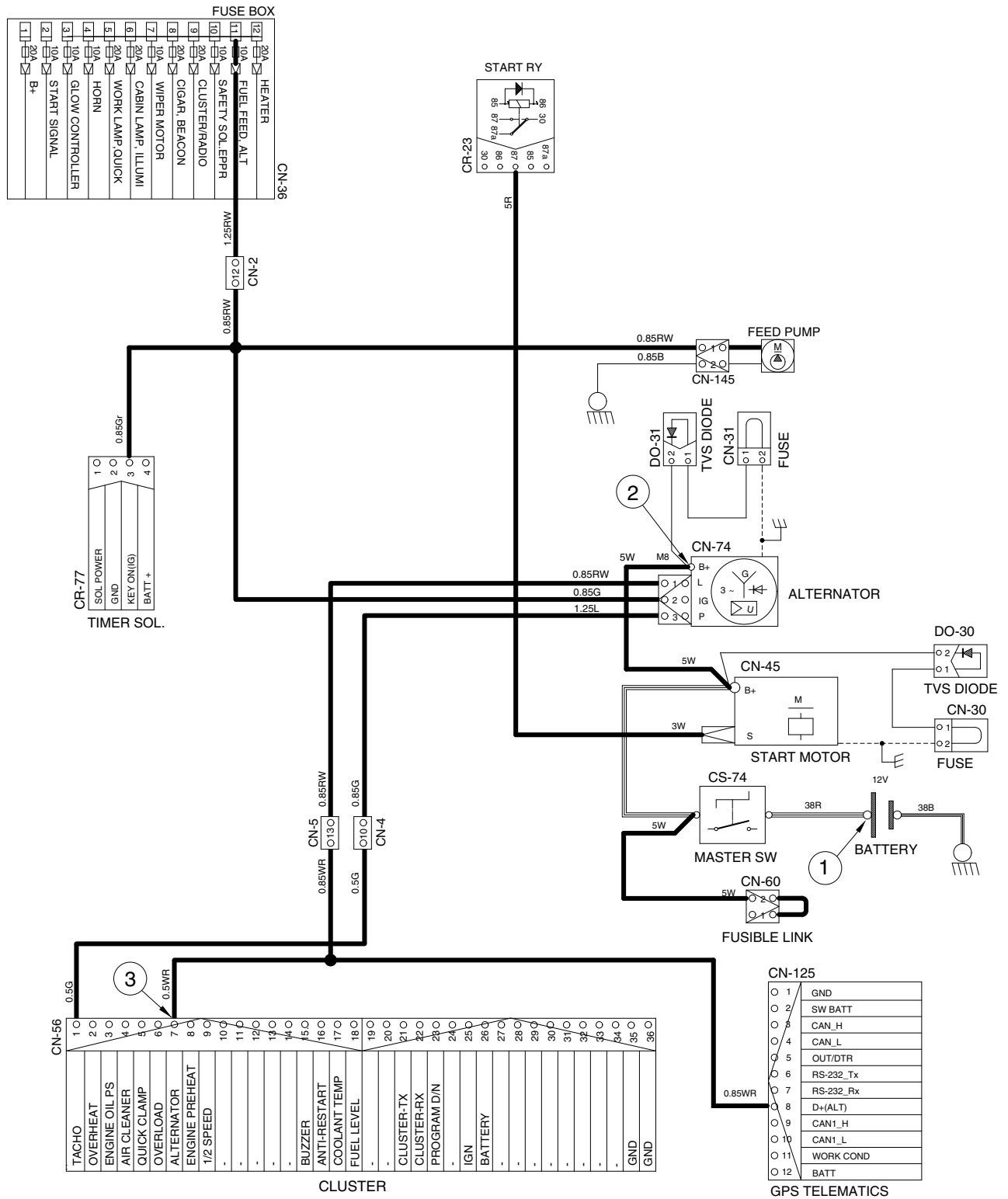
Alternator "B+" terminal → Start motor [CN-45 (B+)] → Master switch [CS-74]
 → Battery(+) terminal

2) CHECK POINT

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

※ GND : Ground

CHARGING CIRCUIT



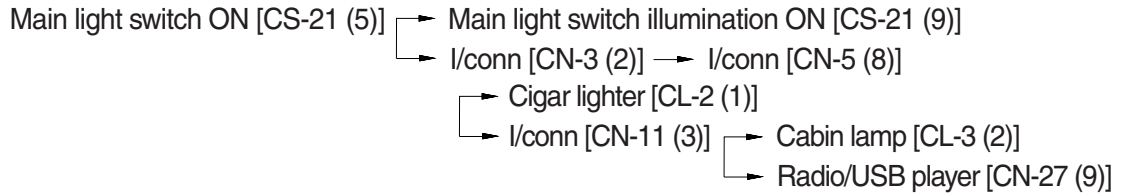
4. WORK LIGHT CIRCUIT

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



(2) Main light switch ON : 2nd step

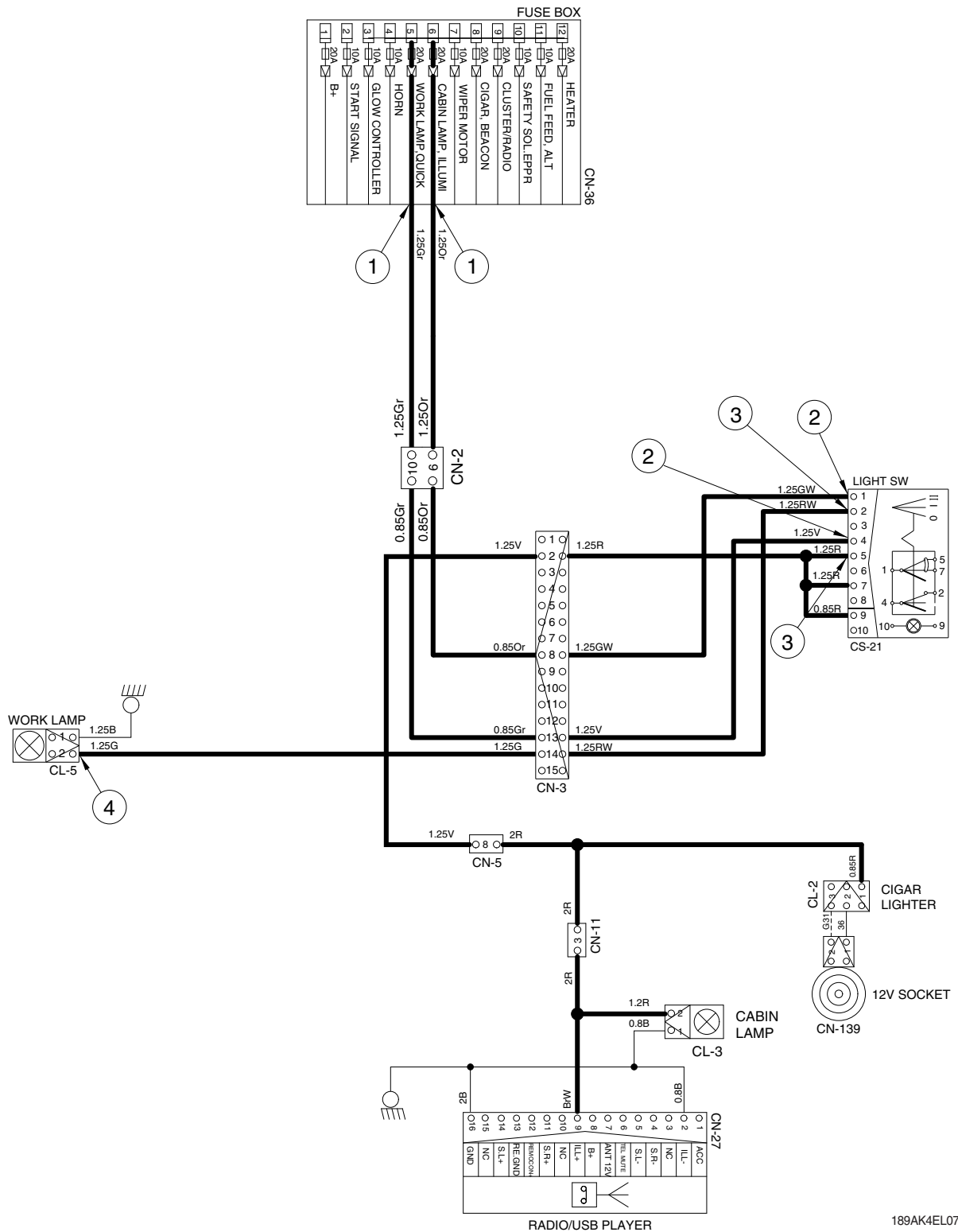
Main light switch ON [CS-21 (2)] → I/conn [CN-3 (14)] → Work light ON [CL-5 (2)]

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 (Work light)	10~12.5 V

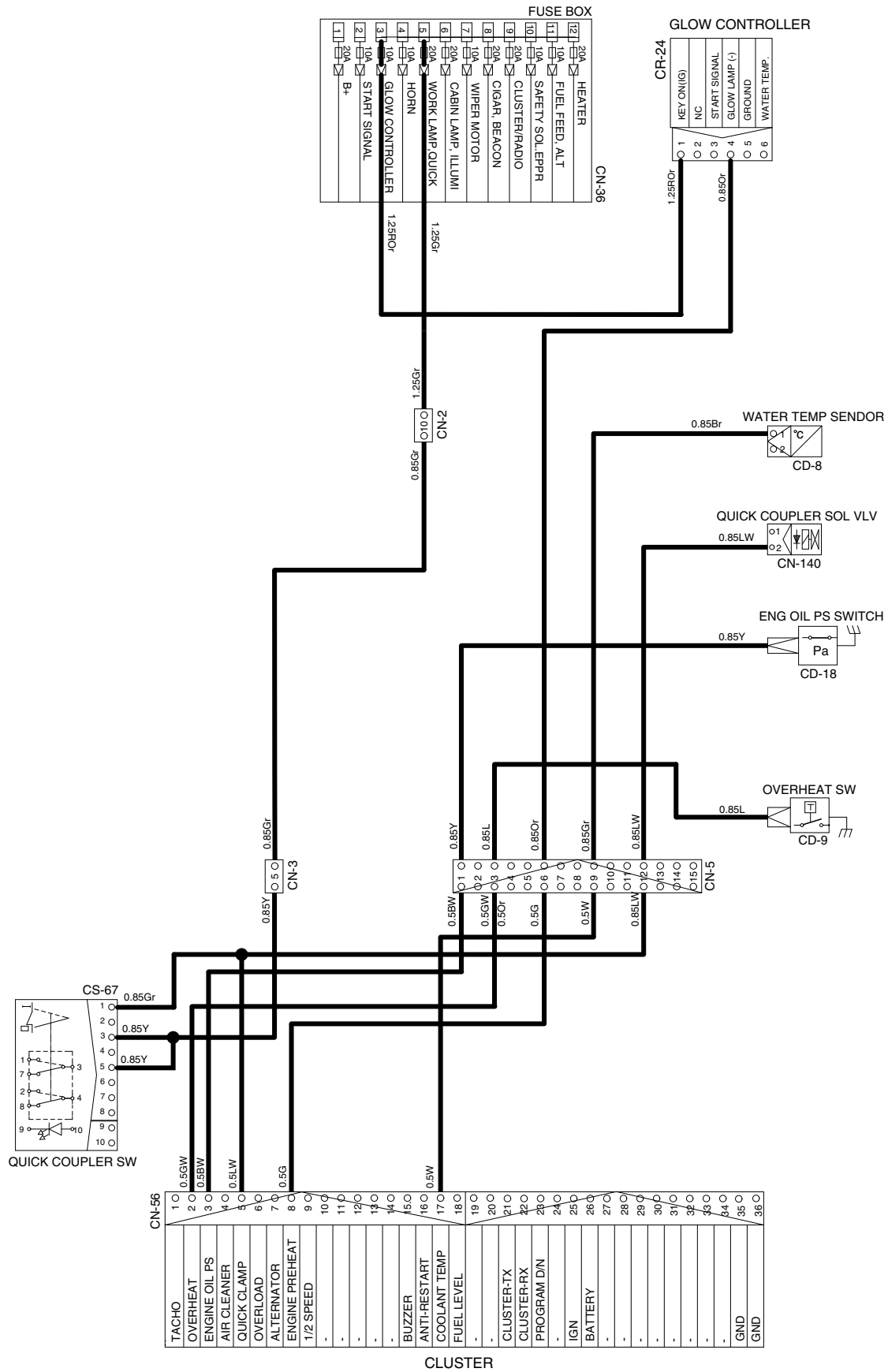
※ GND : Ground

WORK LAMP CIRCUIT

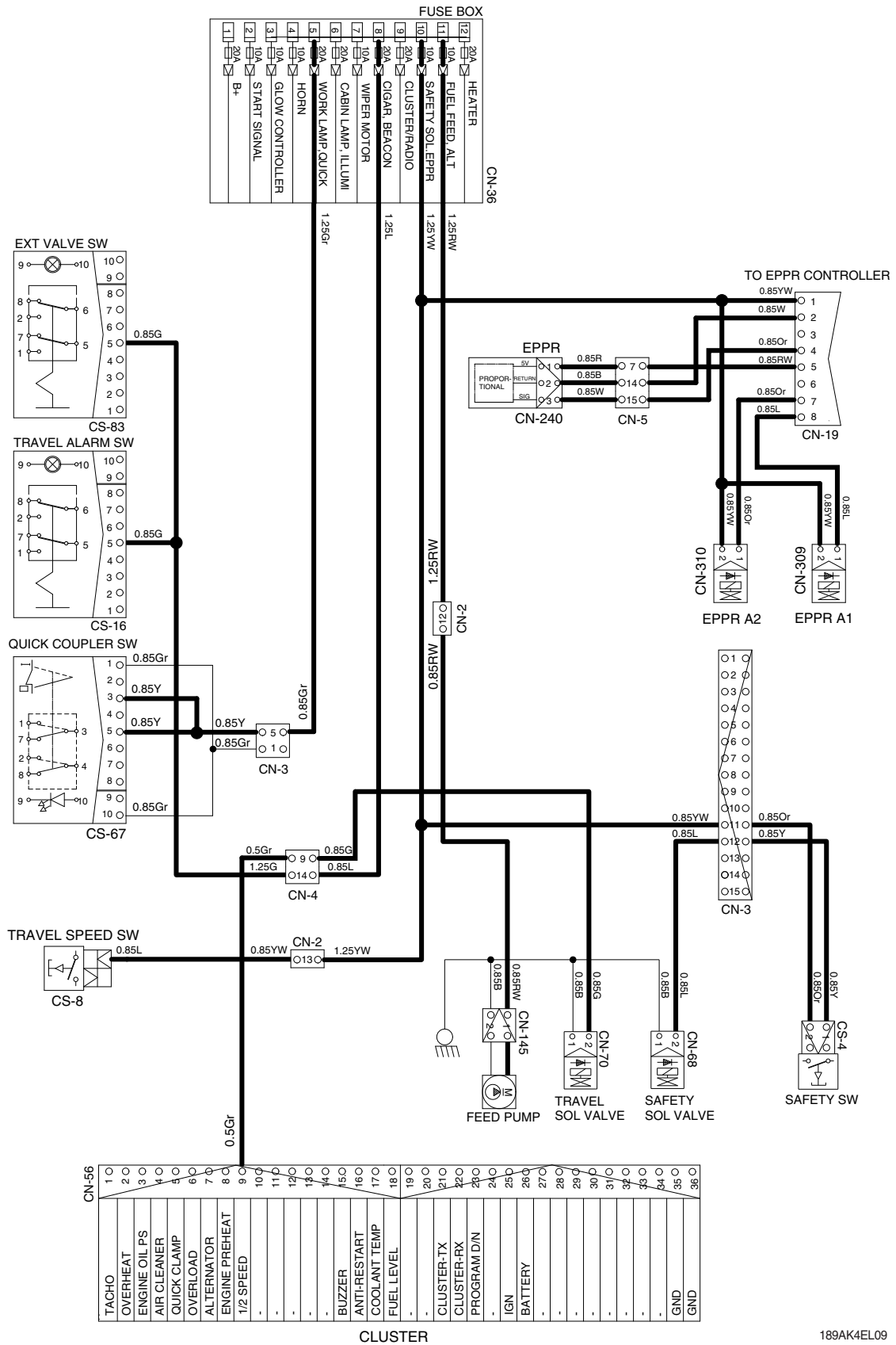


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MONITORING CIRCUIT

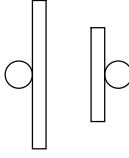
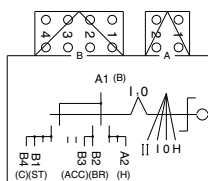
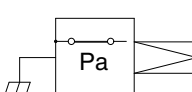
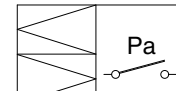
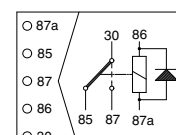
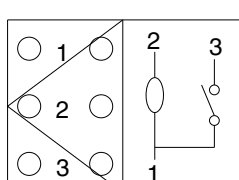


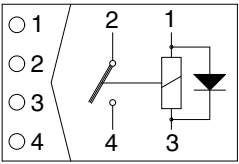
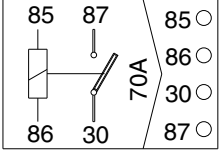
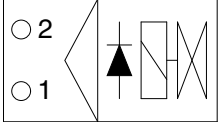
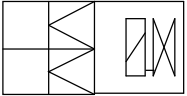
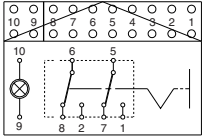
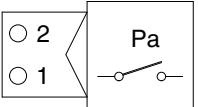
ELECTRIC CIRCUIT FOR HYDRAULIC

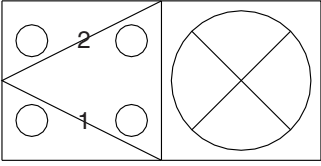
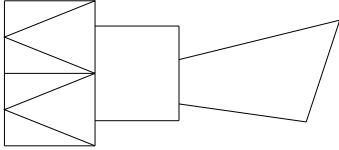
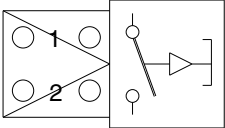
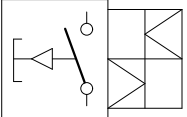
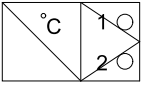
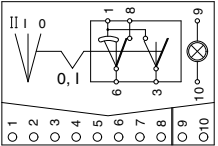


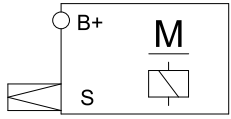
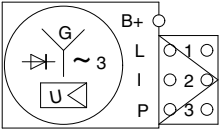
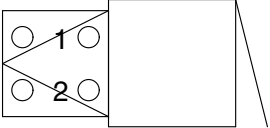
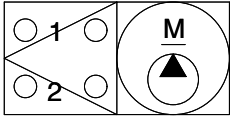
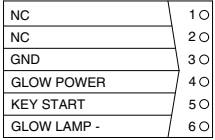
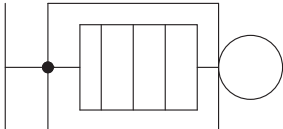
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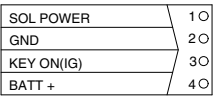
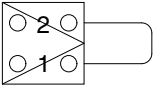
GROUP 4 ELECTRICAL COMPONENT SPECIFICATION

Part name	Symbol	Specification	Check
Battery		12V × 80Ah	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging
Start key	 CS-2 CS-46	12V	※ Check contact OFF : ∞ Ω (for each terminal) ON : 0 Ω (for terminal 1-3 and 1-2) START : 0 Ω (for terminal 1-5)
Pressure switch (for engine oil)	 CD-18	0.5 kgf/cm ² (N.C TYPE)	※ Check resistance Normal : 0 Ω (CLOSE)
Air cleaner pressure switch	 CD-10	Pressure: 635 mmH ₂ O (N.O TYPE)	※ Check contact Normal : ∞ Ω
Start relay	 CR-23	12V 60A	※ Rated coil current 1.2 ± 0.3A
Fuel sender	 CD-2	-	※ Check resistance Full : 30 Ω Low : 100 Ω Empty warning : 200 Ω

Part name	Symbol	Specification	Check
Horn relay	 <p>CR-2</p>	12V 20A	※ Check resistance Normal : About 200 Ω (for terminal 1-3) : 0 Ω (for terminal 2-4)
Power relay	 <p>CR-35</p>	12V 70A	※ Rated coil current 1.2±0.3 A
Solenoid valve	 <p>CN-70 CN-68 CN-140 CN-238 CN-239 CN-264</p>	12V 1A	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
Solenoid valve (engine stop)	 <p>CN-79</p>	12V	※ Coil resistance : 1.8 Ω
Switch (locking type)	 <p>CS-8 CS-16 CS-83</p>	12V 16A	※ Check contact Normal OFF - ∞ Ω (for terminal 1-5,2-6) - 0 Ω (for terminal 5-7,6-8)
Pressure switch	 <p>CD-11</p>	10bar (N.C type)	※ Check contact Normal : 0.1 Ω

Part name	Symbol	Specification	Check
Lamp	 <p>CL-5</p>	12V 55W (H3 TYPE)	※ Check disconnection Normal : 1.2 Ω
Horn	 <p>CN-20</p>	12V 6A	132±5 dB
Safety switch	 <p>CS-4</p>	Micro 12V 15A	※ Check contact Normal : 0 Ω Operating : ∞ Ω
Horn switch	 <p>CS-5</p>	12V 10A	※ Check contact Normal : 0 Ω
Water temp sender	 <p>CD-8</p>	-	※ Check contact 50°C : 0.748~0.904 Ω 67°C : 0.538~0.650 Ω 102°C : 0.185~0.167 Ω 110°C : 0.143~0.130 Ω 135°C : 0.076~0.100 Ω
Light switch	 <p>CS-21</p>	12V 16A	※ Check contact Normal : ∞ Ω

Part name	Symbol	Specification	Check
Starter	 <p>CN-45</p>	12V 1.2kW	※ Check contact Normal : 0.1 Ω
Alternator	 <p>CN-74</p>	12V 40A	※ Check contact Normal : 0 Ω (For terminal B ⁺ -1) Normal : 10 ~ 12.5V
Travel alarm	 <p>CN-81</p>	12V	-
Fuel feed pump	 <p>CN-145</p>	12V	-
Glow timer	 <p>CR-24</p>	12V	-
Air-heater	 <p>CN-80</p>	12V 42A 500W	-

Part name	Symbol	Specification	Check
Control time relay	 <p>CR-77</p>	12V	-
Fusible link	 <p>CN-60</p>	27A	※ Check coil resistance Normal : 3.26m Ω /m

GROUP 5 CONNECTORS

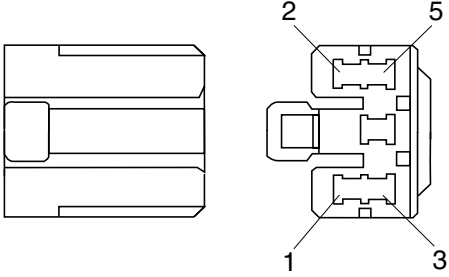
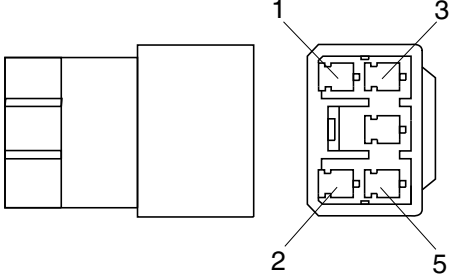
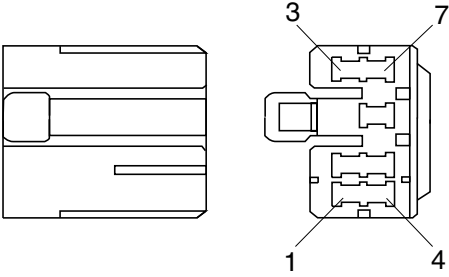
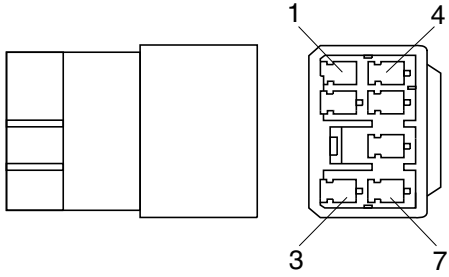
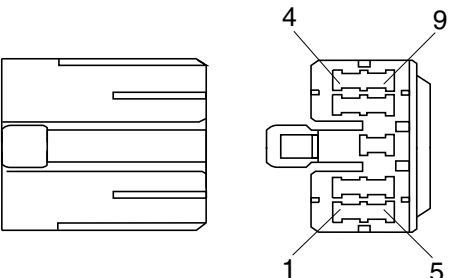
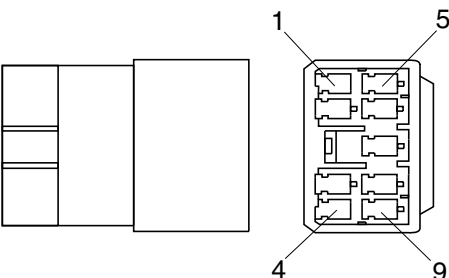
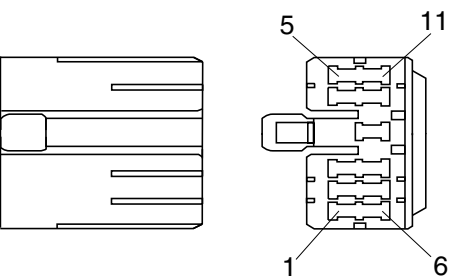
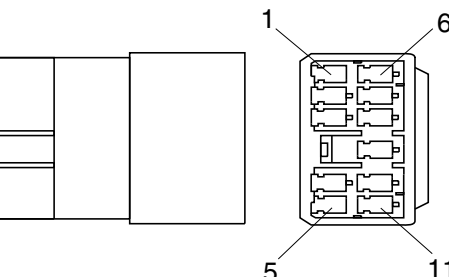
1. CONNECTOR DESTINATION

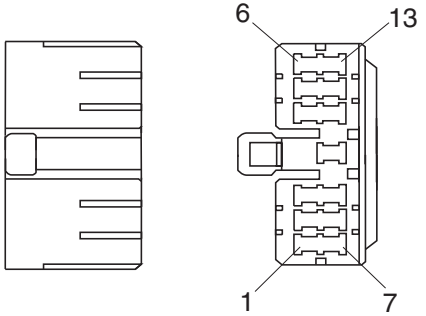
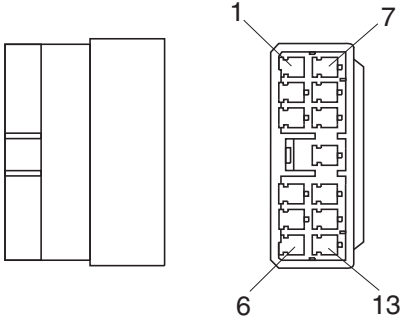
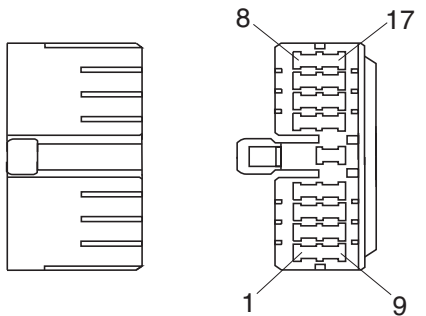
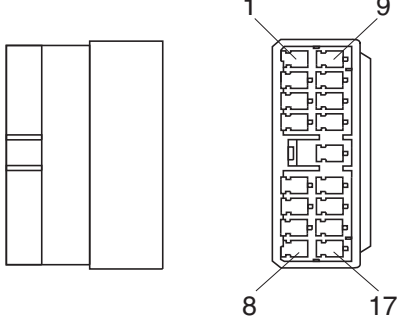
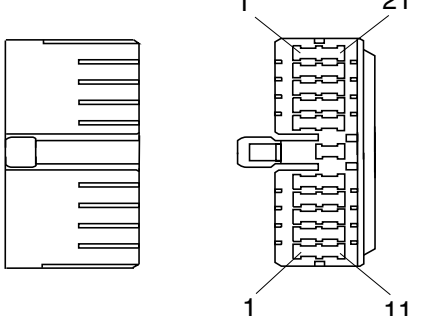
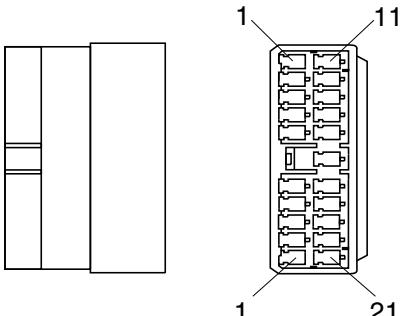
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	-	1	I/conn (RH console harness-main harness)	-	S822-114000
CN-2	AMP	15	I/conn (Main harness-RH console harness)	2-85262-1	-
CN-3	AMP	15	I/conn (LH console harness-main harness)	2-85262-1	-
CN-4	AMP	15	I/conn (Main harness-LH console harness)	-	368301-1
CN-4-1	-	4	I/conn (FR RH side harness-main harness)	S810-004202	-
CN-5	AMP	15	I/conn (Main harness-RH console harness)	2-85262-1	-
CN-11	AMP	8	I/conn (RH console harness-cab harness)	174982-2	-
CN-19	AMP	8	To eppr harness	174984-2	-
CN-20	DEUTSCH	2	Horn	DT06-2S	-
CN-45	YAZAKI	1	Starter	7123-2115	-
CN-60	KET	4	Fusible link	-	MG640795
	-	2	Fusible link	-	S813-130200
CN-68	DEUTSCH	2	Safety solenoid valve A1	DT06-2S	-
CN-70	DEUTSCH	2	Travel speed solenoid valve A2	DT06-2S-P012	-
CN-74	SUMITOMO	3	Alternator	6189-0442	-
CN-79	YAZAKI	1	Engine stop solenoid	7123-2815	-
CN-81	DEUTSCH	1	Travel buzzer	DT06-2S	-
CN-125	-	12	GPS telematics	DTM06-12SA	-
CN-126	-	4	RS232 connect	DT06-4S-EP06	-
CN-140	DEUTSCH	2	Quick coupler solenoid valve	DT06-2S	DT04-2P
CN-145	YAZAKI	2	Fuel feed pump	7122-2820	-
CN-238	DEUTSCH	2	EPPR solenoid LH	DT06-2S	-
CN-239	DEUTSCH	2	EPPR solenoid RH	DT06-2S	-
CN-240	-	3	EPPR	DT06-3S	-
CN-264	DEUTSCH	2	Extention valve	DT06-2S	-
CN-305	REXROTH	56	EPPR controller	1-928-405-16	-
CN-307	DEUTSCH	3	Service tool	DT06-3S	-
	-	3	Service tool	DT04-3P	-
LAMP					
CL-2	AMP	3	Cigar	174200-1	-
CL-5	DEUTSCH	1	Boom lamp	DT06-2S	-
RELAY					
CR-2	KET	4	Horn relay	MG612017-5	-
CR-23	KET	4	Start relay	MG612017-5	-
	YAZAKI			7323-2446	-
CR-24	SUMITOMO	6	Glow controller relay	6195-0021	-

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CR-36	SUMITOMO	2	Glow controller	6195-0060	-
CR-77	KET	4	Timer solenoid relay	MG612017-5	-
SENSOR					
CD-82	AMP	2	Fuel sender	S816-003002	-
CD-8	TE	1	Water temp sender (glow controller)	171809-2	-
CD-08A	TE	1	Water temp sender (glow controller)	171809-2	-
CD-9	AMP	1	Overheat switch	172320-2	-
CD-11	KET	2	Travel alarm pressure switch	MG640795	-
SWITCH					
CS-2	-	2	Start key switch	S813-030201	-
CS-5	-	-	Horn	-	DT04-2P
CS-8	SWF	10	Travel speed	583757	-
CS-16	SWF	10	Travel alarm	583757	-
CS-21	-	10	Quick coupler	593757	-
CS-23	SWF	10	Beacon	583757	-
CS-33	-	6	Emergency engine stop switch	S816-006002	-
CS-46	KET	2	Start switch	MG640795	-
CS-67	-	10	Light	593757	-
CS-83	SWF	10	Extention valve	583757	-

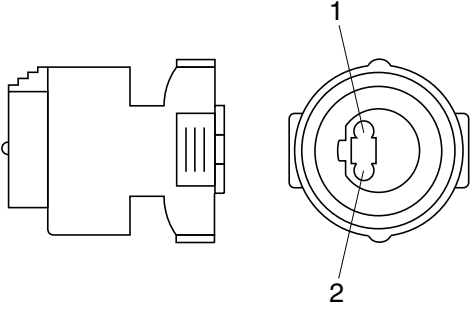
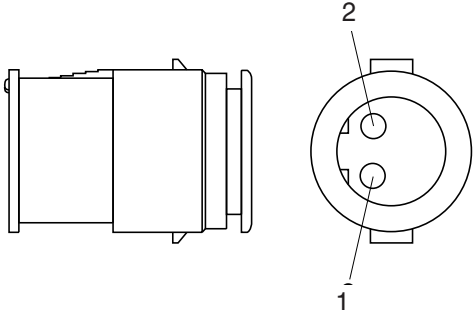
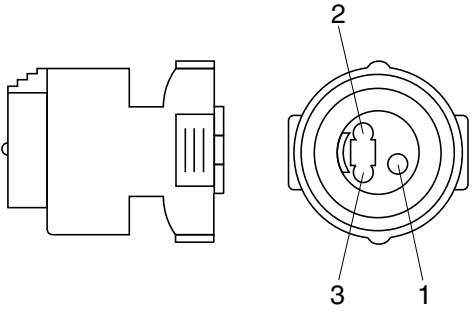
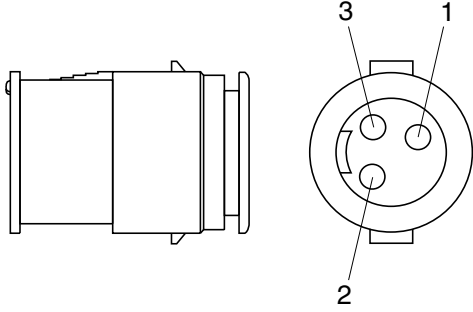
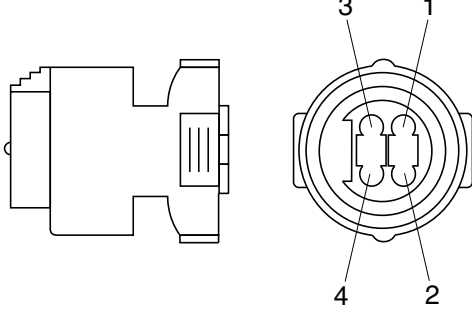
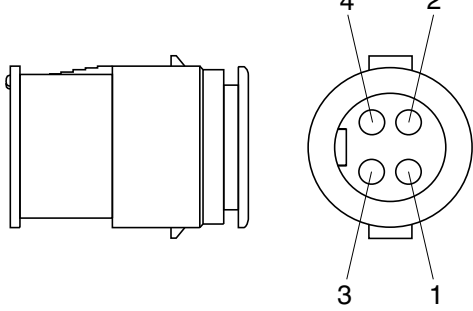
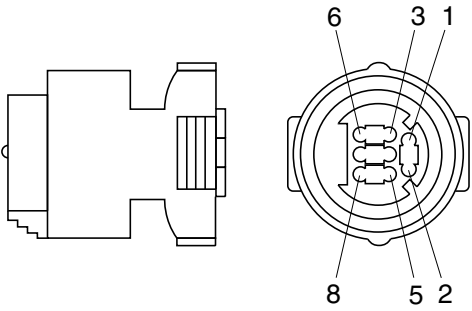
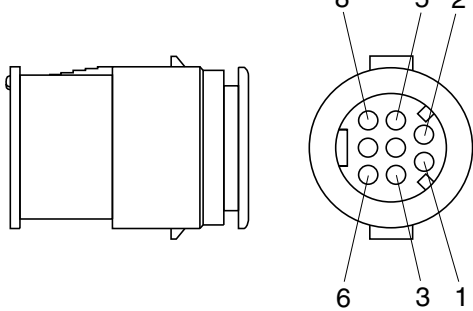
2. CONNECTION TABLE FOR CONNECTORS

1) PA TYPE CONNECTOR

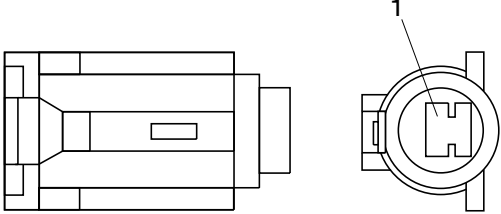
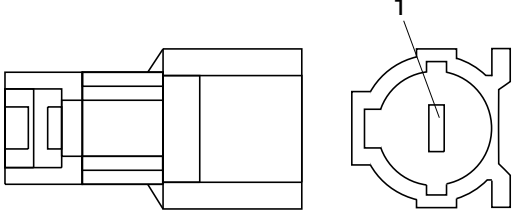
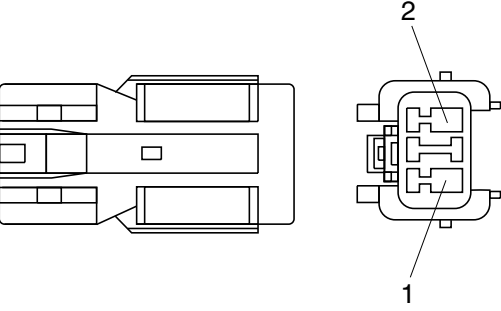
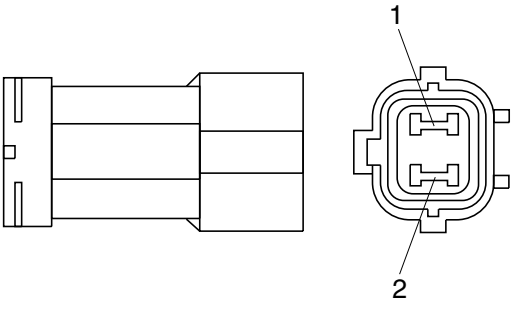
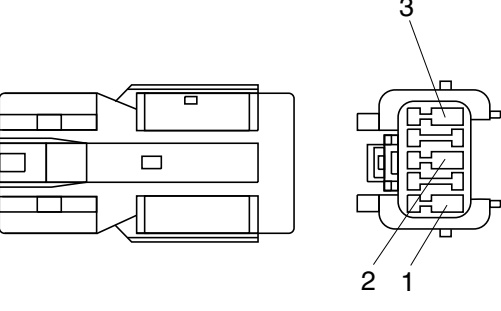
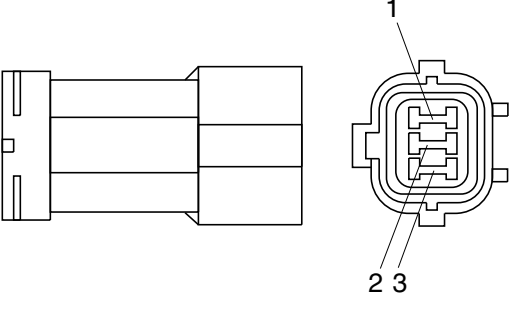
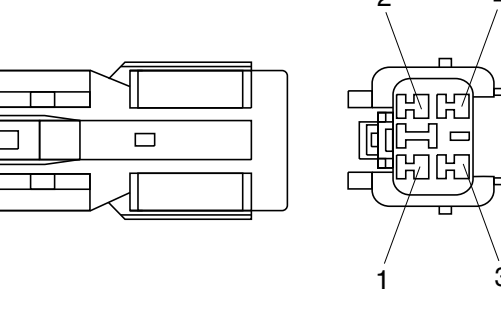
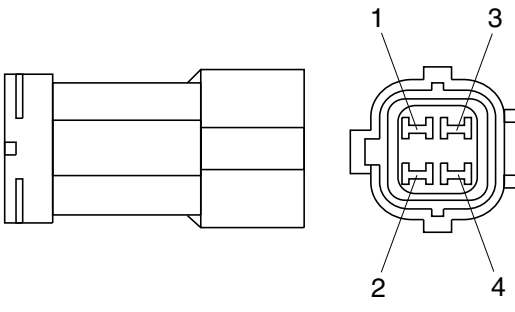
No. of pin	Receptacle connector (female)	Plug connector (male)
5	 <p style="text-align: center;">S811-005002</p>	 <p style="text-align: center;">S811-105002</p>
7	 <p style="text-align: center;">S811-007002</p>	 <p style="text-align: center;">S811-107002</p>
9	 <p style="text-align: center;">S811-009002</p>	 <p style="text-align: center;">3S811-109002</p>
11	 <p style="text-align: center;">S811-011002</p>	 <p style="text-align: center;">S811-111002</p>

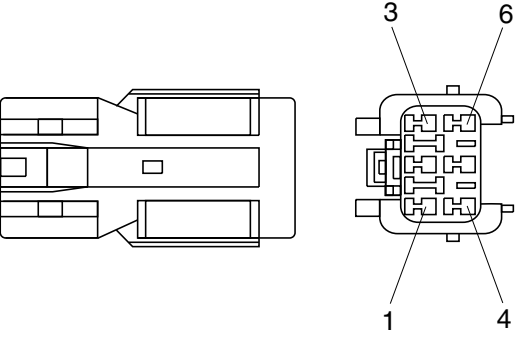
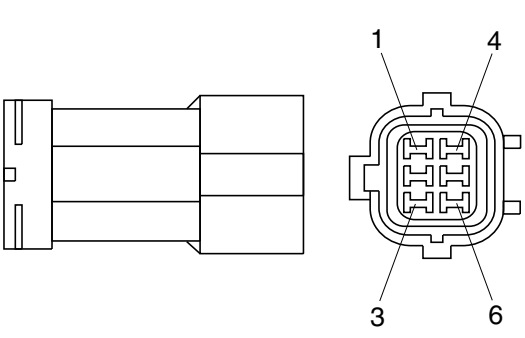
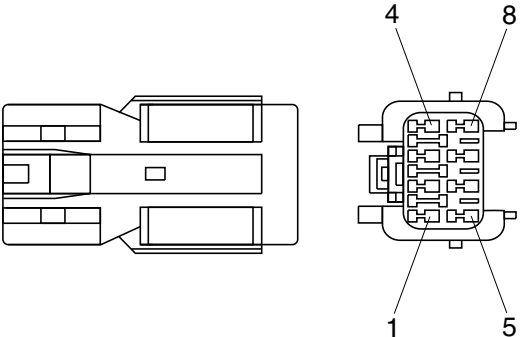
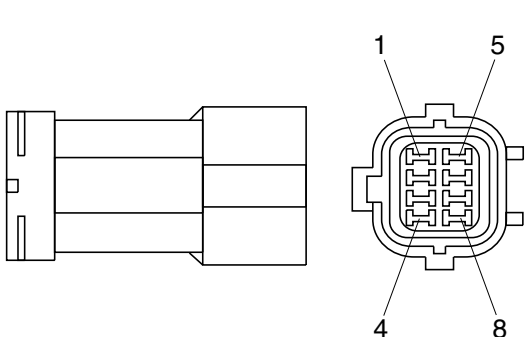
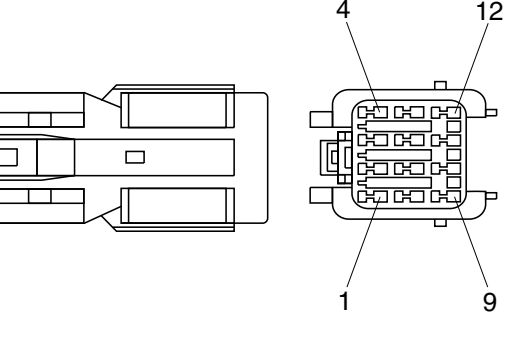
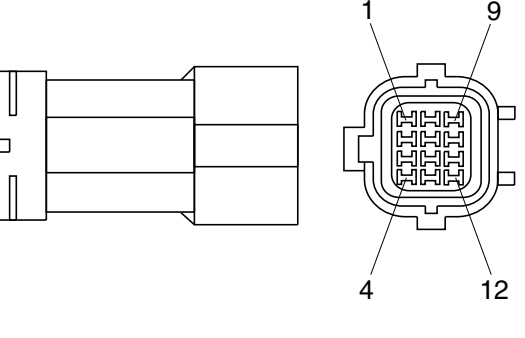
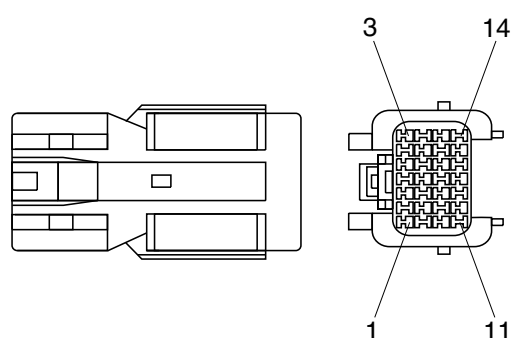
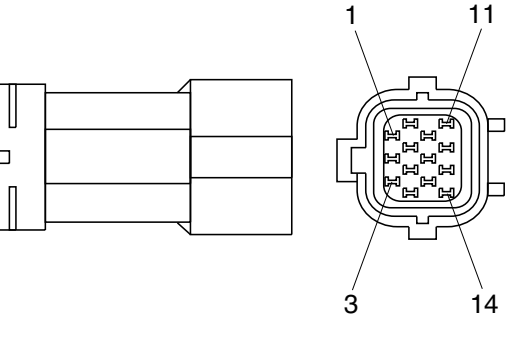
No. of pin	Receptacle connector (female)	Plug connector (male)
13	 <p data-bbox="686 638 837 672">S811-013002</p>	 <p data-bbox="1244 638 1396 672">S811-113002</p>
17	 <p data-bbox="686 1041 837 1075">S811-017002</p>	 <p data-bbox="1244 1041 1396 1075">S811-117002</p>
21	 <p data-bbox="686 1444 837 1478">S811-021002</p>	 <p data-bbox="1244 1444 1396 1478">S811-121002</p>

2) J TYPE CONNECTOR

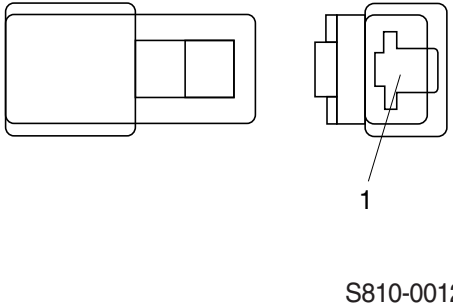
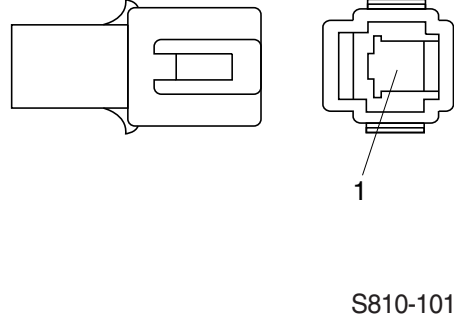
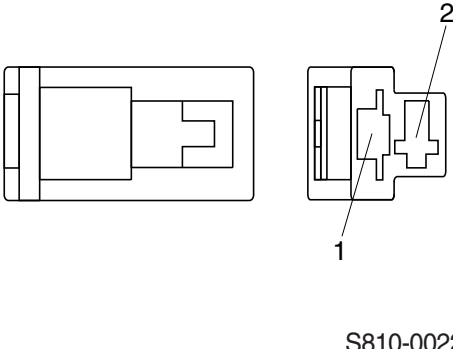
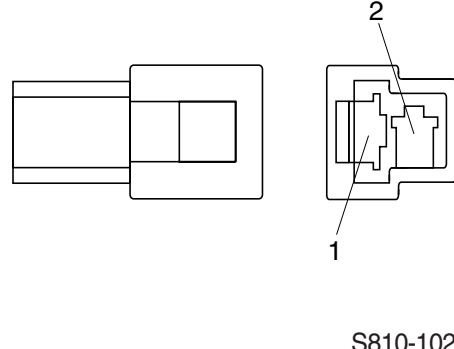
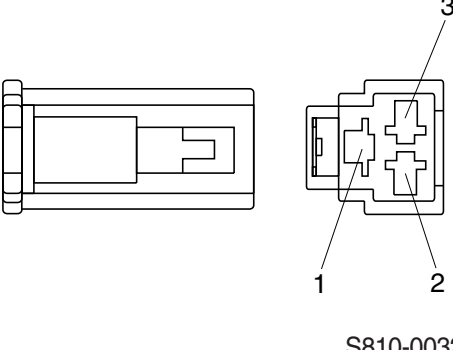
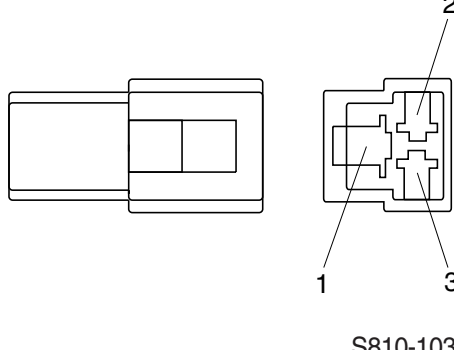
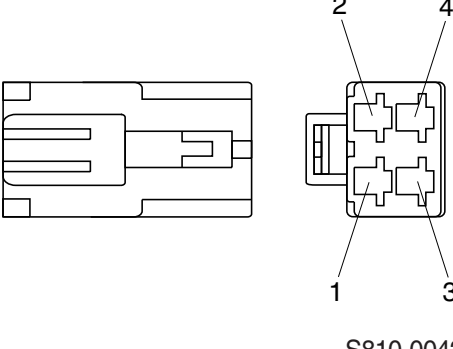
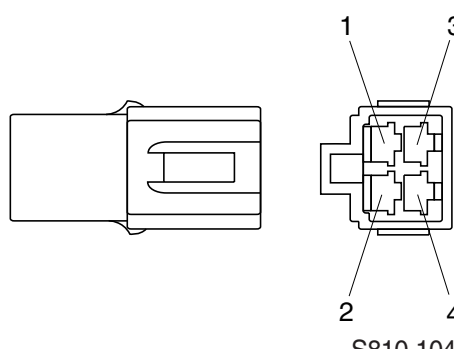
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">S816-002001</p>	 <p style="text-align: center;">S816-102001</p>
3	 <p style="text-align: center;">S816-003001</p>	 <p style="text-align: center;">S816-103001</p>
4	 <p style="text-align: center;">S816-004001</p>	 <p style="text-align: center;">S816-104001</p>
8	 <p style="text-align: center;">S816-008001</p>	 <p style="text-align: center;">S816-108001</p>

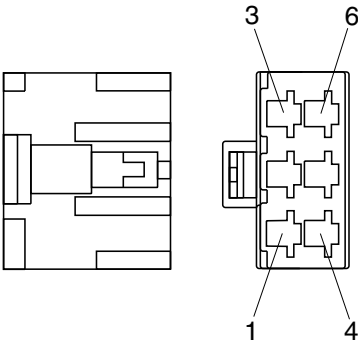
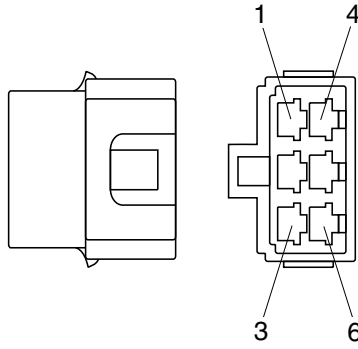
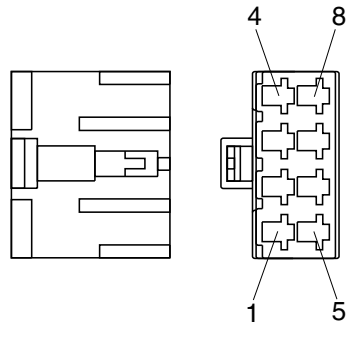
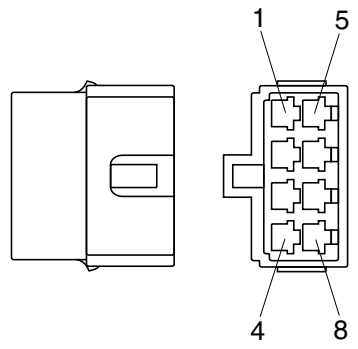
3) SWP TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p data-bbox="687 680 836 707">S814-001000</p>	 <p data-bbox="1241 680 1390 707">S814-101000</p>
2	 <p data-bbox="687 1088 836 1115">S814-002000</p>	 <p data-bbox="1241 1088 1390 1115">S814-102000</p>
3	 <p data-bbox="687 1498 836 1525">S814-003000</p>	 <p data-bbox="1241 1498 1390 1525">S814-103000</p>
4	 <p data-bbox="687 1908 836 1935">S814-004000</p>	 <p data-bbox="1241 1908 1390 1935">S814-104000</p>

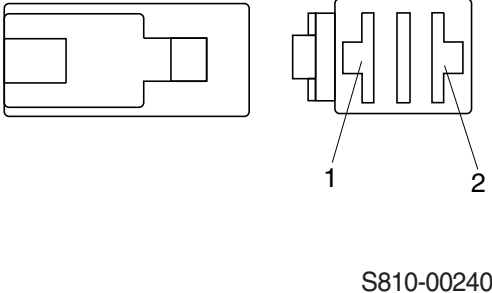
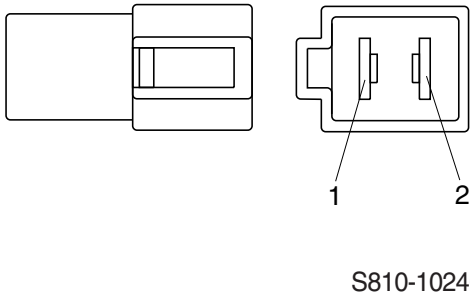
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S814-006000</p>	 <p data-bbox="1244 638 1396 672">S814-106000</p>
8	 <p data-bbox="686 1041 837 1075">S814-008000</p>	 <p data-bbox="1244 1041 1396 1075">S814-108000</p>
12	 <p data-bbox="686 1444 837 1478">S814-012000</p>	 <p data-bbox="1244 1444 1396 1478">S814-112000</p>
14	 <p data-bbox="686 1848 837 1881">S814-014000</p>	 <p data-bbox="1244 1848 1396 1881">S814-114000</p>

4) CN TYPE CONNECTOR

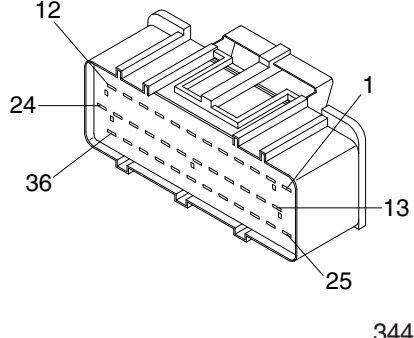
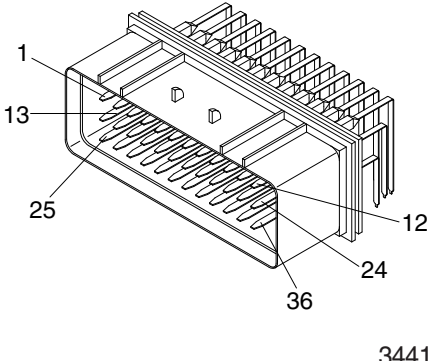
No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: center;">S810-001202</p>	 <p style="text-align: center;">S810-101202</p>
2	 <p style="text-align: center;">S810-002202</p>	 <p style="text-align: center;">S810-102202</p>
3	 <p style="text-align: center;">S810-003202</p>	 <p style="text-align: center;">S810-103202</p>
4	 <p style="text-align: center;">S810-004202</p>	 <p style="text-align: center;">S810-104202</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S810-006202</p>	 <p data-bbox="1244 638 1396 672">S810-106202</p>
8	 <p data-bbox="686 1041 837 1075">S810-008202</p>	 <p data-bbox="1244 1041 1396 1075">S810-108202</p>

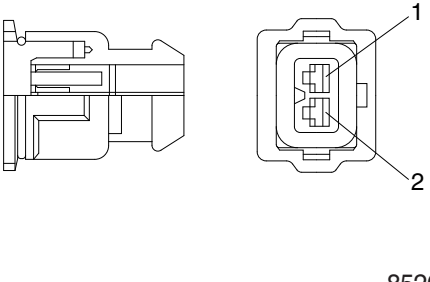
5) 375 FASTEN TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">S810-002402</p>	 <p style="text-align: center;">S810-102402</p>

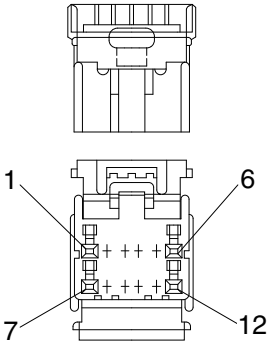
6) AMP ECONOSEAL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
36	 <p style="text-align: center;">344111-1</p>	 <p style="text-align: center;">344108-1</p>

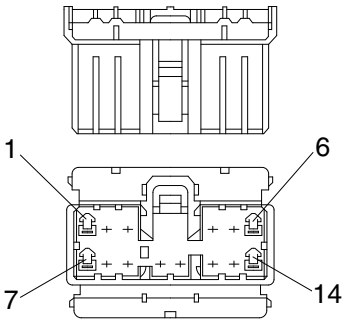
7) AMP TIMER CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">85202-1</p>	

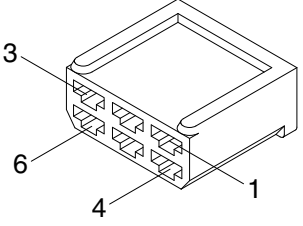
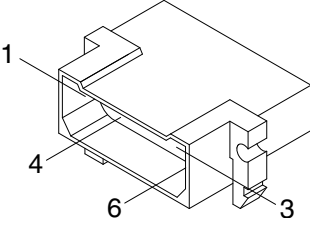
8) AMP 040 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
12	 <p style="text-align: right;">174045-2</p>	

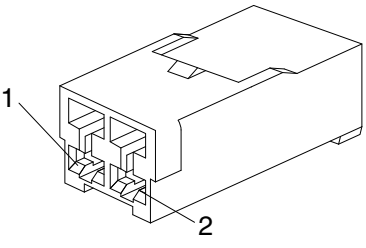
9) AMP 070 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 <p style="text-align: right;">173852</p>	

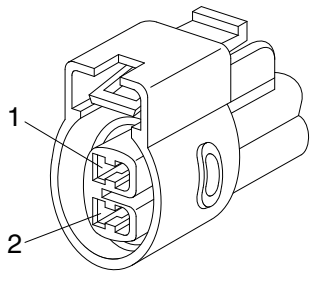
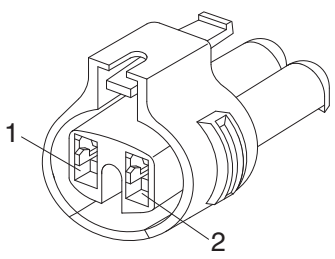
10) AMP FASTIN - FASTON CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p style="text-align: right;">925276-0</p>	 <p style="text-align: right;">480003-9</p>

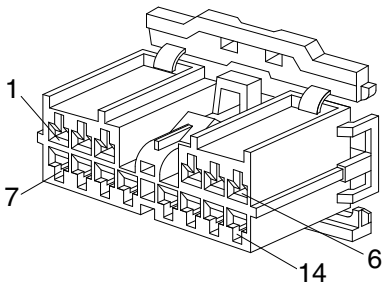
11) KET 090 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">MG610070</p>	

12) KET 090 WP CONNECTORS

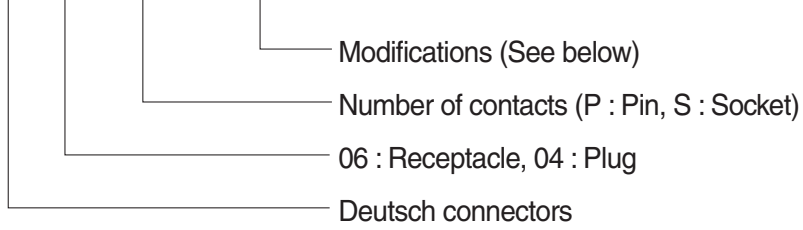
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">MG640605</p>	
2	 <p style="text-align: right;">MG640795</p>	

13) KET SDL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 <p style="text-align: center;">MG610406</p>	

14) DEUTSCH DT CONNECTORS

DT 06 - 3S - ★★★★★



※ Modification

E003 : Standard end cap - gray

E004 : Color of connector to be black

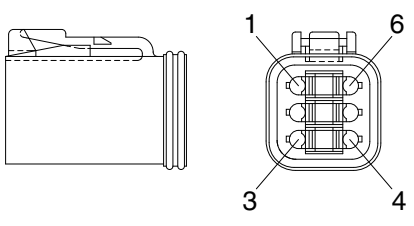
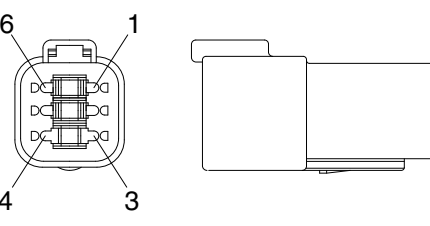
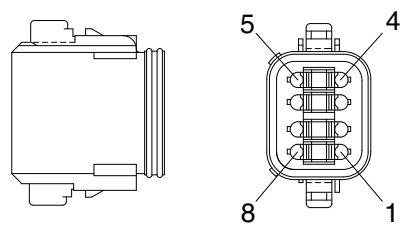
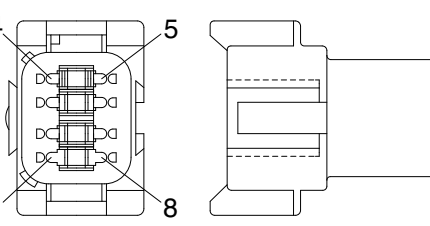
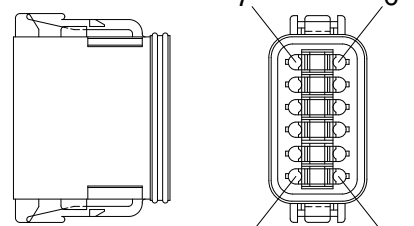
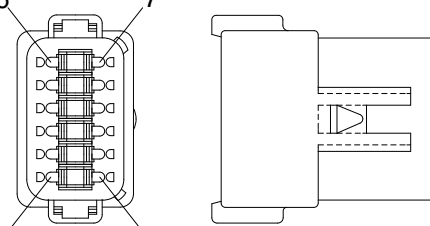
E005 : Combination - E004 & E003

EP04 : End cap

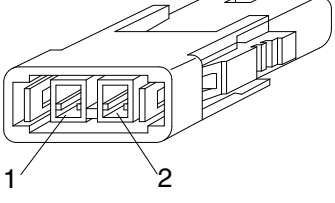
EP06 : Combination P012 & EP04

P012 : Front seal enhancement - connectors color to black for 2, 3, 4 & 6pin

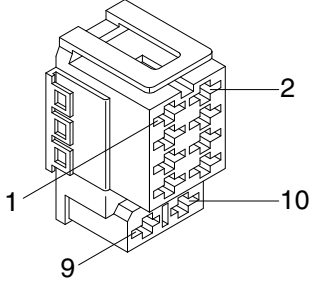
No. of pin	Receptacle connector (female)	Plug connector (male)
2	<p>DT06-2S</p>	<p>DT04-2P</p>
3	<p>DT06-3S</p>	<p>DT04-3P</p>
4	<p>DT06-4S</p>	<p>DT04-4P</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p style="text-align: center;">DT06-6S</p>	 <p style="text-align: center;">DT04-6P</p>
8	 <p style="text-align: center;">DT06-8S</p>	 <p style="text-align: center;">DT04-8P</p>
12	 <p style="text-align: center;">DT06-12S</p>	 <p style="text-align: center;">DT04-12P</p>

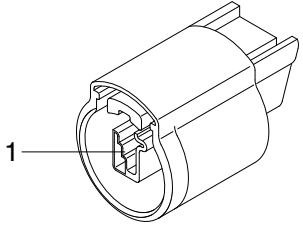
15) MOLEX 2CKTS CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">35215-0200</p>	

16) ITT SWF CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
10	 <p style="text-align: right;">SWF593757</p>	

17) MWP NMWP CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: right;">NMWP01F-B</p>	