

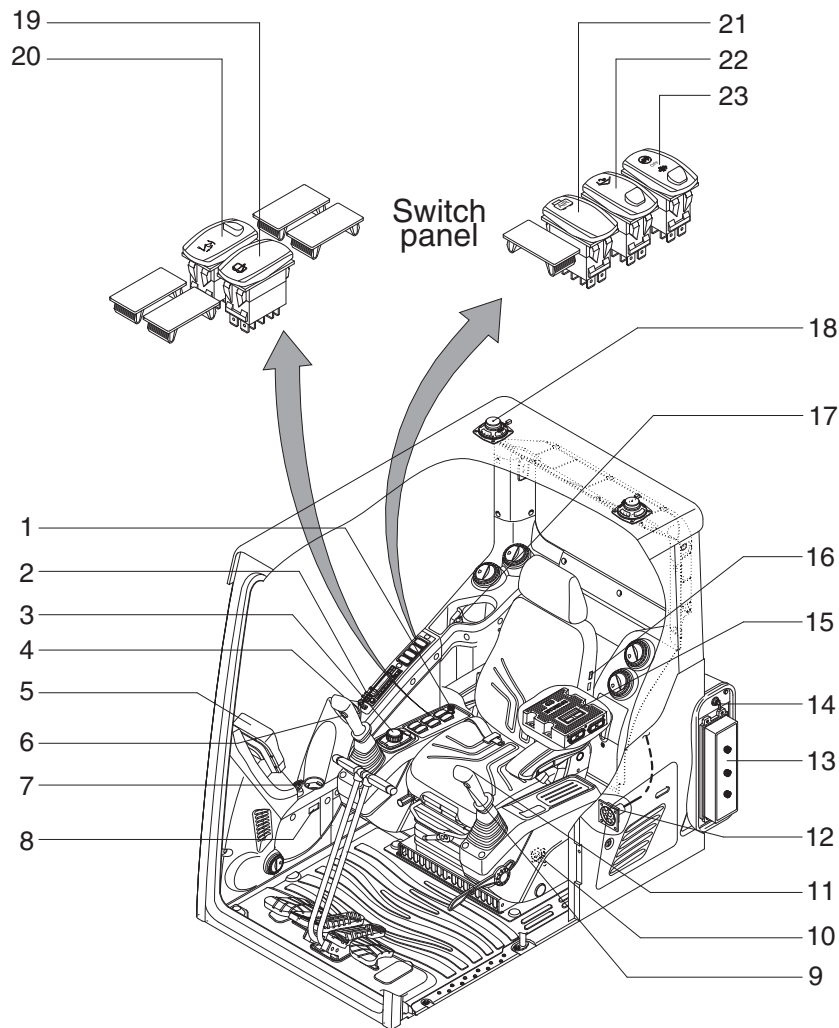
SECTION 4 ELECTRICAL SYSTEM

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SECTION 4 ELECTRICAL SYSTEM

GROUP 1 COMPONENT LOCATION

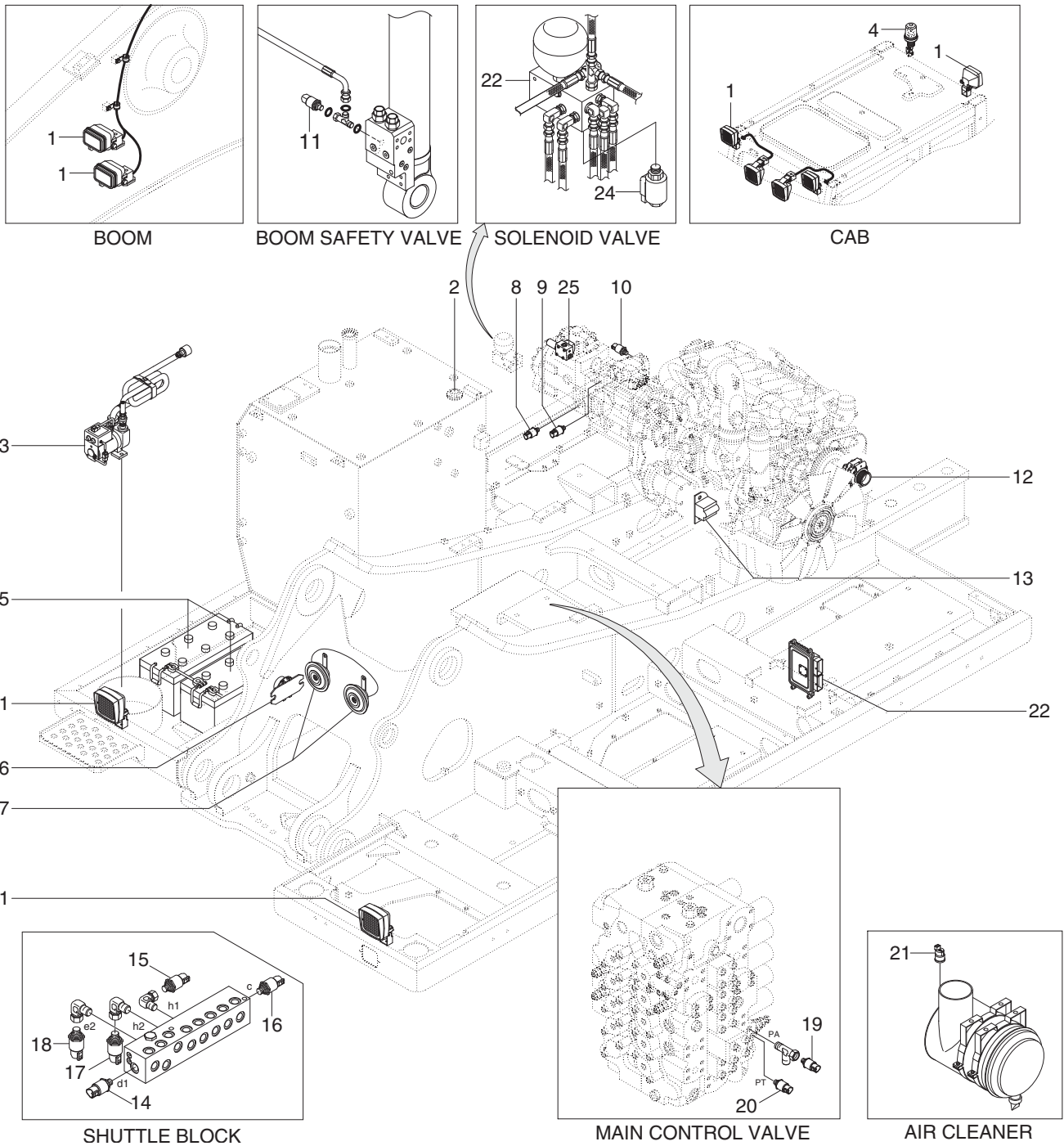
1. LOCATION 1



480F4EL01

- | | | |
|----------------------------|---------------------------------|--------------------------------|
| 1 Cigar lighter | 9 Power max switch | 17 Service socket |
| 2 Radio & USB player | 10 Emergency engine stop switch | 18 Speaker |
| 3 Haptic controller | 11 One touch decel switch | 19 Lower wiper & washer switch |
| 4 Horn switch | 12 RS232 & J1939 service socket | 20 Boom floating switch |
| 5 Cluster | 13 Fuse & relay box | 21 Air compressor switch |
| 6 Breaker operation switch | 14 Master switch | 22 Quick clamp switch |
| 7 Starting switch | 15 Machine control unit | 23 SCR system cleaning switch |
| 8 Service meter | 16 Seat heater switch | |

2. LOCATION 2

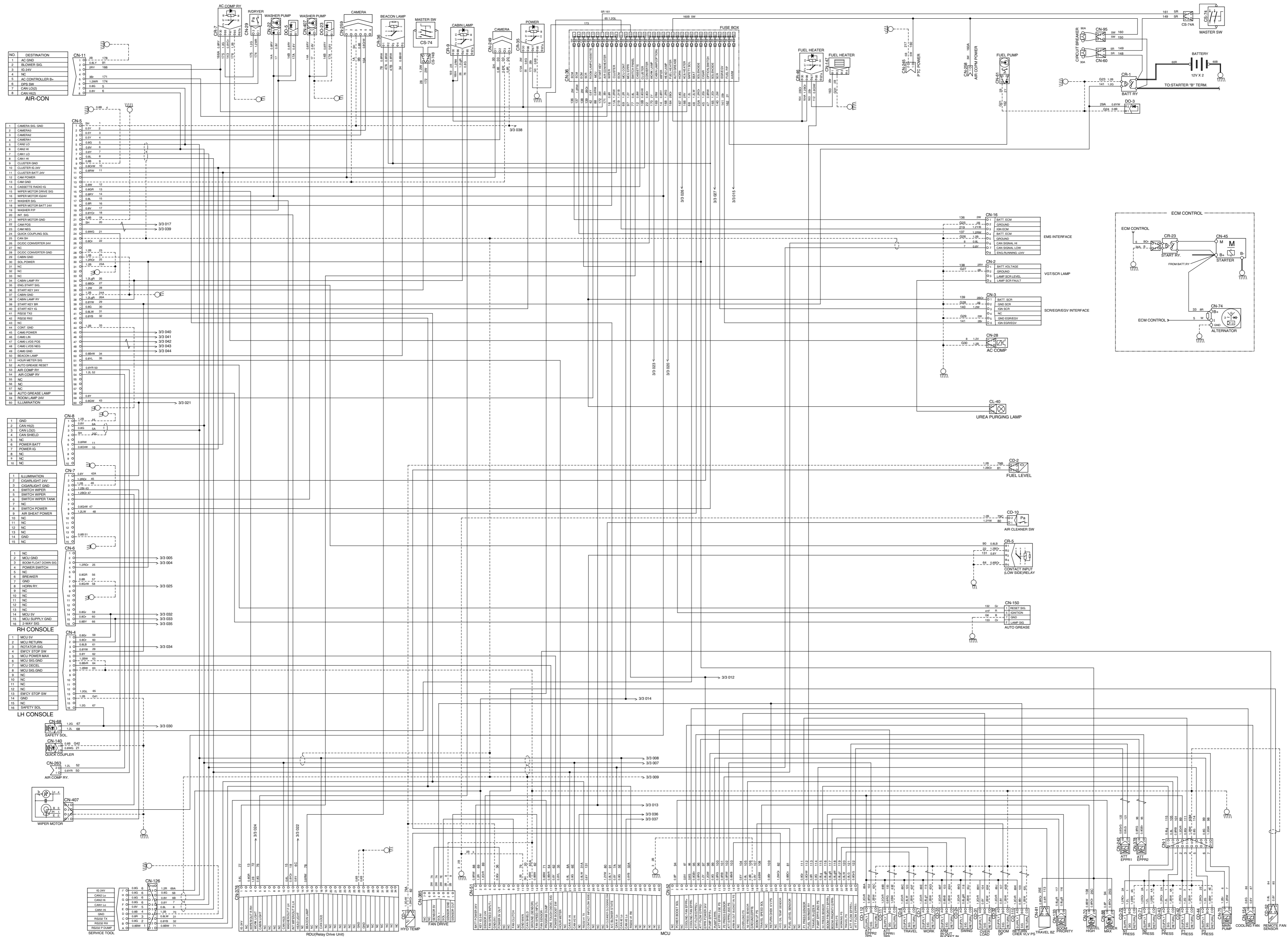


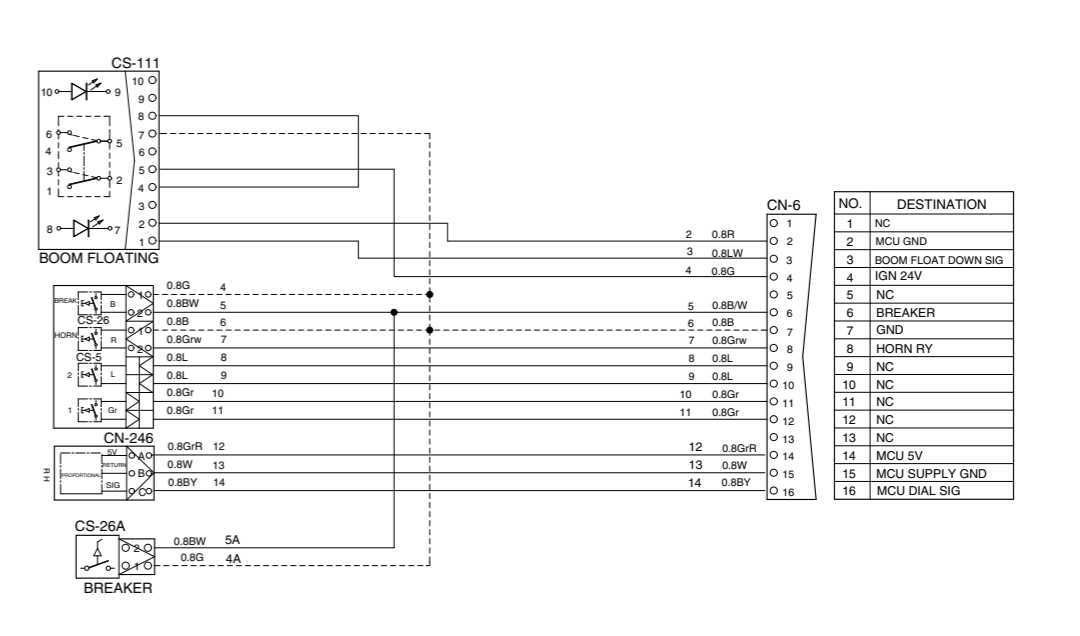
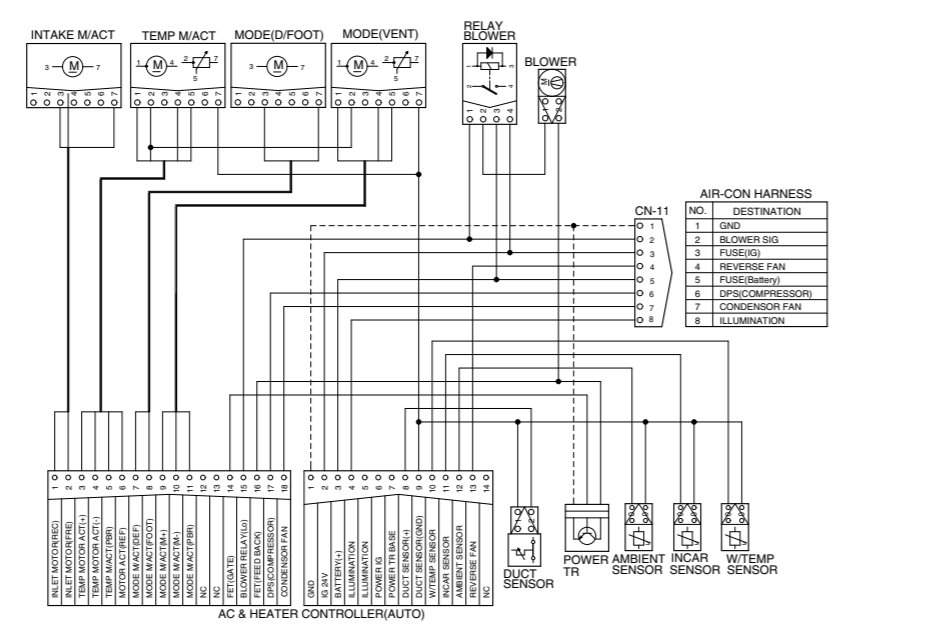
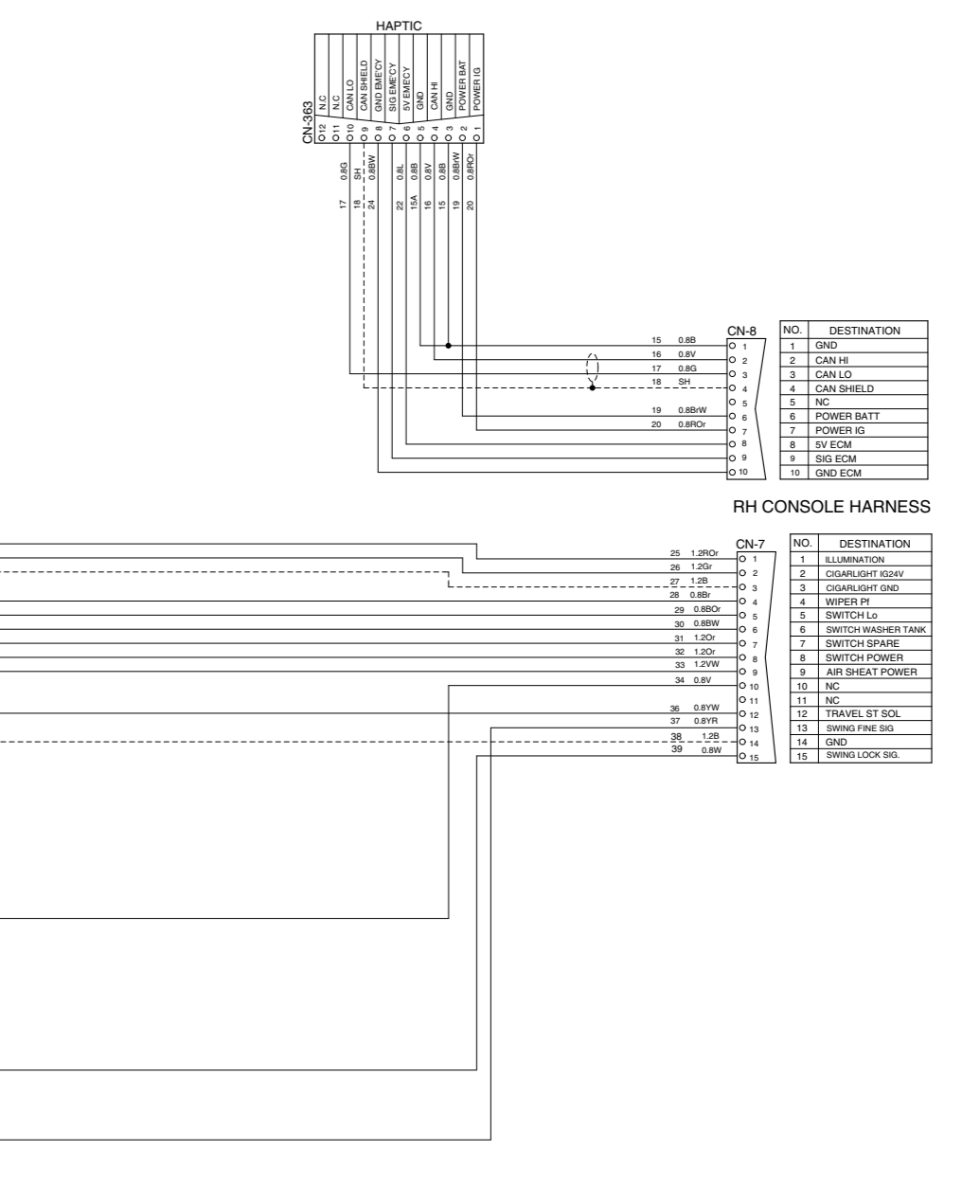
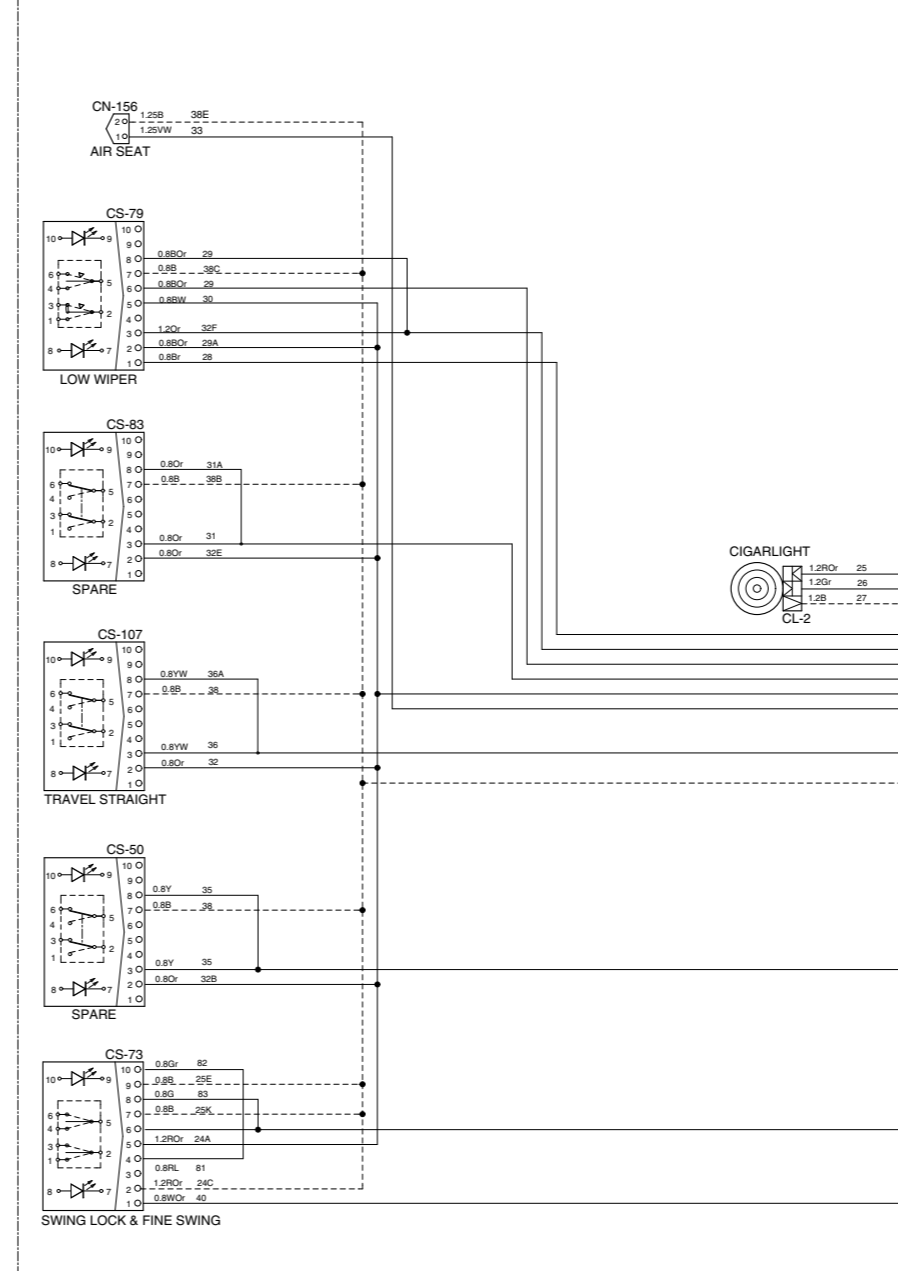
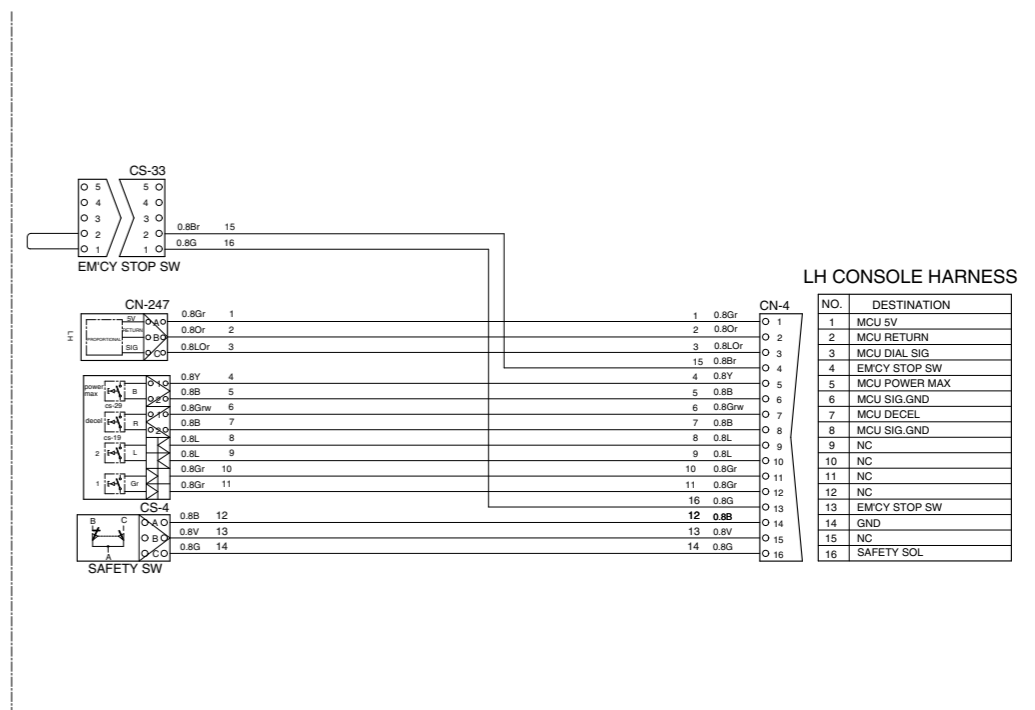
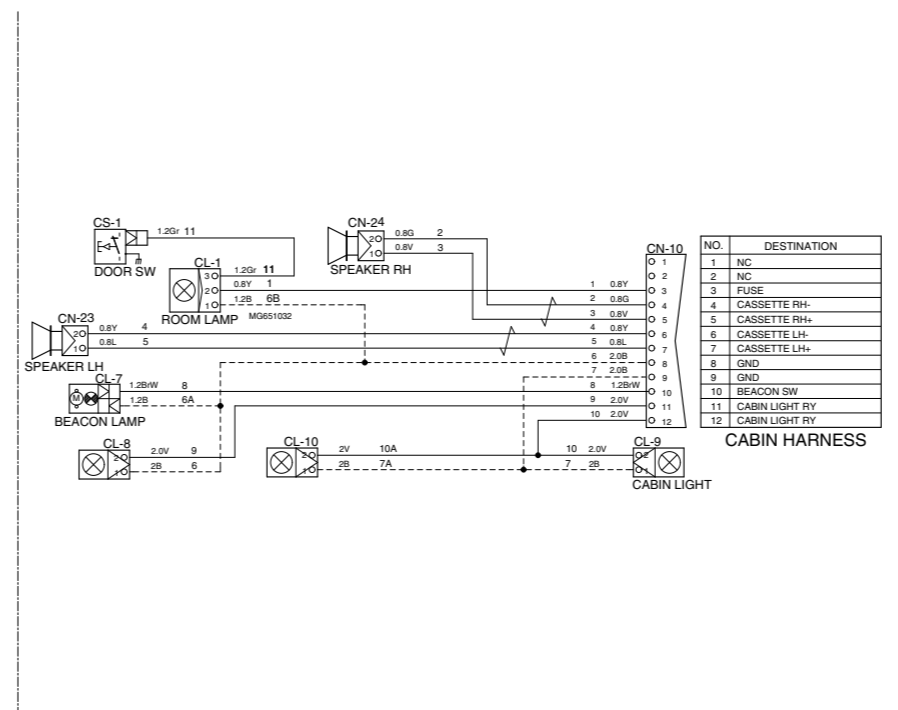
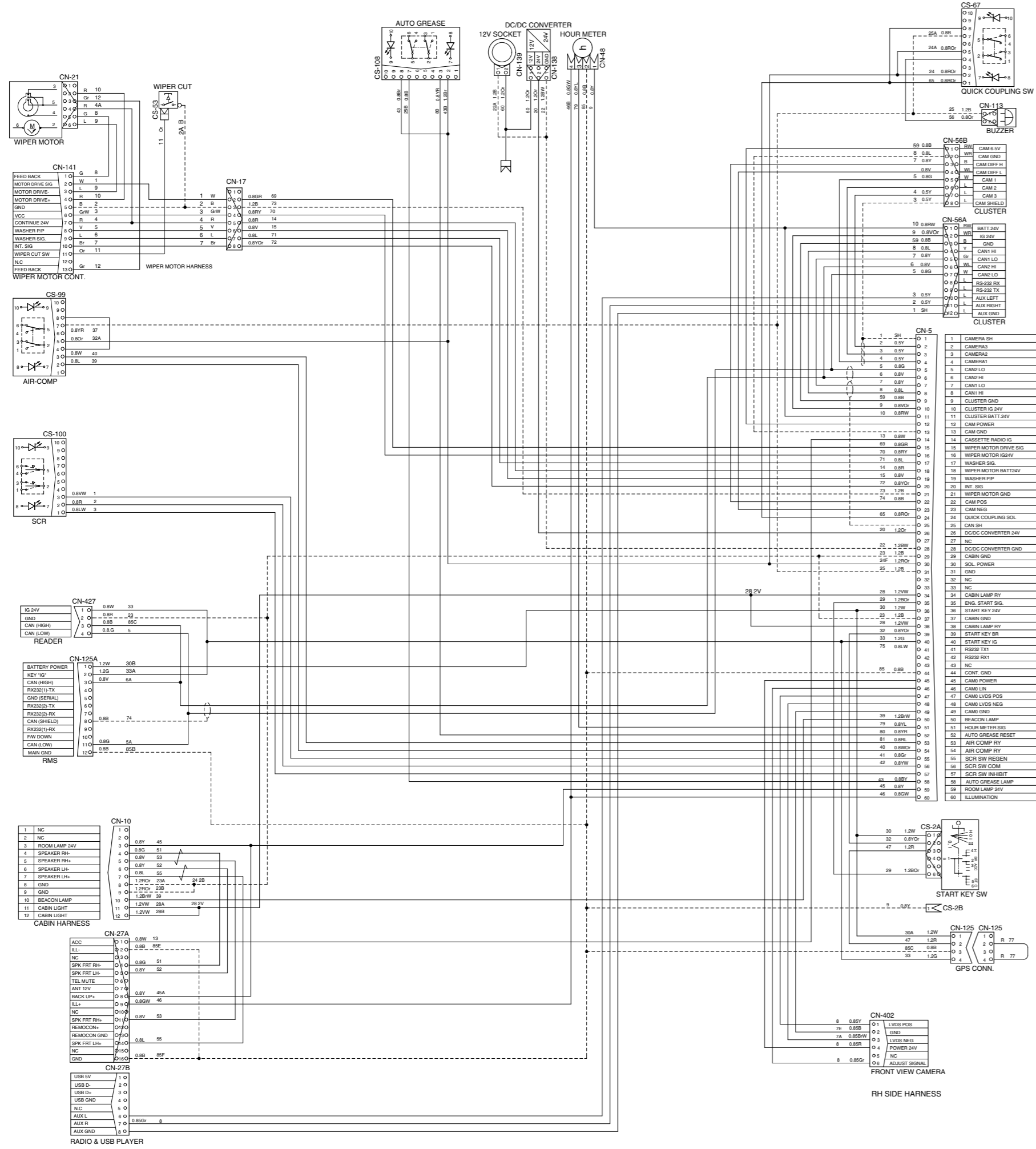
480F4EL02

- | | | |
|----------------------|--------------------------------------|------------------------------|
| 1 Lamp | 9 P2 pressure sensor | 17 Boom down pressure sensor |
| 2 Fuel sender | 10 EPPR pressure sensor | 18 Arm in pressure sensor |
| 3 Fuel filler pump | 11 Overload pressure sensor | 19 Attach pressure sensor |
| 4 Beacon lamp | 12 Alternator | 20 Travel pressure sensor |
| 5 Battery | 13 Travel alarm buzzer | 21 Air cleaner sensor |
| 6 Battery relay | 14 Arm out/Bucket in pressure sensor | 22 Solenoid valve |
| 7 Horn | 15 Boom up pressure sensor | 23 Pump EPPR valve |
| 8 P1 pressure sensor | 16 Swing pressure sensor | 24 Boom priority EPPR valve |

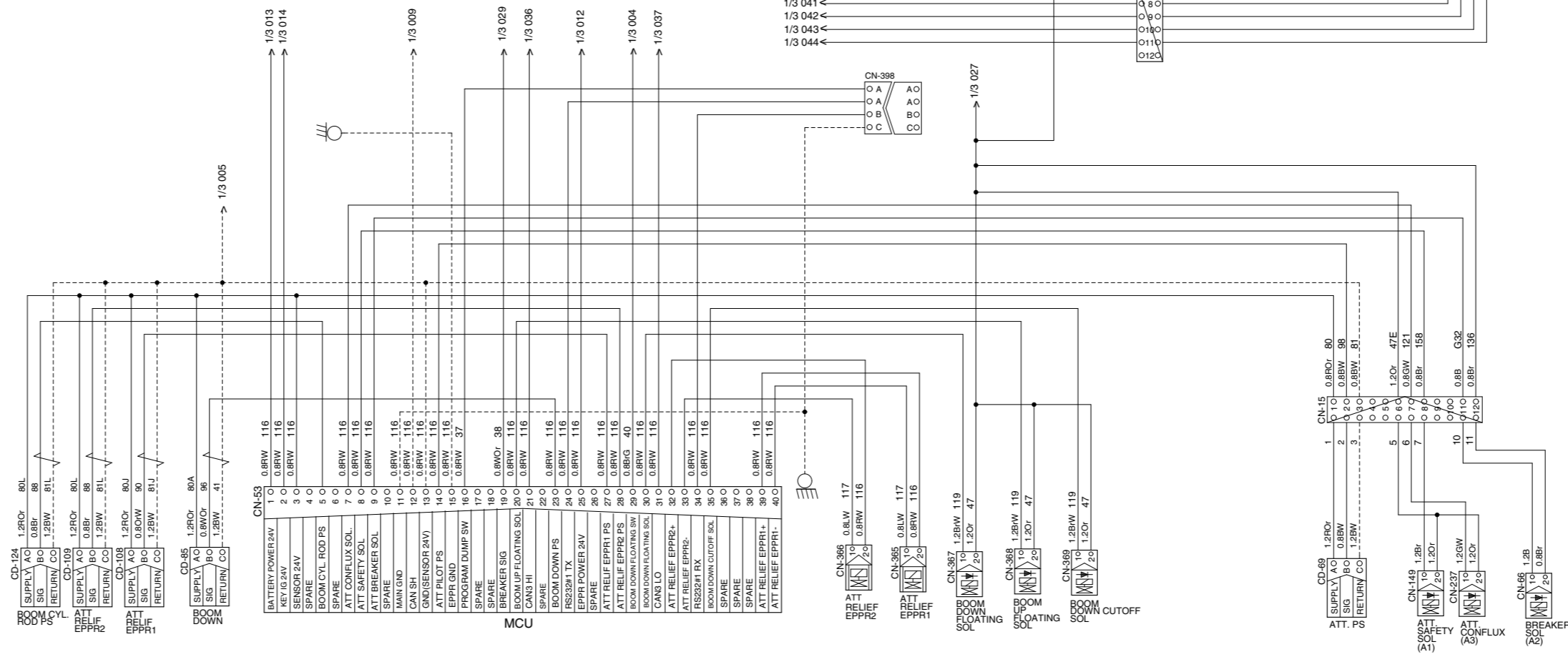
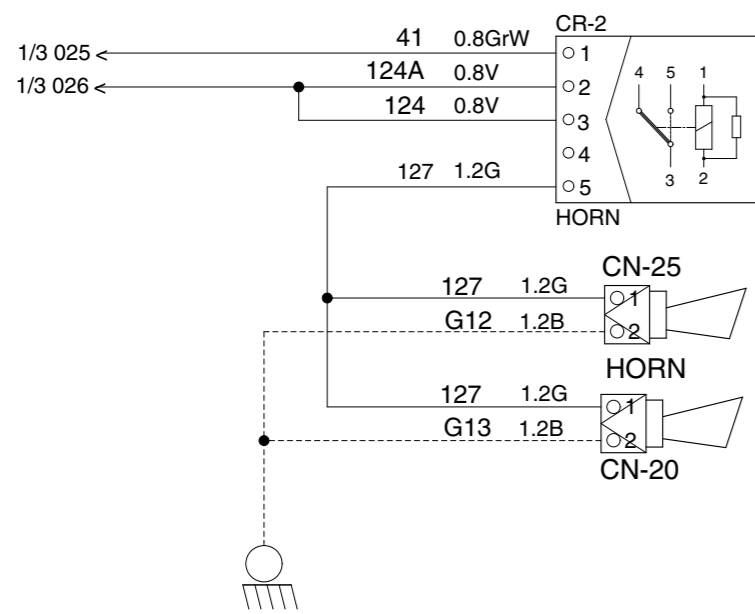
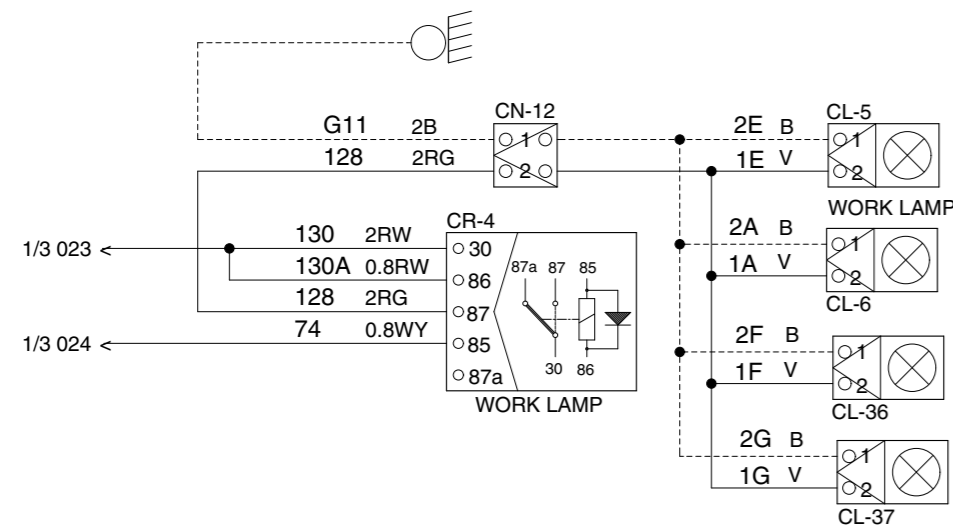
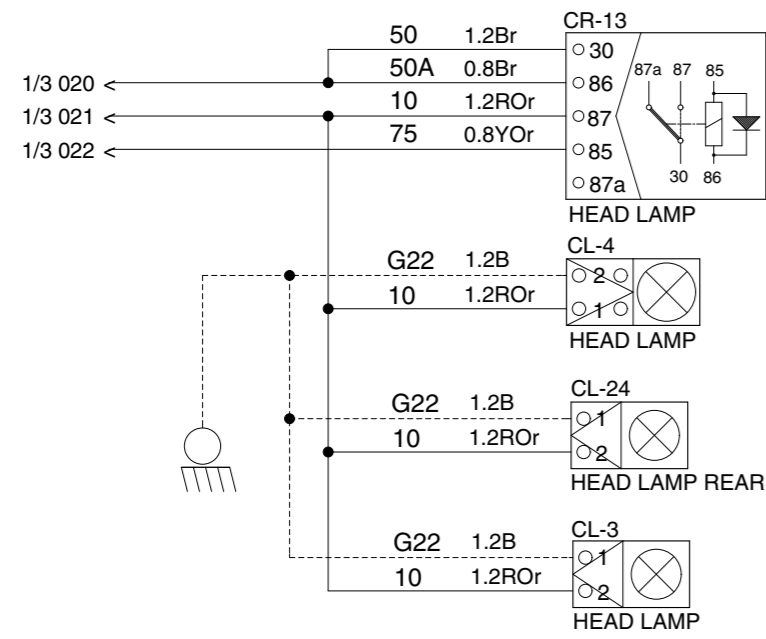
GROUP 2 ELECTRICAL CIRCUIT

ELECTRICAL CIRCUIT (1/6, SERIAL NO. HX480 L : -#0162 / HX520 L : -#0171)

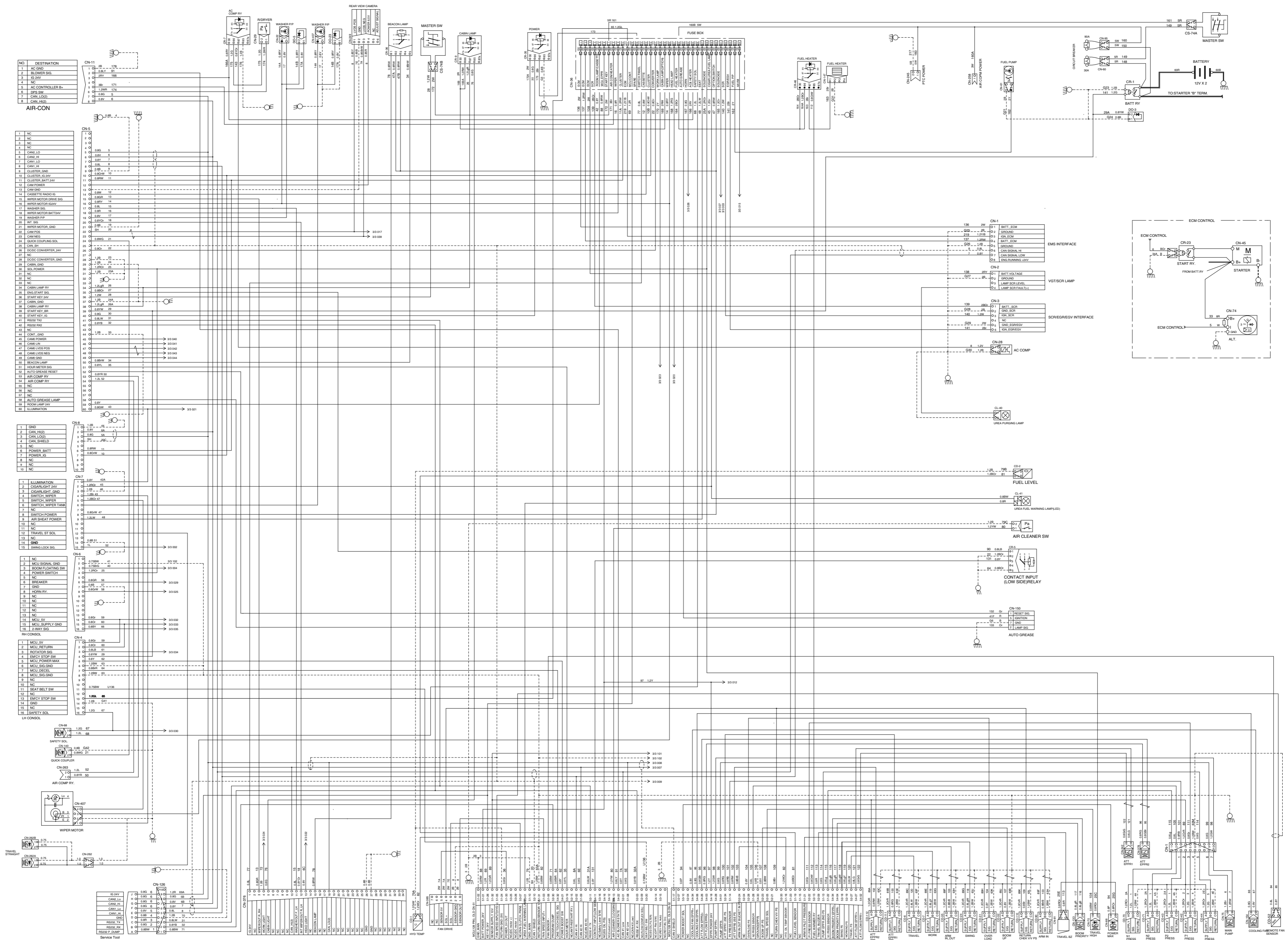




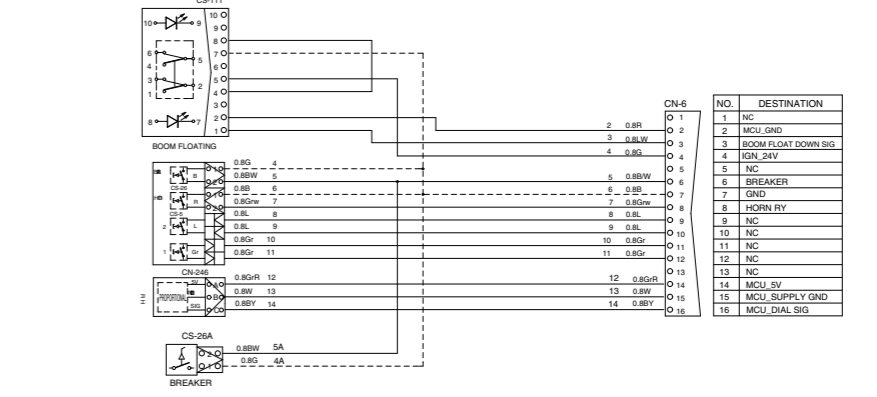
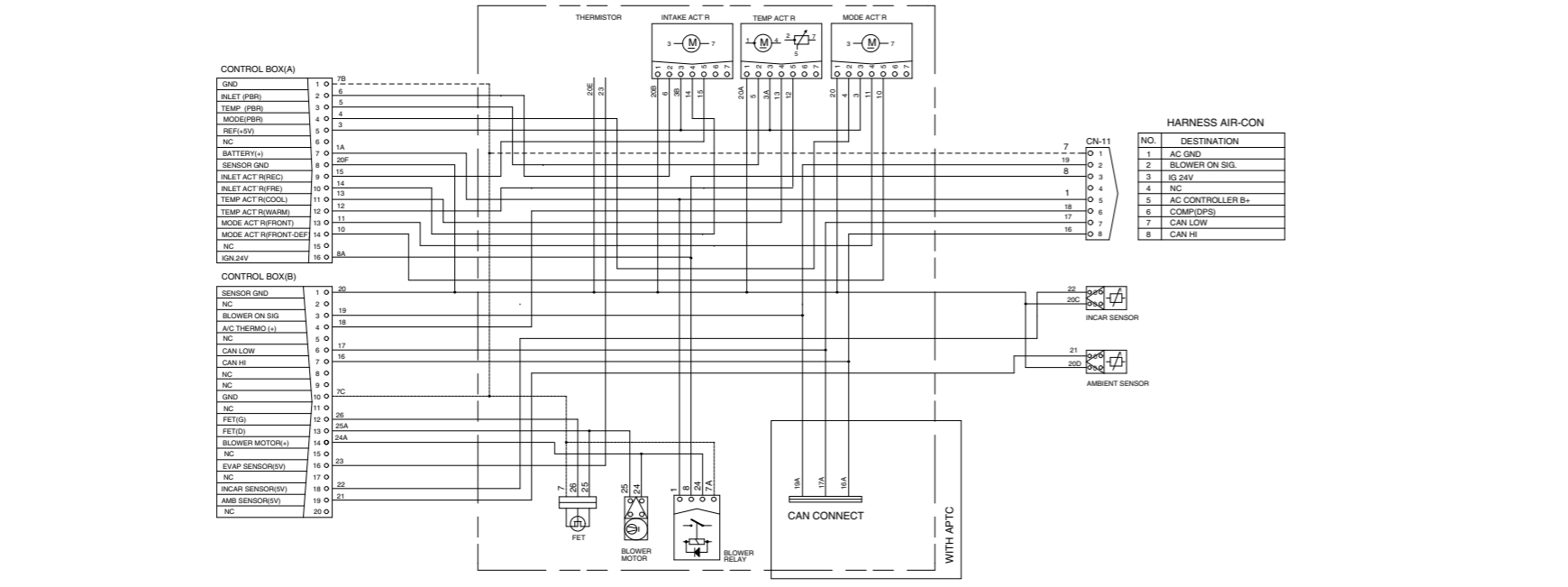
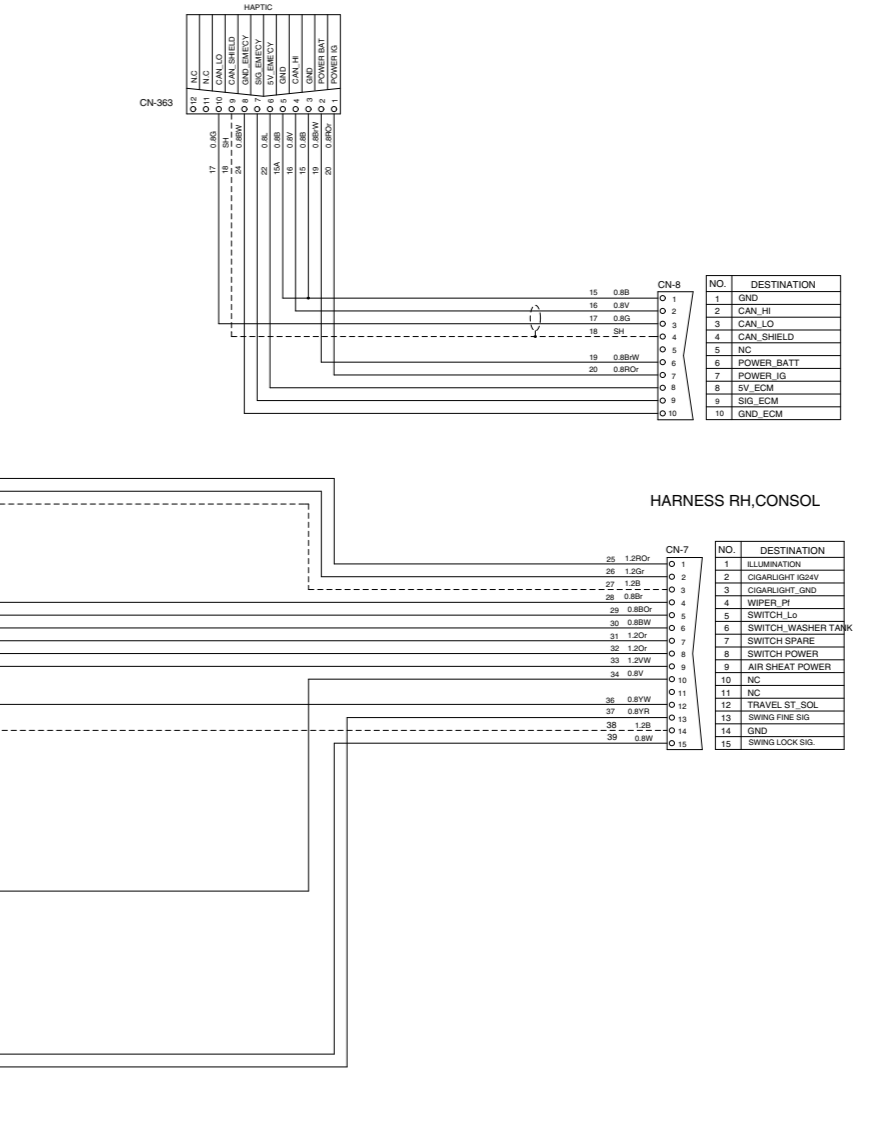
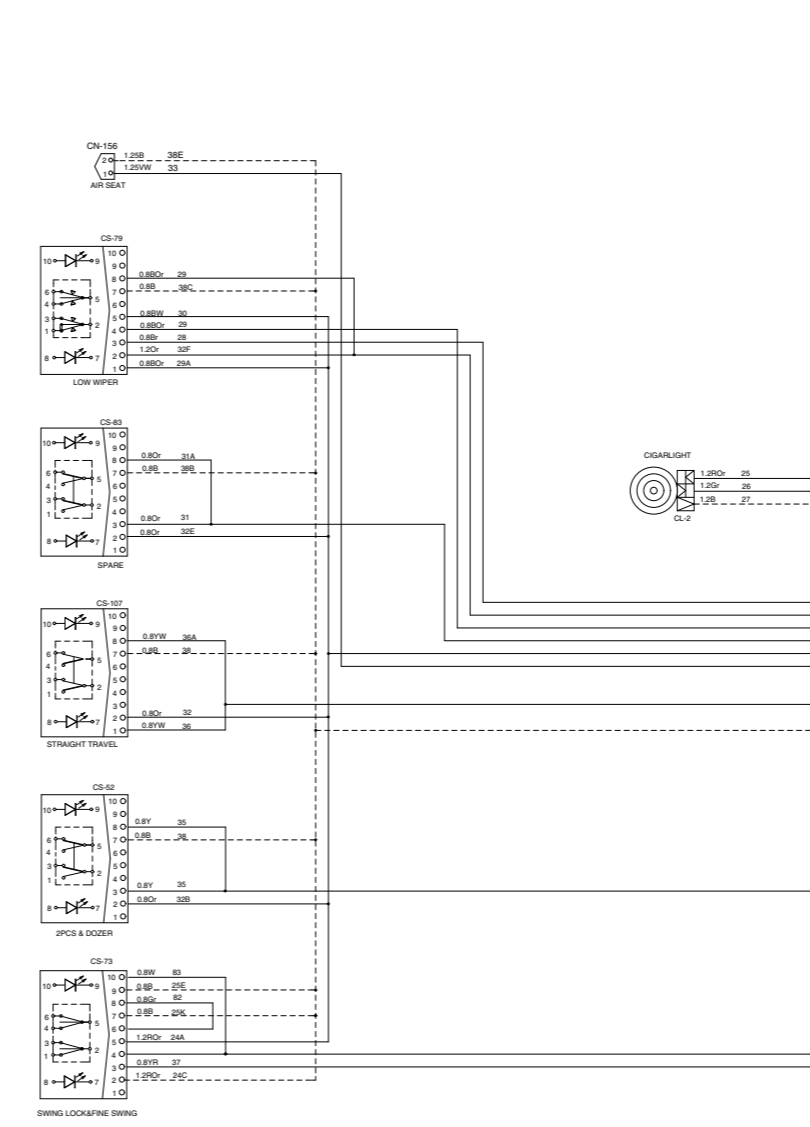
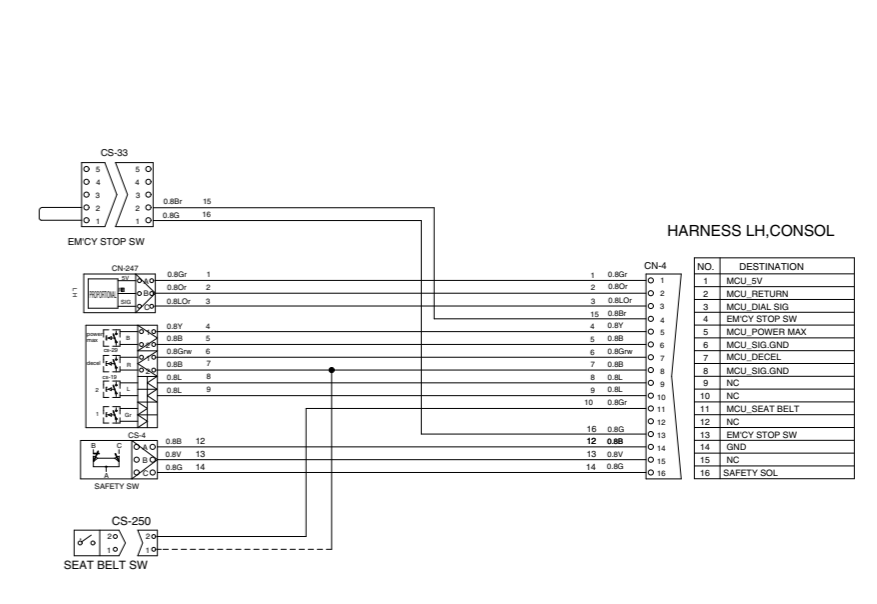
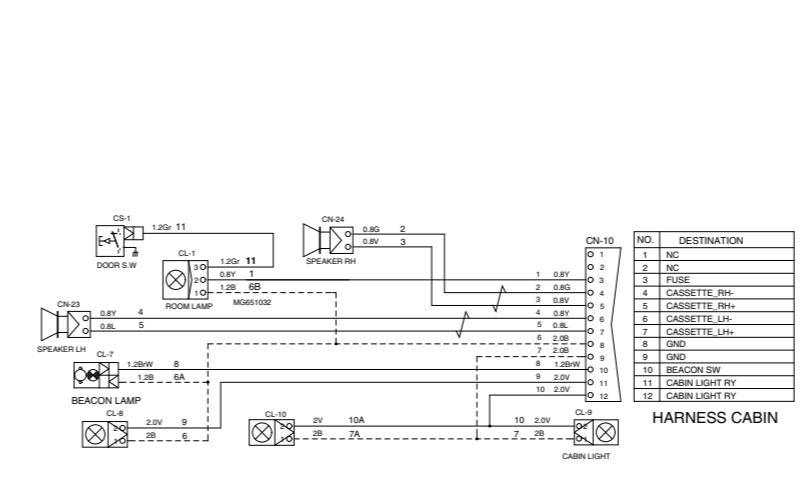
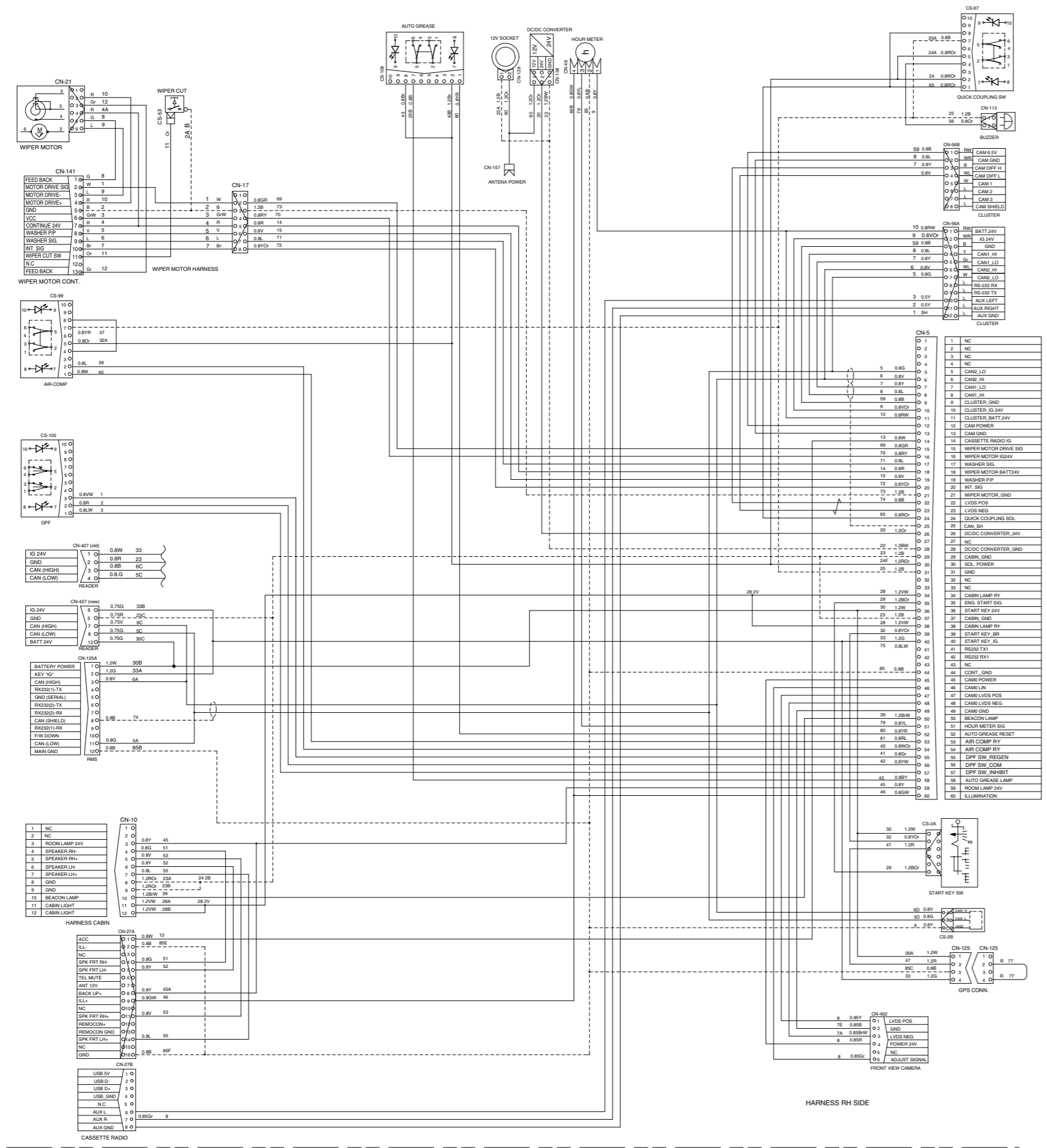
ELECTRICAL CIRCUIT (3/6, SERIAL NO. HX480 L : -#0162 / HX520 L : -#0171)

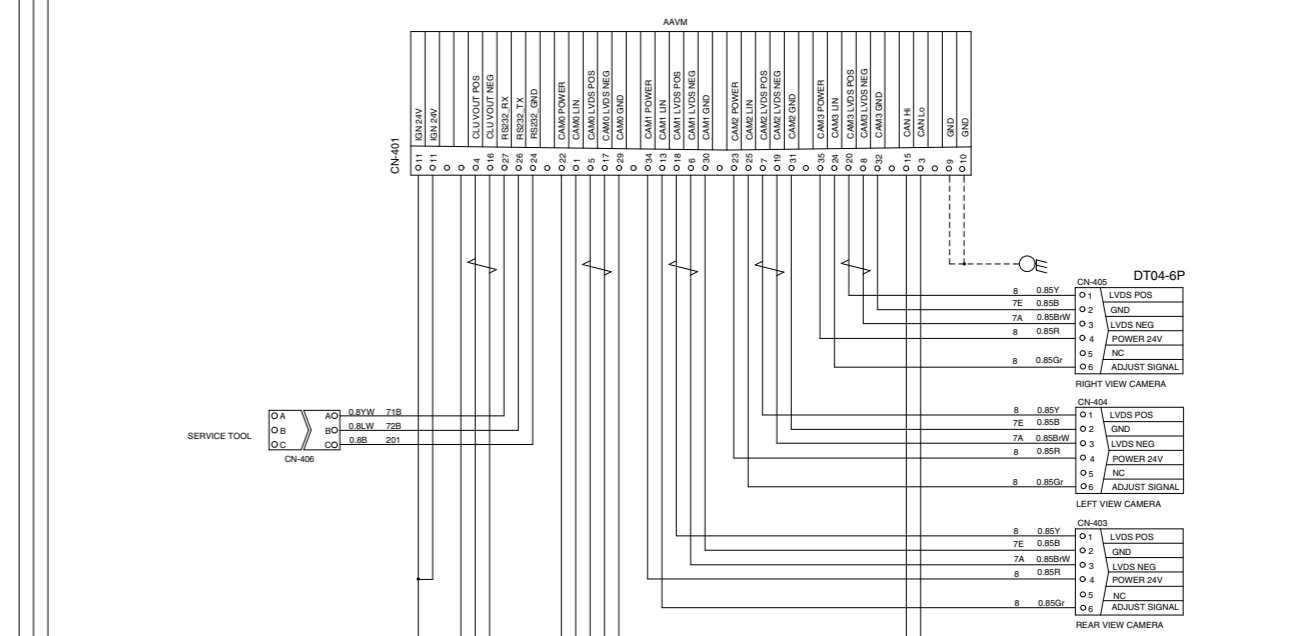
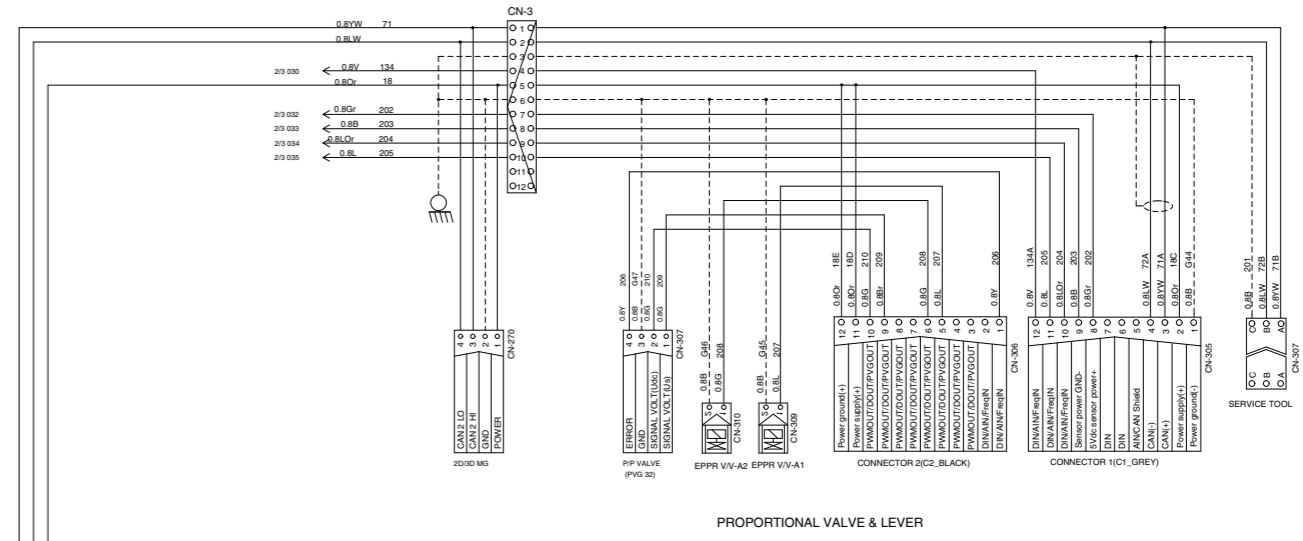
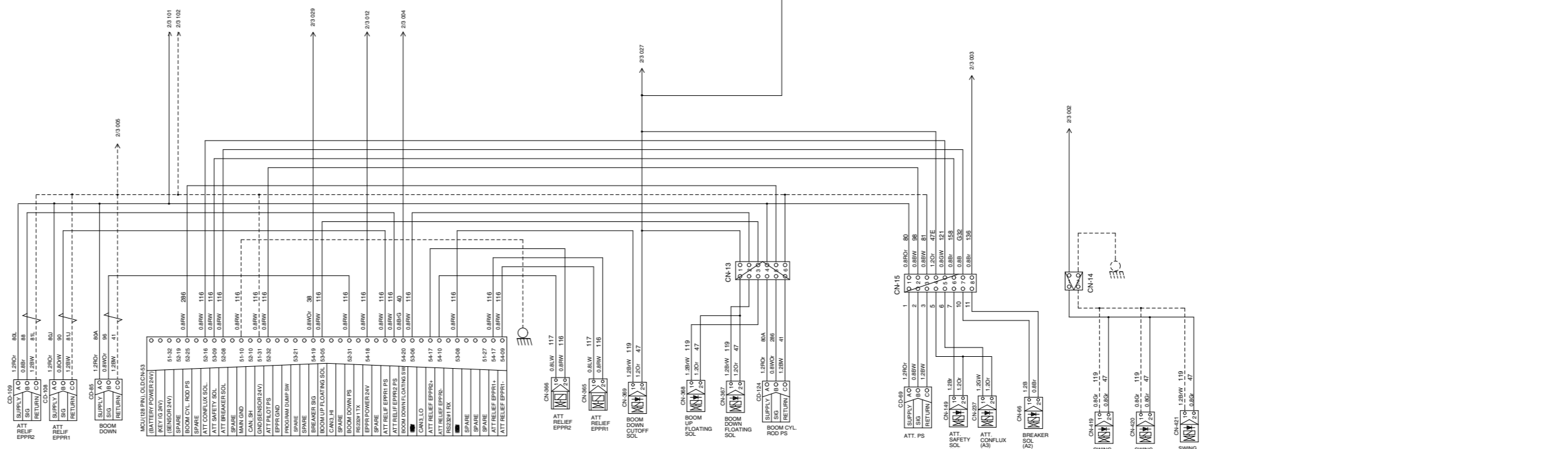
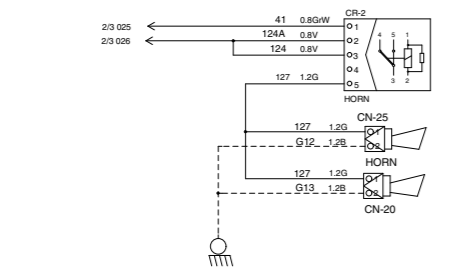
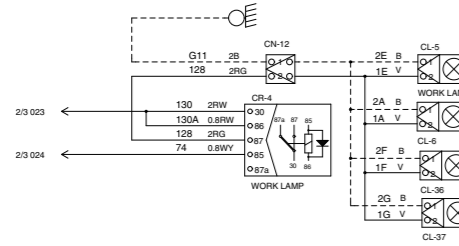
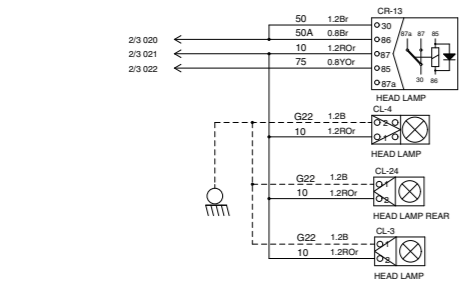


ELECTRICAL CIRCUIT (4/6, SERIAL NO. HX480 L : #0163- / HX520 L : #0172-)



ELECTRICAL CIRCUIT (5/6, SERIAL NO. HX480 L : #0163- / HX520 L : #0172-)





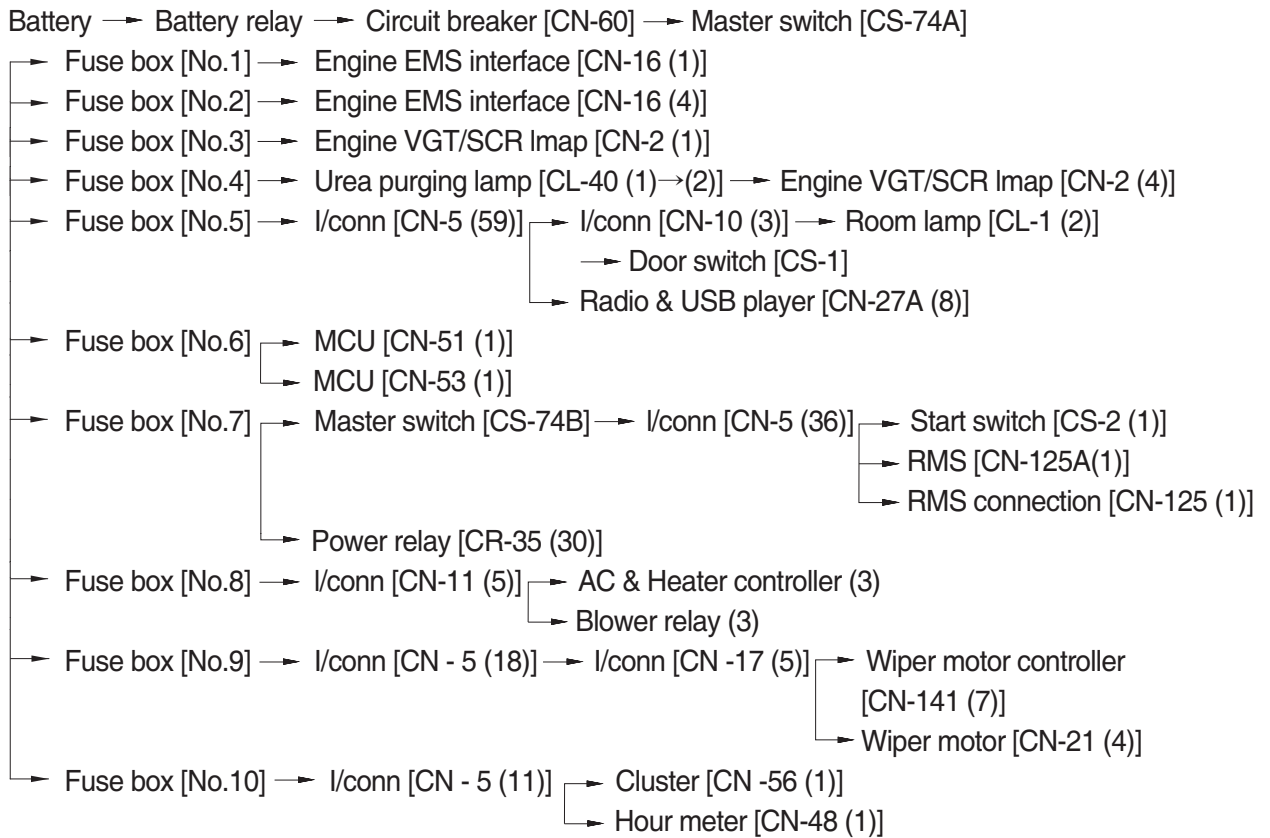
MEMORANDUM

1. POWER CIRCUIT

OLD VERSION

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

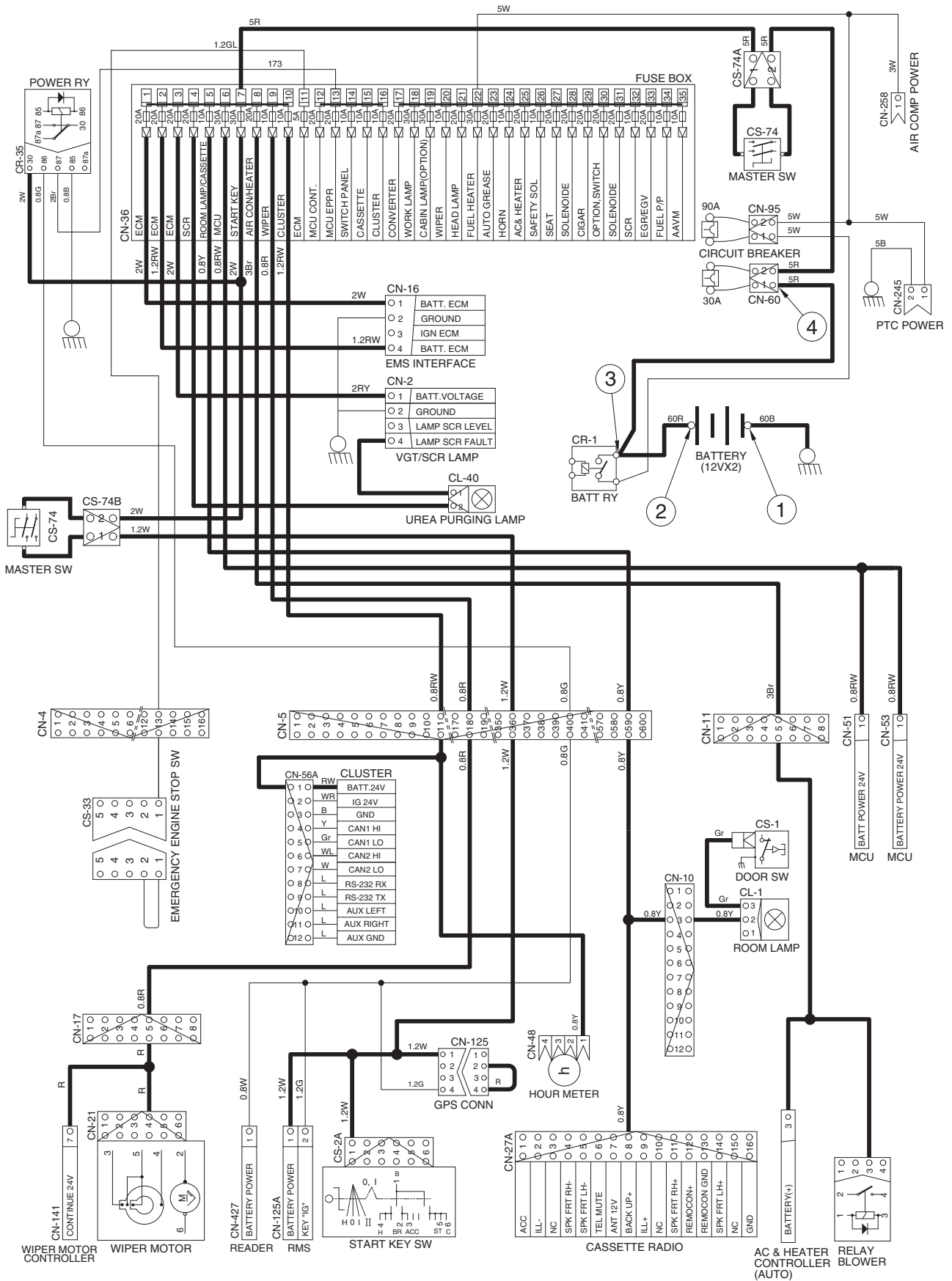
2) CHECK POINT

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

※ GND : Ground

POWER CIRCUIT

OLD VERSION



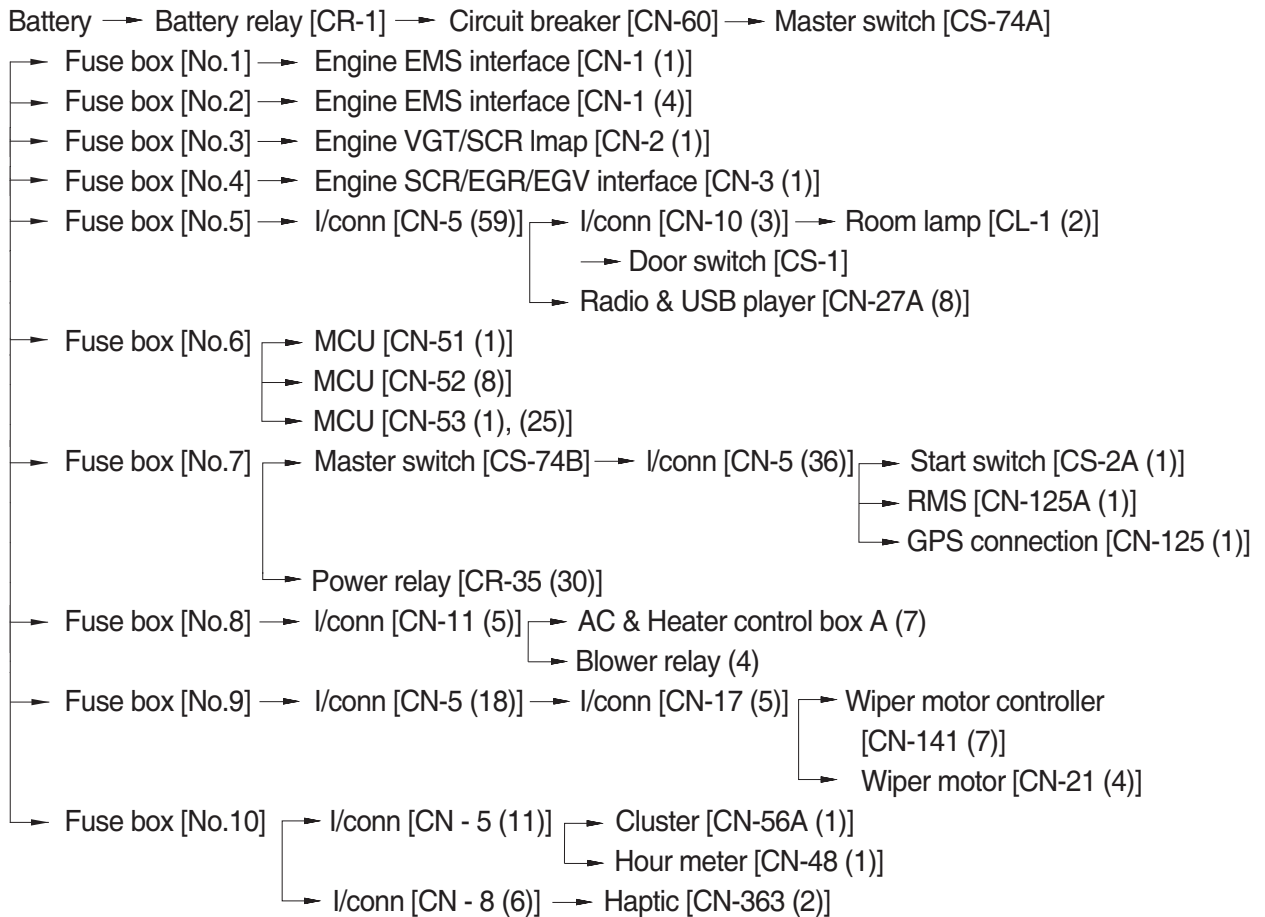
POWER CIRCUIT

CURRENT VERSION

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

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

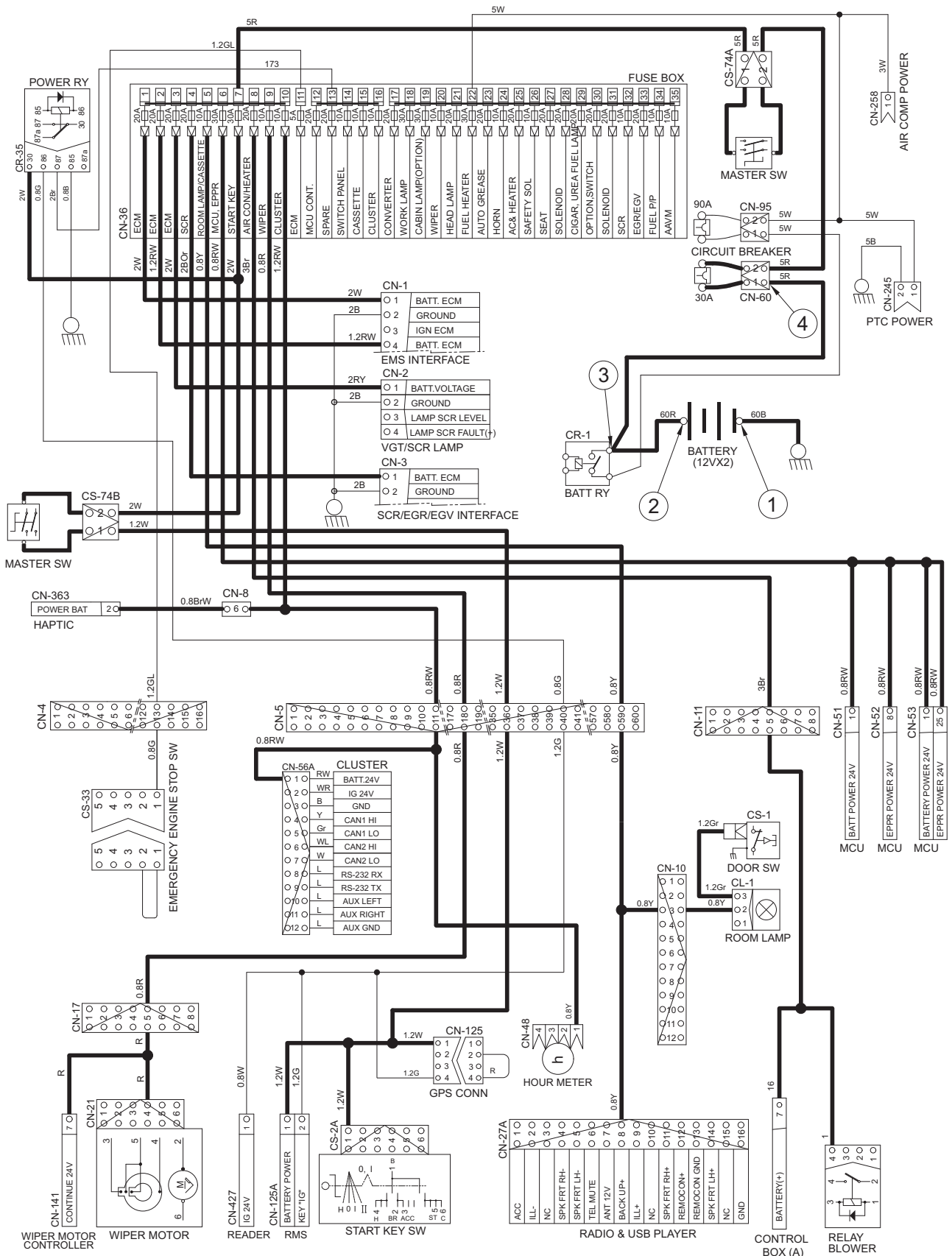
2) CHECK POINT

Engine	Start switch	Check point	Voltage
OFF	OFF	① - GND (battery 1EA)	10~12.5V
		② - GND (battery 2EA)	20~25V
		③ - GND (battery relay 2EA)	20~25V
		④ - GND (circuit breaker)	20~25V

※ GND : Ground

POWER CIRCUIT

CURRENT VERSION



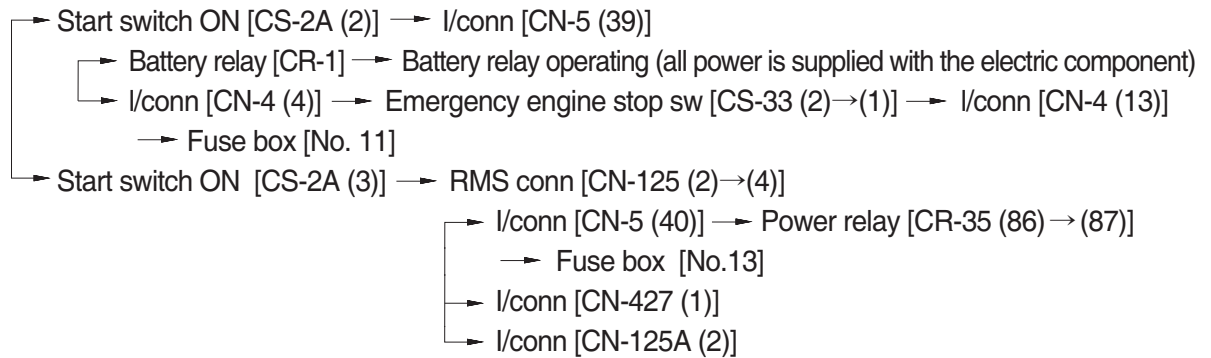
2. STARTING CIRCUIT

OLD VERSION

1) OPERATING FLOW

Battery(+) terminal → Battery relay [CR-1] → Circuit breaker [CN-60] → Master switch [CS-74A]
 → Fuse box [No.7] → Master switch [CS-74B] → I/conn [CN-5(36)] → Start switch [CS-2A(1)]

(1) When start key switch is in ON position



(2) When start key switch is in START position

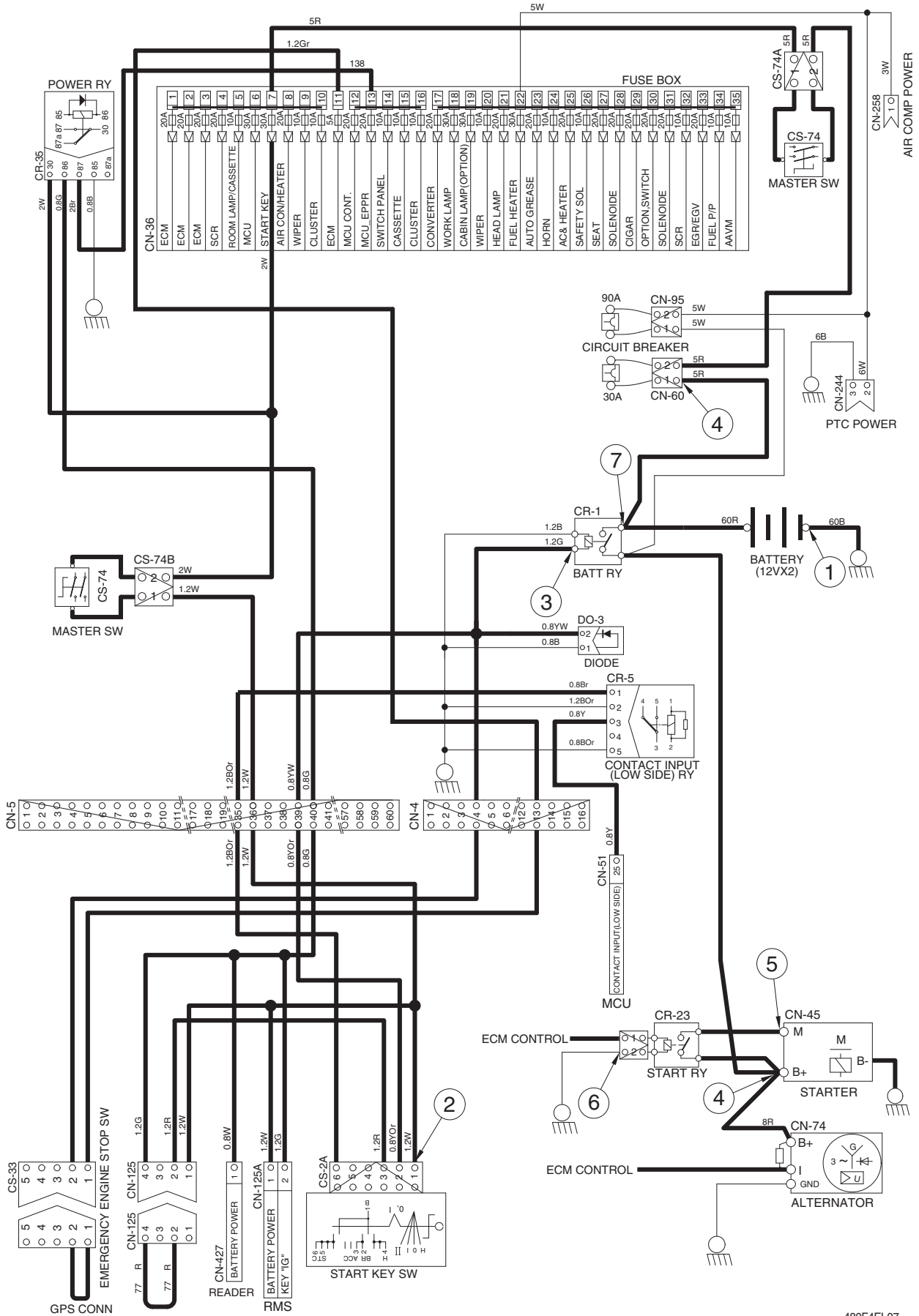
Start switch START [CS-2A (6)] → I/conn [CN-5 (35)] → Contact input relay [CR-5 (1) → (3)]
 → MCU [CN-51 (25)] → ECM control → Start relay [CR-23]

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 (starter B+) ⑤ - GND (starter M) ⑥ - GND (start relay) ⑦ - GND (battery relay M8)	20~25V

STARTING CIRCUIT

OLD VERSION



480F4EL07

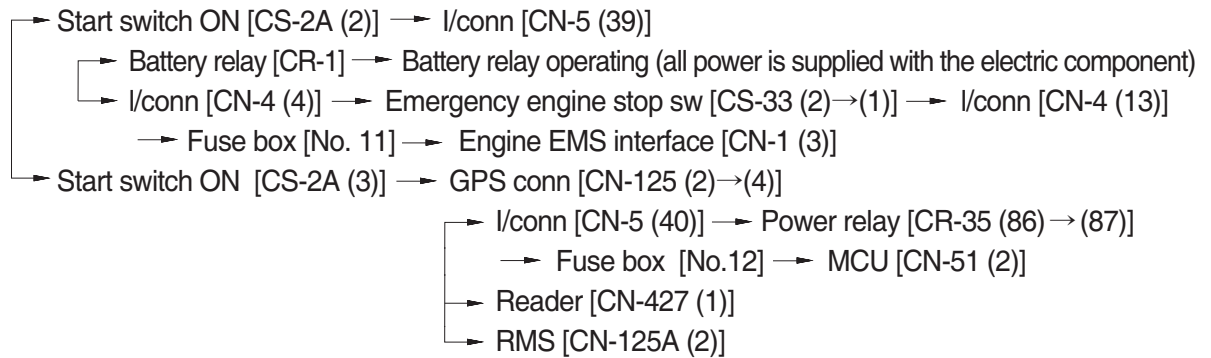
STARTING CIRCUIT

CURRENT VERSION

1) OPERATING FLOW

Battery(+) terminal → Battery relay [CR-1] → Circuit breaker [CN-60] → Master switch [CS-74A]
 → Fuse box [No.7] → Master switch [CS-74B] → I/conn [CN-5 (36)] → Start switch [CS-2A (1)]

(1) When start key switch is in ON position



(2) When start key switch is in START position

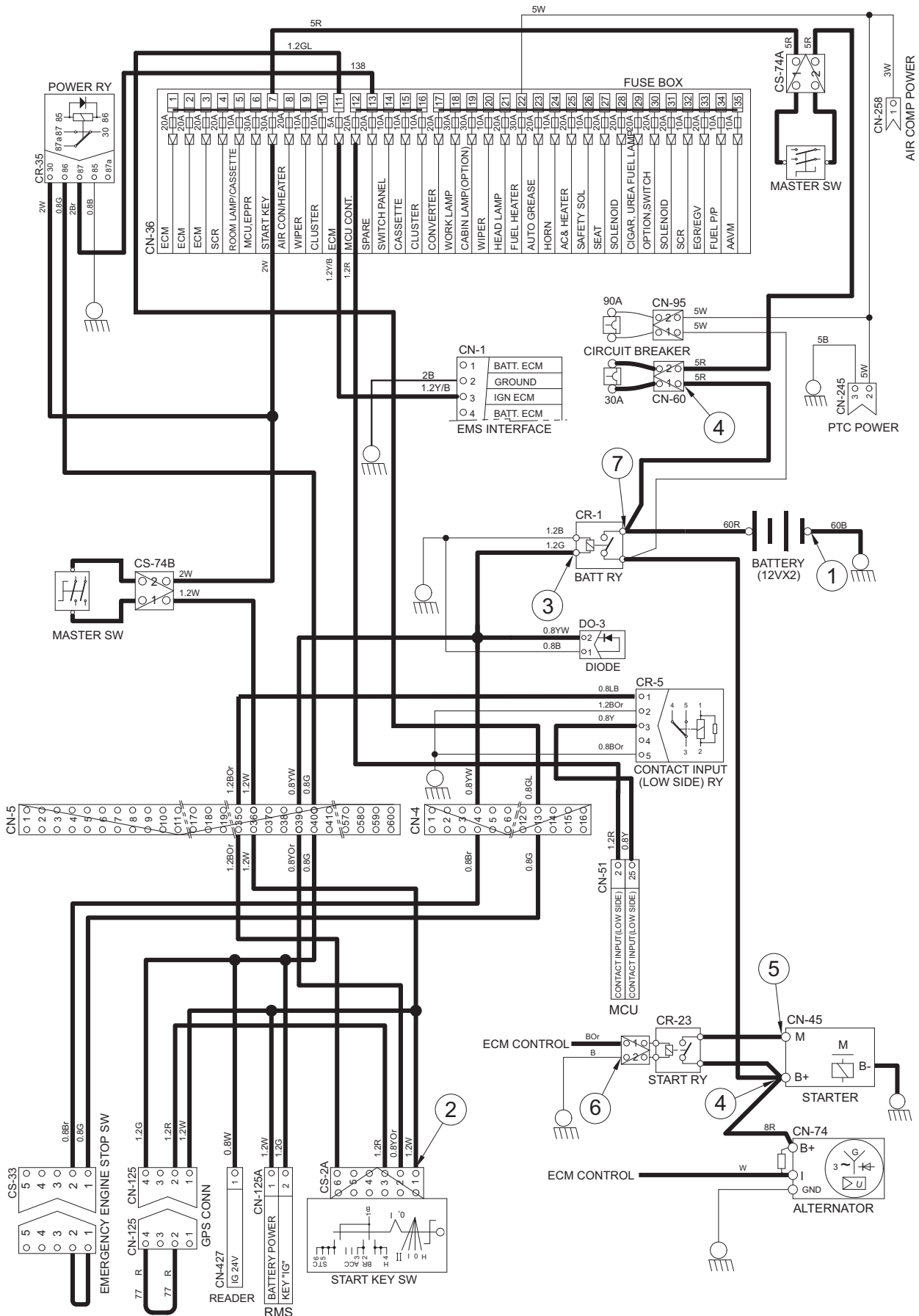
Start switch START [CS-2A (6)] → I/conn [CN-5 (35)] → Contact input relay [CR-5 (1) → (3)]
 → MCU [CN-51 (25)] → ECM control → Start relay [CR-23 (1)] → Starter operating

2) CHECK POINT

Engine	Start switch	Check point	Voltage
OPERATING	START	① - GND (battery) ② - GND (start switch) ③ - GND (battery relay M4) ④ - GND (starter B+) ⑤ - GND (starter M) ⑥ - GND (start relay) ⑦ - GND (battery relay M8)	20~25V

STARTING CIRCUIT

CURRENT VERSION



480F4EL07B

3. CHARGING CIRCUIT

OLD VERSION

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 through the battery relay [CR-1].

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

1) OPERATING FLOW

(1) Warning flow

Alternator "I" terminal → ECM control

→ Cluster charging warning lamp (Via CAN interface)

(2) Charging flow

Alternator "B+" terminal → Battery relay(M8) → Battery(+) terminal
 → Circuit breaker [CN-60] → Master switch [CS-74A]
 → Fuse box

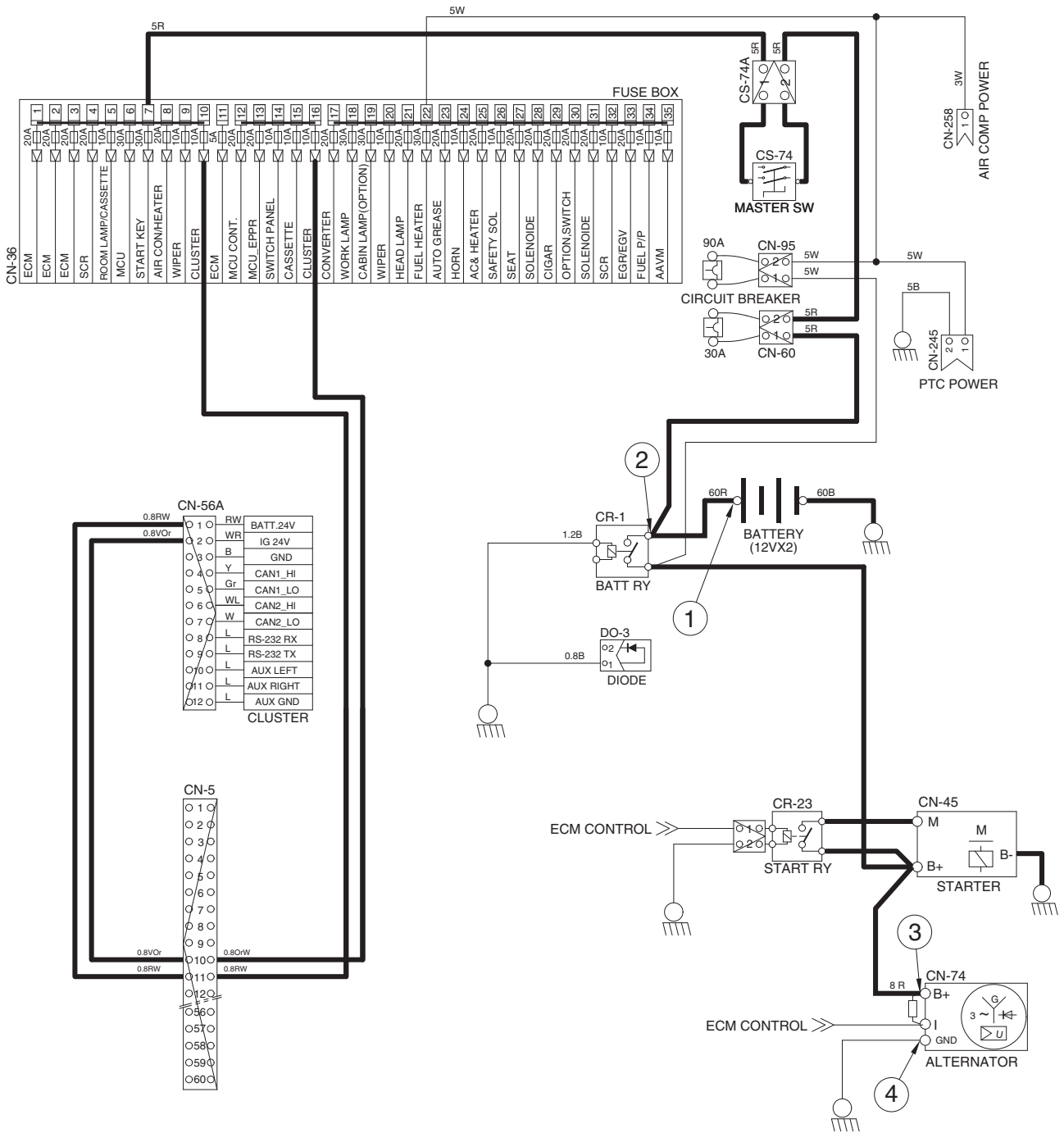
2) CHECK POINT

Engine	Start switch	Check point	Voltage
Run	ON	① - GND (battery voltage) ② - GND (battery relay) ③ - GND (alternator B ⁺ terminal) ④ - GND (alternator I terminal)	20~25V

※ GND : Ground

CHARGING CIRCUIT

OLD VERSION



CHARGING CIRCUIT

CURRENT VERSION

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 through the battery relay [CR-1].

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

1) OPERATING FLOW

(1) Warning flow

- Alternator [CN-74 (I)] → ECM control
- Cluster charging warning lamp (Via CAN interface)

(2) Charging flow

- Alternator [CN-74 (B+)] → Battery relay (M8)
 - Battery(+) terminal
 - Circuit breaker [CN-60] → Master switch [CS-74A]
 - Fuse box [No. 1~10]
 - Circuit breaker [CN-95] → Fuse box [No. 17~35]

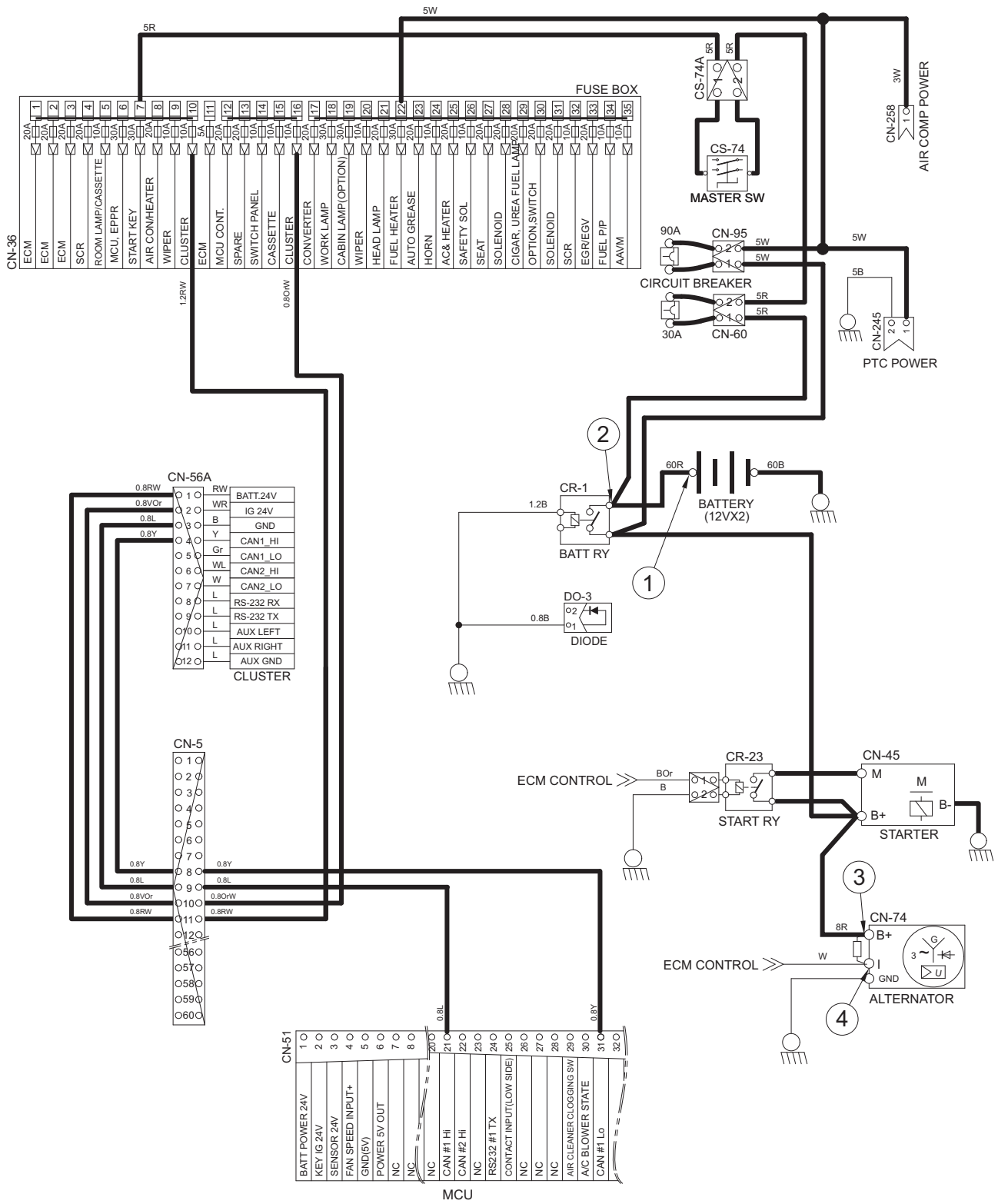
2) CHECK POINT

Engine	Start switch	Check point	Voltage
Run	ON	① - GND (battery voltage) ② - GND (battery relay) ③ - GND (alternator B ⁺ terminal) ④ - GND (alternator I terminal)	20~25V

※ GND : Ground

CHARGING CIRCUIT

CURRENT VERSION



480F4EL08B

4. HEAD AND WORK LIGHT CIRCUIT

OLD VERSION

1) OPERATING FLOW

Fuse box (No.21) → Head light relay [CR-13 (30,86)]

Fuse box (No.18) → Work light relay [CR-4 (30,86)]

(1) Head light switch ON

Head light switch ON [CN-376 (13)] → Head light relay [CR-13 (85) → (87)]

→ Head light ON [CL-3 (1), CL-4 (1), CL-24 (1)]

→ I/conn [CN-7 (1)] → Cigar light [CL-2]

→ I/conn [CN-5 (60)] → Radio & USB player illumination ON [CN-27A (9)]

(2) Work light switch ON

Work light switch ON [CN-376 (4)] → Work light relay [CR-4 (85) → (87)]

→ I/conn [CN-12 (2)] → Work light ON [CL-5 (2), CL-6 (2), CL-36 (2), CL-37 (2)]

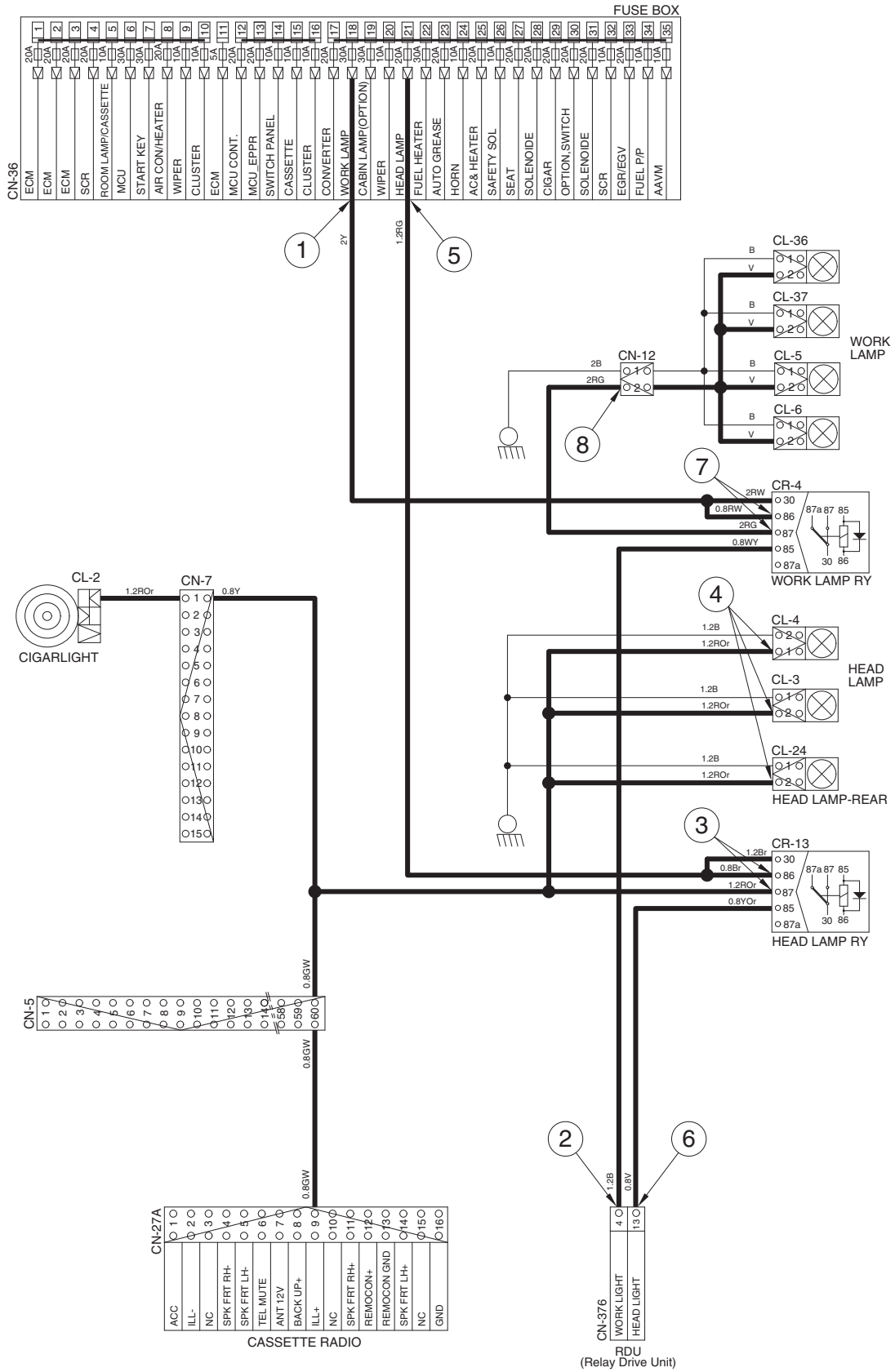
2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (switch power output) ③ - GND (head light relay) ④ - GND (head light) ⑤ - GND (fuse box) ⑥ - GND (switch power output) ⑦ - GND (work light relay) ⑧ - GND (work light)	20~25V

※ GND : Ground

HEAD AND WORK LIGHT CIRCUIT

OLD VERSION



480F4EL09

HEAD AND WORK LIGHT CIRCUIT

CURRENT VERSION

1) OPERATING FLOW

Fuse box (No.21) → Head light relay [CR-13 (30, 86)]

Fuse box (No.18) → Work light relay [CR-4 (30, 86)]

Fuse box (No.14) → Relay drive unit [CN-376 (1)]

(1) Head light switch ON

Head light switch ON [CN-376 (13)] → Head light relay [CR-13 (85) → (87)]

→ Head light ON [CL-3 (2), CL-4 (1), CL-24 (2)]

→ I/conn [CN-7 (1)] → Cigar lighter [CL-2]

→ I/conn [CN-5 (60)] → Radio & USB player illumination ON [CN-27A (9)]

→ Hour meter [CN-48 (4)]

(2) Work light switch ON

Work light switch ON [CN-376 (4)] → Work light relay [CR-4 (85) → (87)]

→ I/conn [CN-12 (2)] → Work light ON [CL-5 (2), CL-6 (2), CL-36 (2), CL-37 (2)]

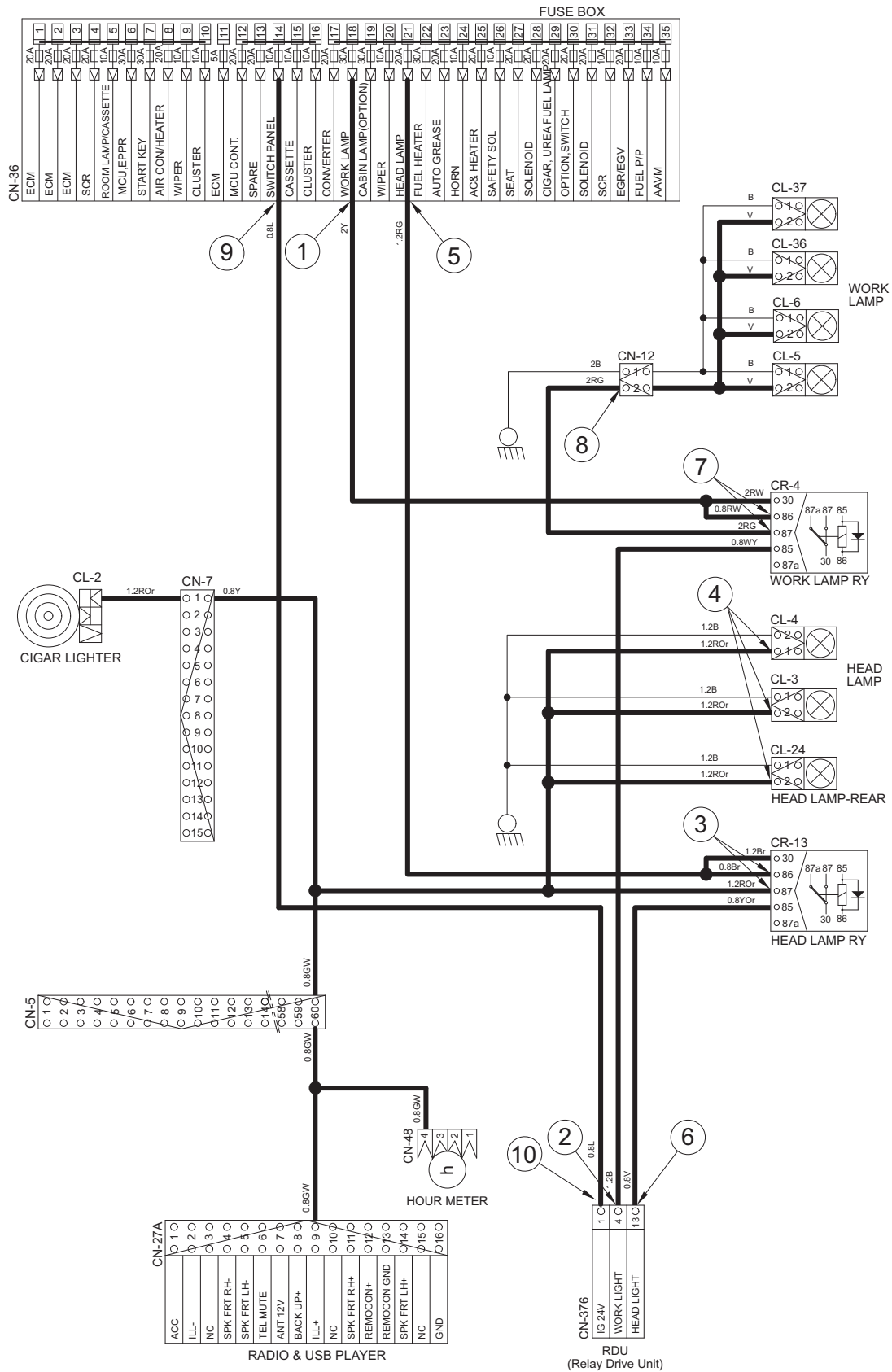
2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (switch power output) ③ - GND (head light relay) ④ - GND (head light) ⑤ - GND (fuse box) ⑥ - GND (switch power output) ⑦ - GND (work light relay) ⑧ - GND (work light) ⑨ - GND (fuse box) ⑩ - GND (relay drive unit power input)	20~25V

※ GND : Ground

HEAD AND WORK LIGHT CIRCUIT

CURRENT VERSION



480F4EL09B

5. BEACON LAMP AND CAB LIGHT CIRCUIT

OLD VERSION

1) OPERATING FLOW

Fuse box (No.30) → Beacon lamp relay [CR-36 (2, 3)]

Fuse box (No.19) → Cab light relay [CR-9 (30, 86)]

(1) Beacon lamp switch ON

Beacon lamp switch ON [CN-376 (15)] → Beacon lamp relay [CR-36 (1)→ (5)]

→ I/conn [CN-5 (50)] → I/conn [CN-10 (10)] → Beacon lamp ON [CL-7]

(2) Cab light switch ON

Cab light switch ON [CN-376 (5)] → Cab lamp relay [CR-9 (85) → (87)]

→ I/conn [CN-5 (34, 38)] → I/conn [CN-10 (11)] → Cab light ON [CL-8 (2)]

→ I/conn [CN-10 (12)] → Cab light ON [CL-9 (2), CL-10 (2)]

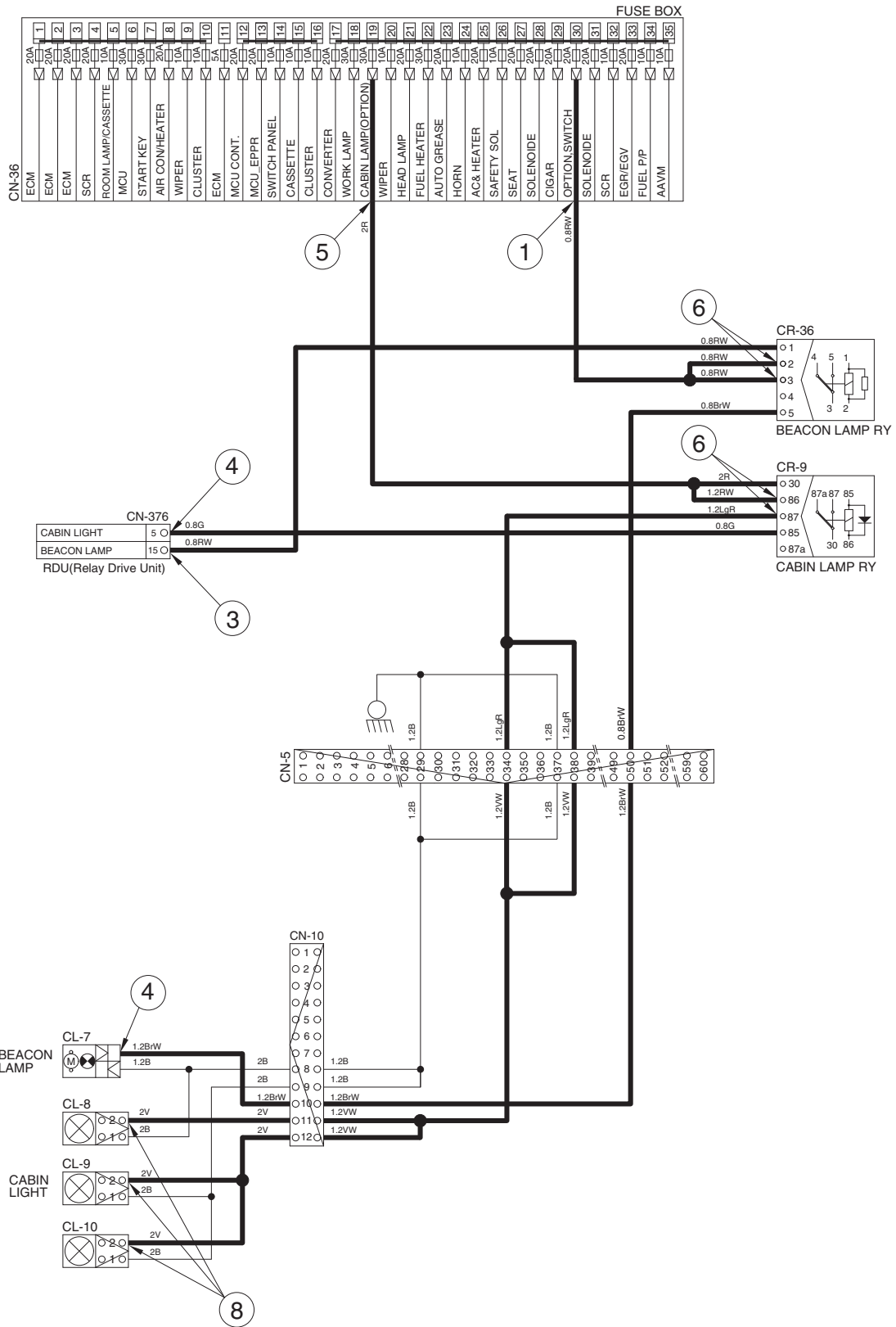
2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (beacon lamp relay) ③ - GND (switch power output) ④ - GND (beacon lamp) ⑤ - GND (fuse box) ⑥ - GND (cabin light relay) ⑦ - GND (switch power output) ⑧ - GND (cab light)	20~25V

※ GND : Ground

BEACON LAMP AND CAB LIGHT CIRCUIT

OLD VERSION



480F4EL10

BEACON LAMP AND CAB LIGHT CIRCUIT

CURRENT VERSION

1) OPERATING FLOW

Fuse box (No.30) → Beacon lamp relay [CR-36 (2, 3)]

Fuse box (No.19) → Cab light relay [CR-9 (30, 86)]

Fuse box (No.14) → Relay drive unit [CN-376 (1)]

(1) Beacon lamp switch ON

Beacon lamp switch ON [CN-376 (15)] → Beacon lamp relay [CR-36 (1)→ (5)]

→ I/conn [CN-5 (50)] → I/conn [CN-10 (10)] → Beacon lamp ON [CL-7]

(2) Cab light switch ON

Cab light switch ON [CN-376 (5)] → Cab lamp relay [CR-9 (85) → (87)]

→ I/conn [CN-5 (34, 38)] → I/conn [CN-10 (11)] → Cab light ON [CL-8 (2)]

→ I/conn [CN-10 (12)] → Cab light ON [CL-9 (2), CL-10 (2)]

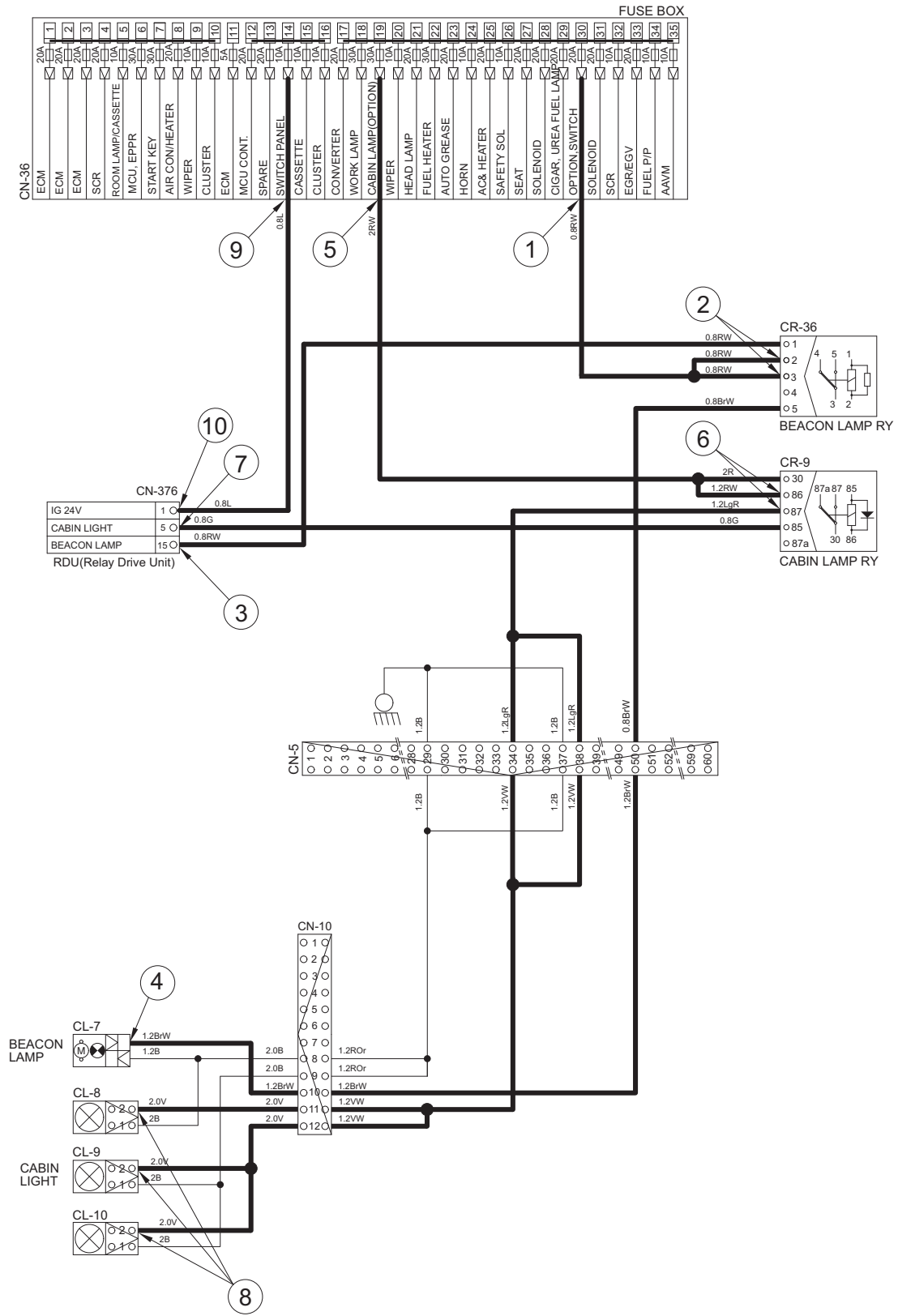
2) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box) ② - GND (beacon lamp relay) ③ - GND (switch power output) ④ - GND (beacon lamp) ⑤ - GND (fuse box) ⑥ - GND (cabin light relay) ⑦ - GND (switch power output) ⑧ - GND (cab light) ⑨ - GND (fuse box) ⑩ - GND (relay drive unit power input)	20~25V

※ GND : Ground

BEACON LAMP AND CAB LIGHT CIRCUIT

CURRENT VERSION



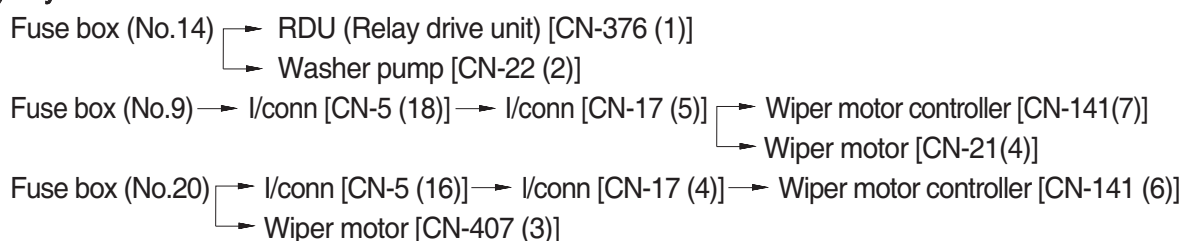
480F4EL10B

6. WIPER AND WASHER CIRCUIT

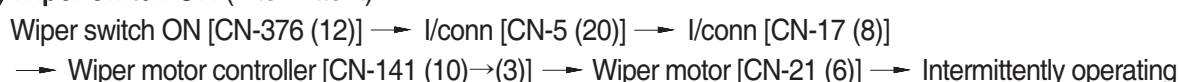
OLD VERSION

1) OPERATING FLOW

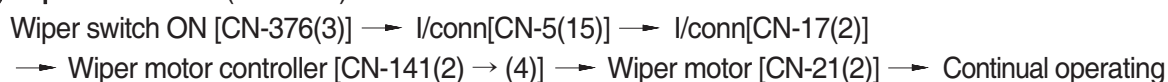
(1) Key switch ON



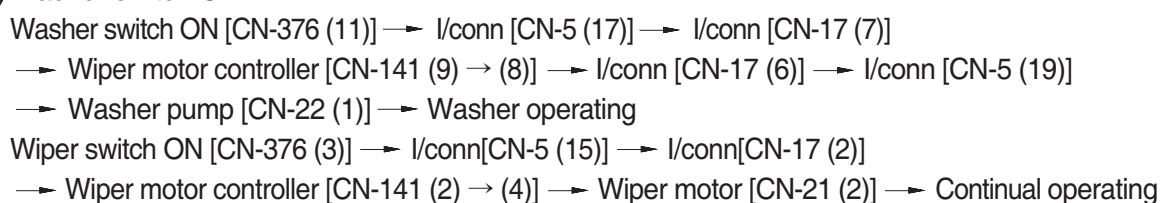
(2) Wiper switch ON (Intermittent)



(3) Wiper switch ON (continual)



(4) Washer switch ON

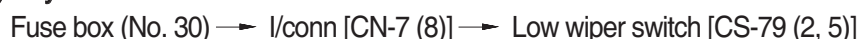


(5) Auto parking (when switch OFF)

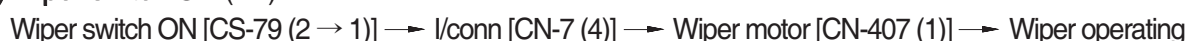


2) OPERATING FLOW (LOW WIPER)

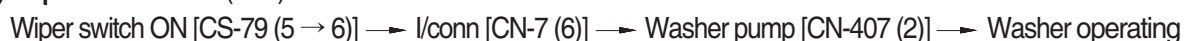
(1) Key switch ON



(2) Wiper switch ON (1st)



(3) Wiper switch ON (2nd)



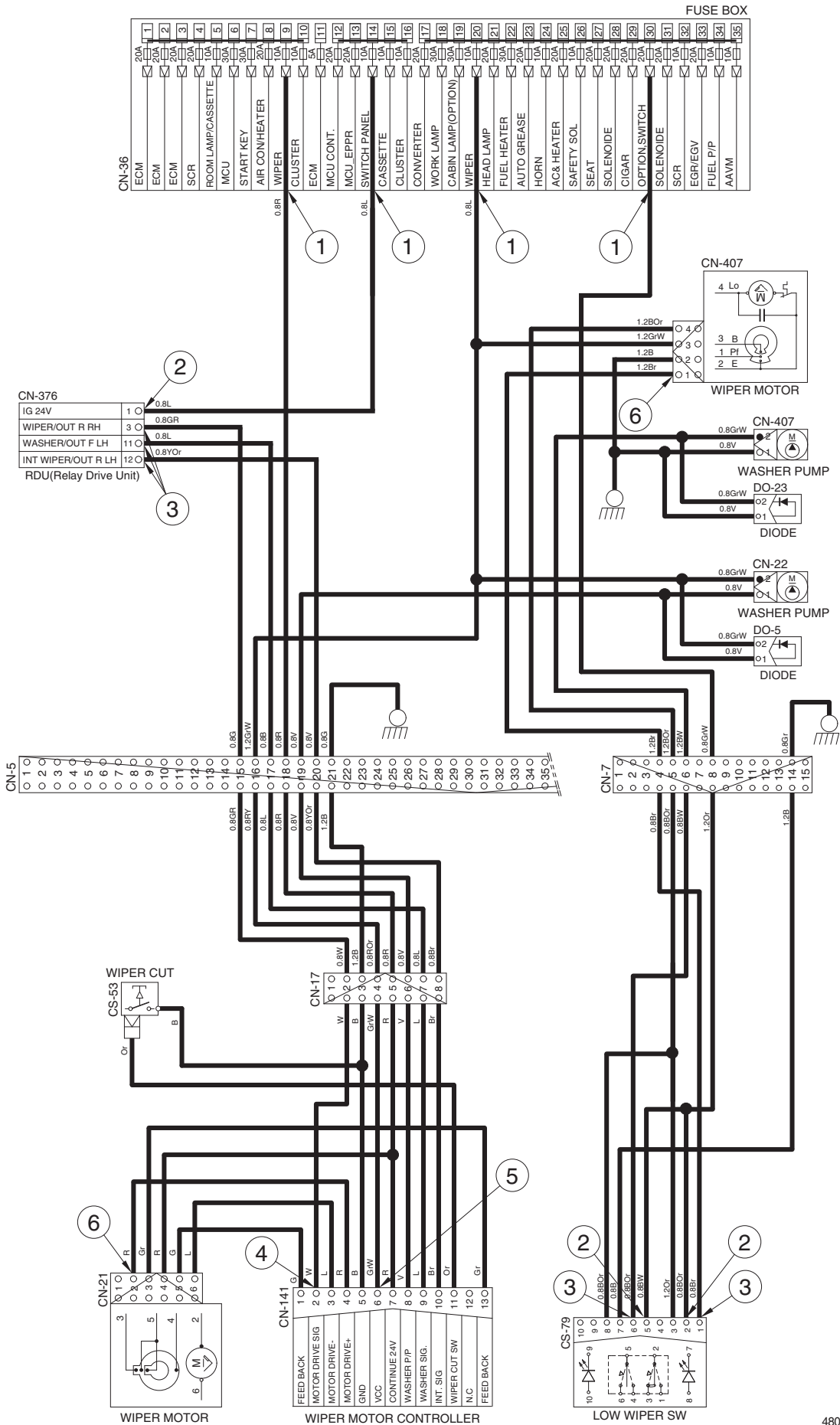
3) CHECK POINT

Engine	Start switch	Check point	Voltage	
STOP	ON	① - GND (fuse box)	20~25V	
		② - GND (switch power input)		
		③ - GND (switch power output)	0 ~ 5V	
		④ - GND (wiper power input)		
		⑤ - GND (wiper power output)		24V
		⑥ - GND (wiper motor)		0 or 24V

※ GND : Ground

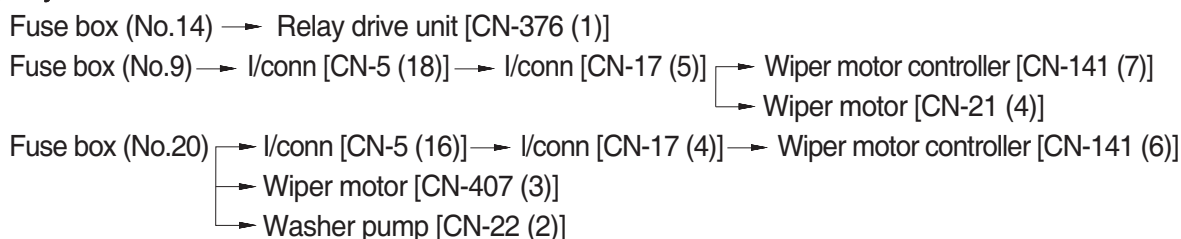
WIPER AND WASHER CIRCUIT

OLD VERSION

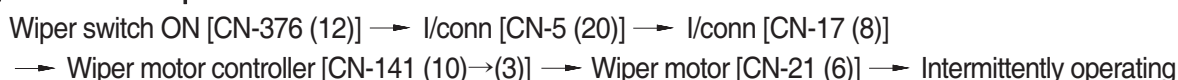


1) OPERATING FLOW

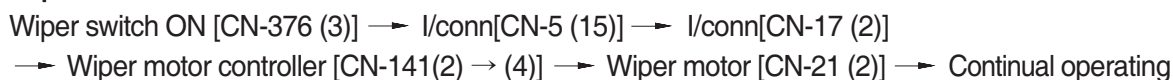
(1) Key switch ON



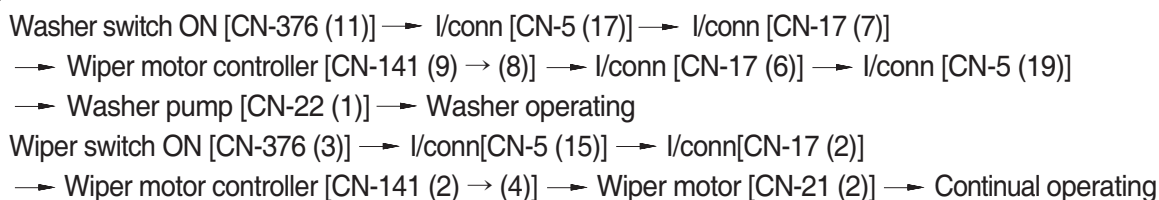
(2) Intermittent wiper switch ON



(3) Wiper switch ON



(4) Washer switch ON

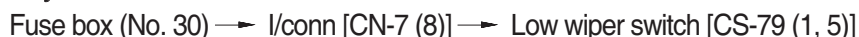


(5) Auto parking (when switch OFF)

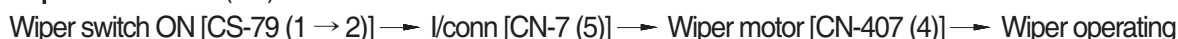


2) OPERATING FLOW (LOW WIPER)

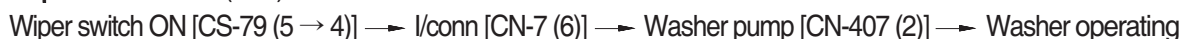
(1) Key switch ON



(2) Wiper switch ON (1st)



(3) Wiper switch ON (2nd)



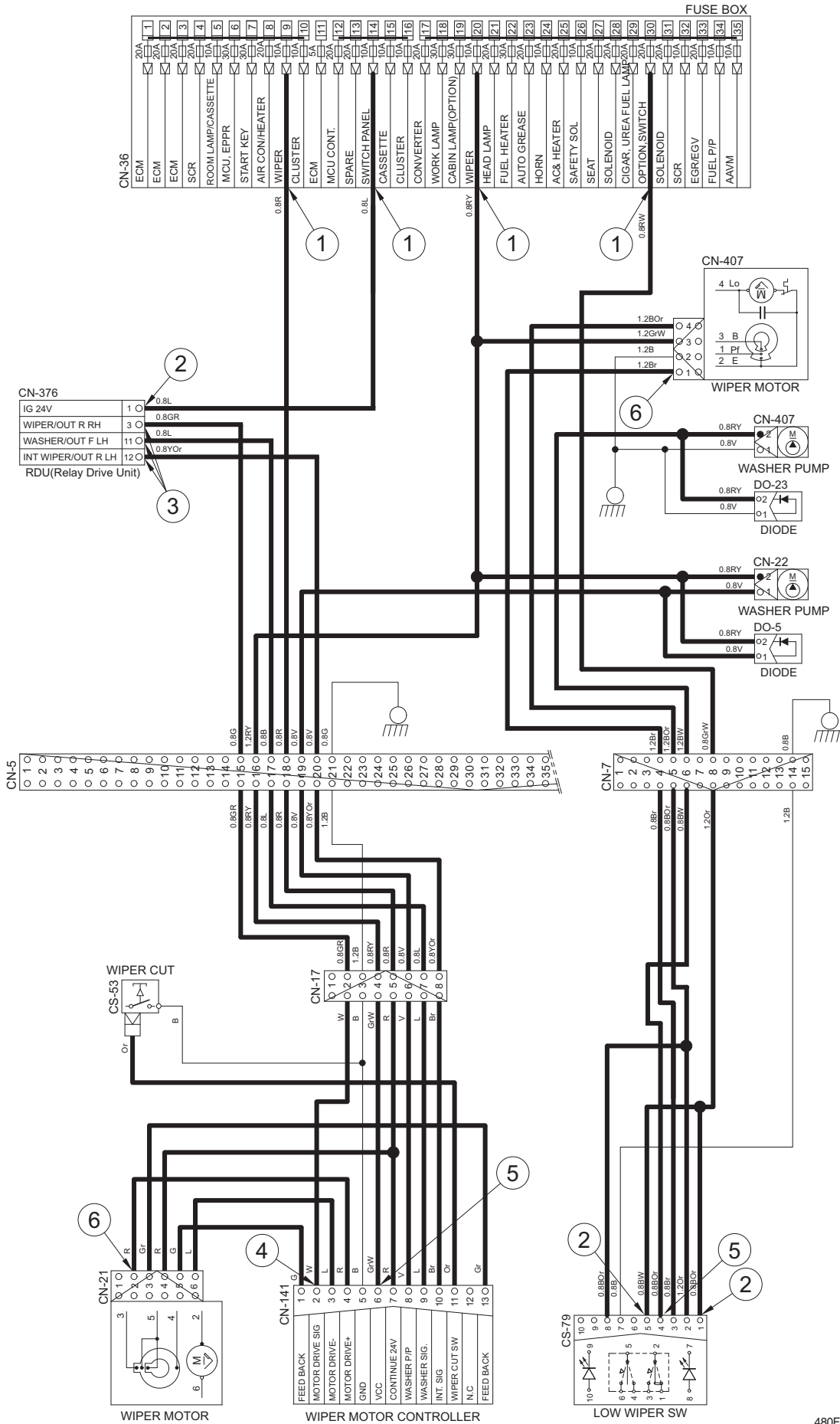
3) CHECK POINT

Engine	Start switch	Check point	Voltage	
STOP	ON	① - GND (fuse box)	20~25V	
		② - GND (switch power input)		
		③ - GND (switch power output)	0 ~ 5V	
		④ - GND (wiper power input)		
		⑤ - GND (wiper power output)		24V
		⑥ - GND (wiper motor)		0 or 24V

※ GND : Ground

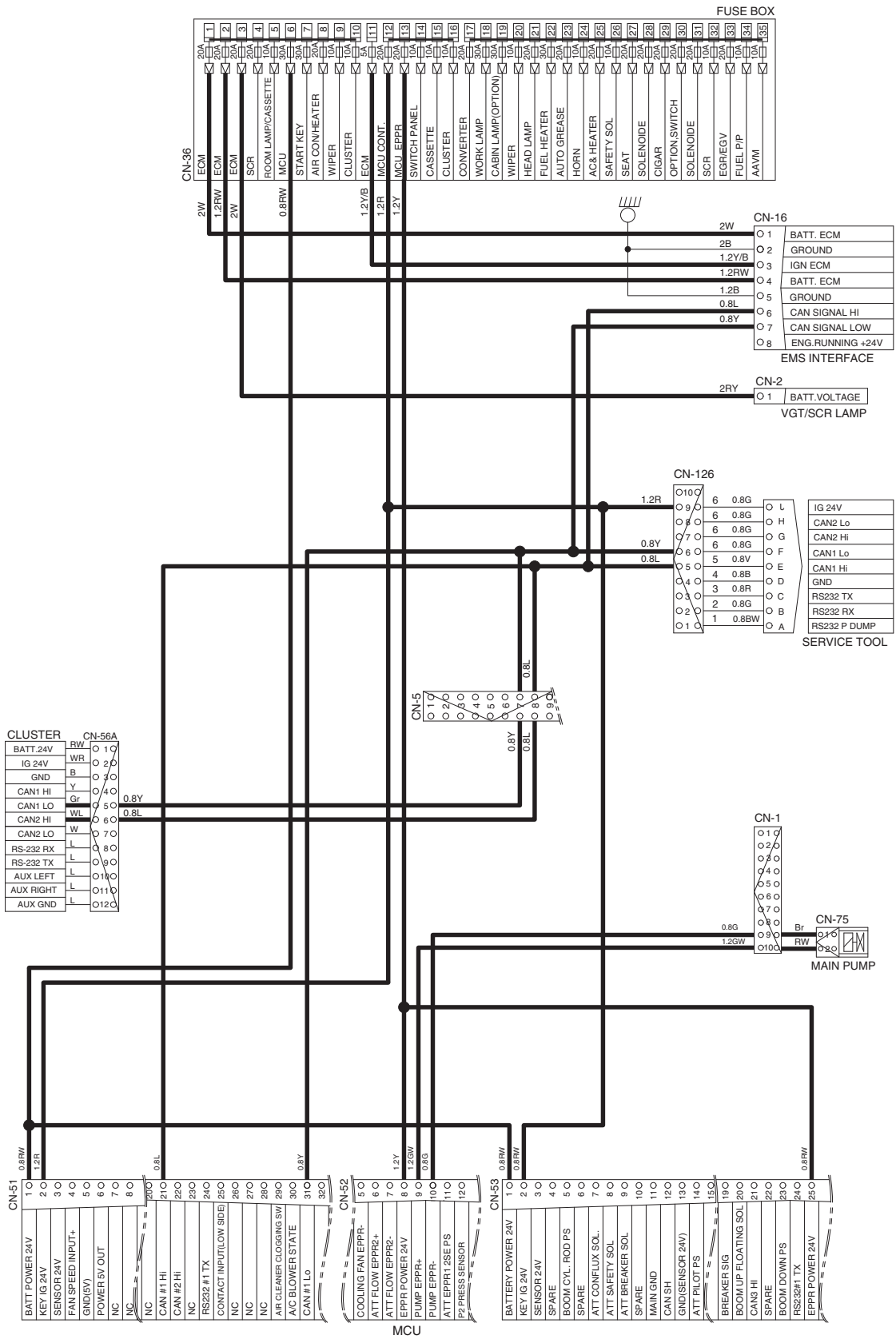
WIPER AND WASHER CIRCUIT

CURRENT VERSION



CONTROLLER CIRCUIT

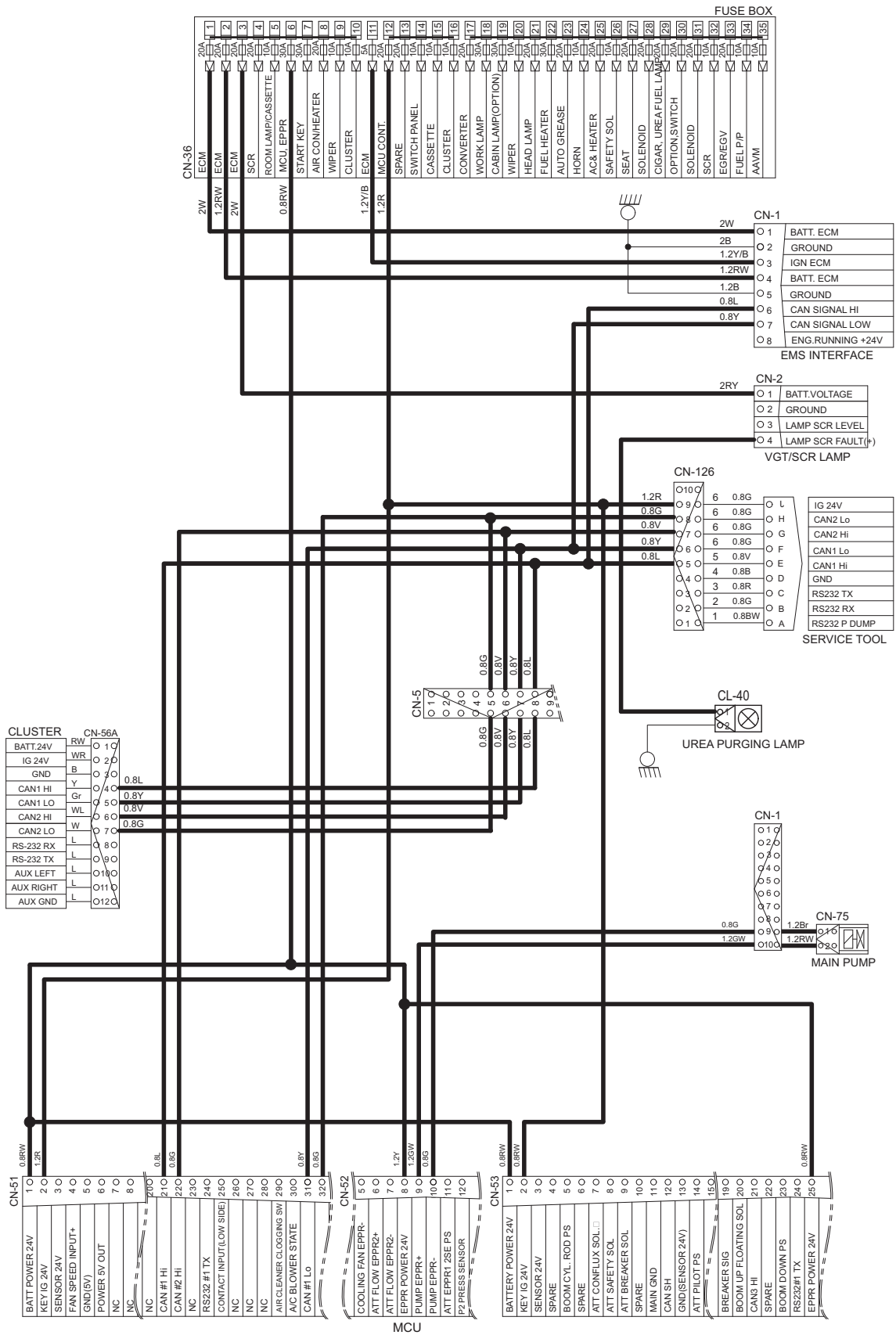
OLD VERSION



480F4EL12

CONTROLLER CIRCUIT CURRENT VERSION

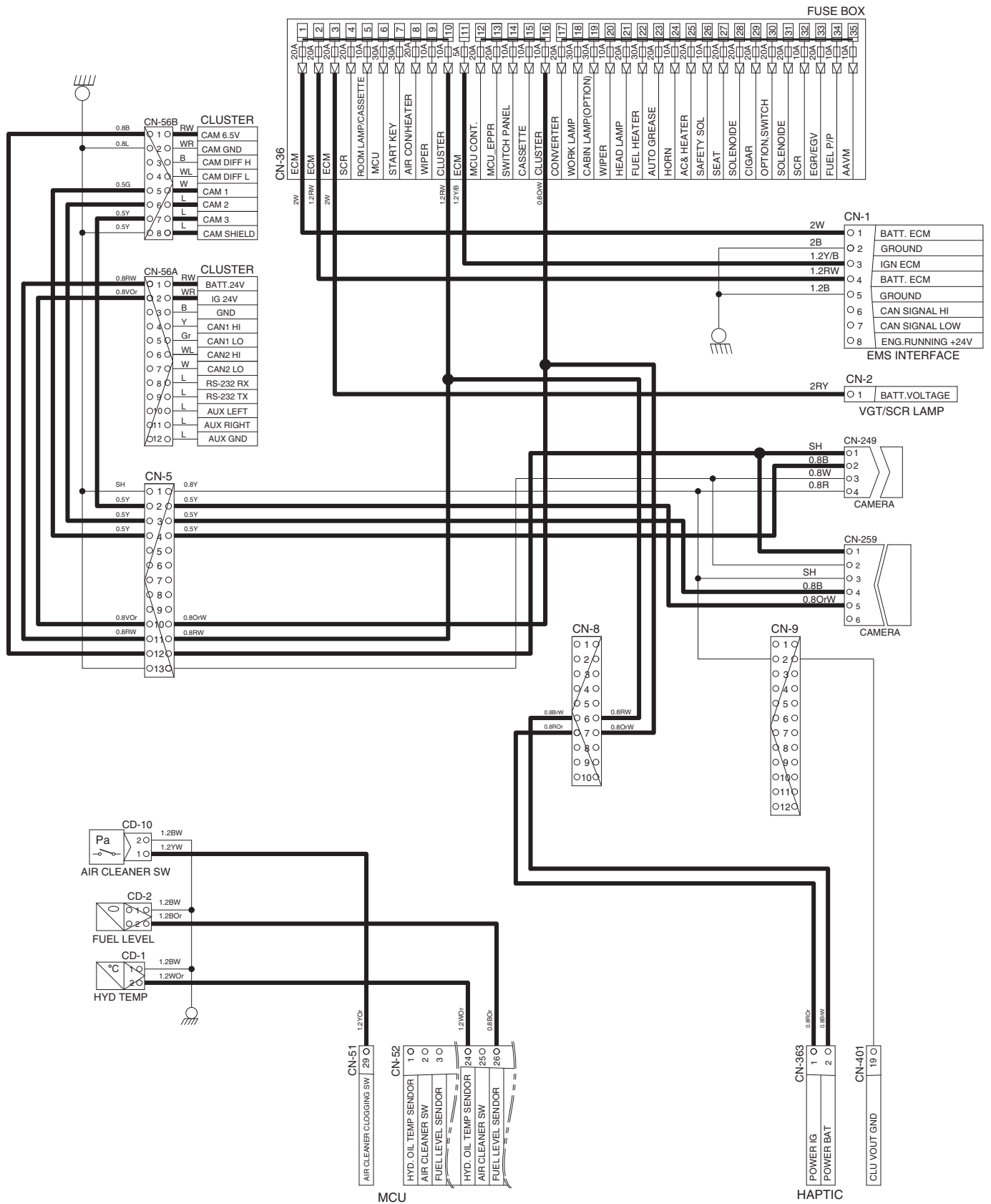
CURRENT VERSION



480F4EL12B

MONITORING CIRCUIT

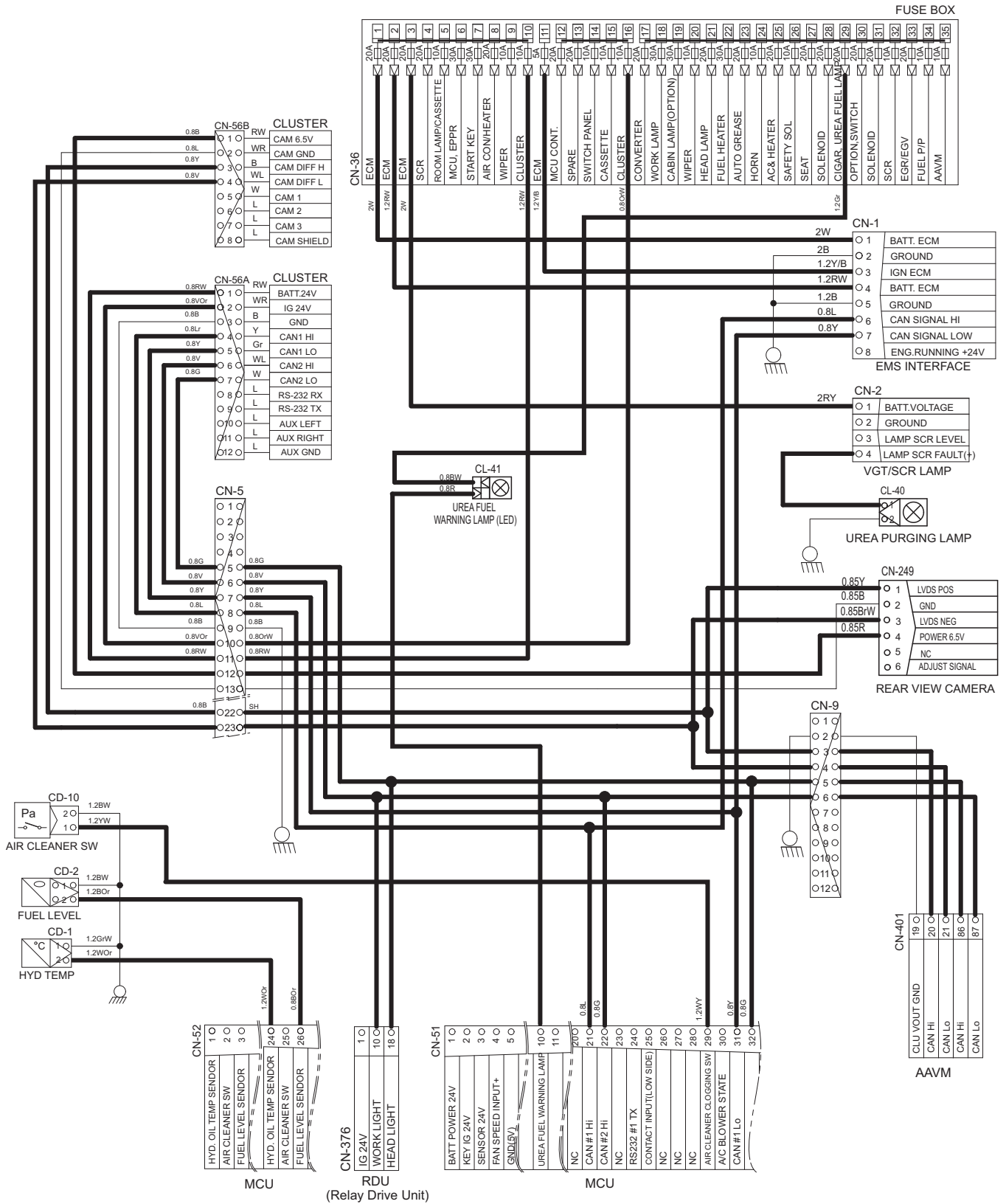
OLD VERSION



480F4EL14

MONITORING CIRCUIT

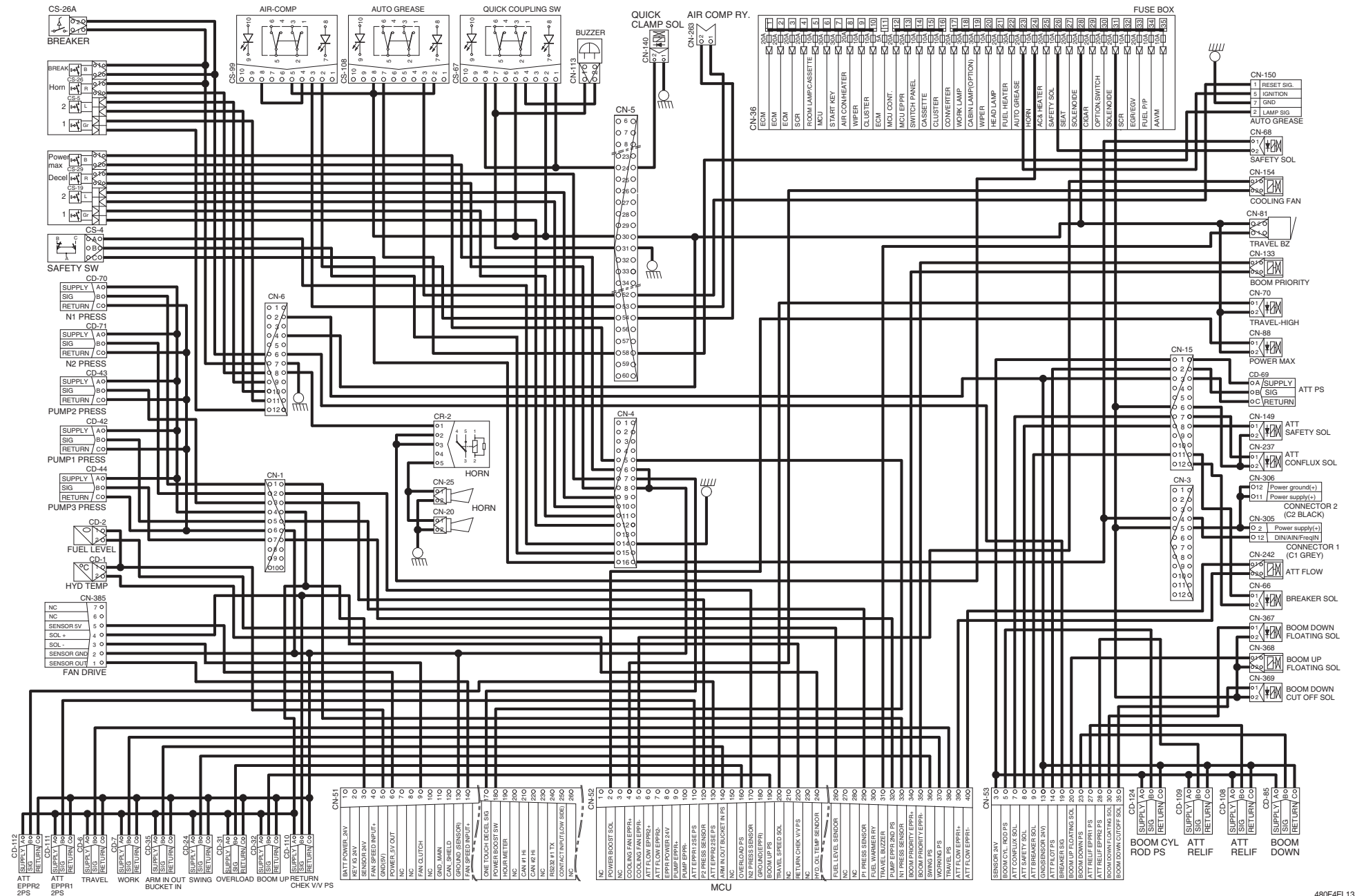
CURRENT VERSION



480F4EL14B

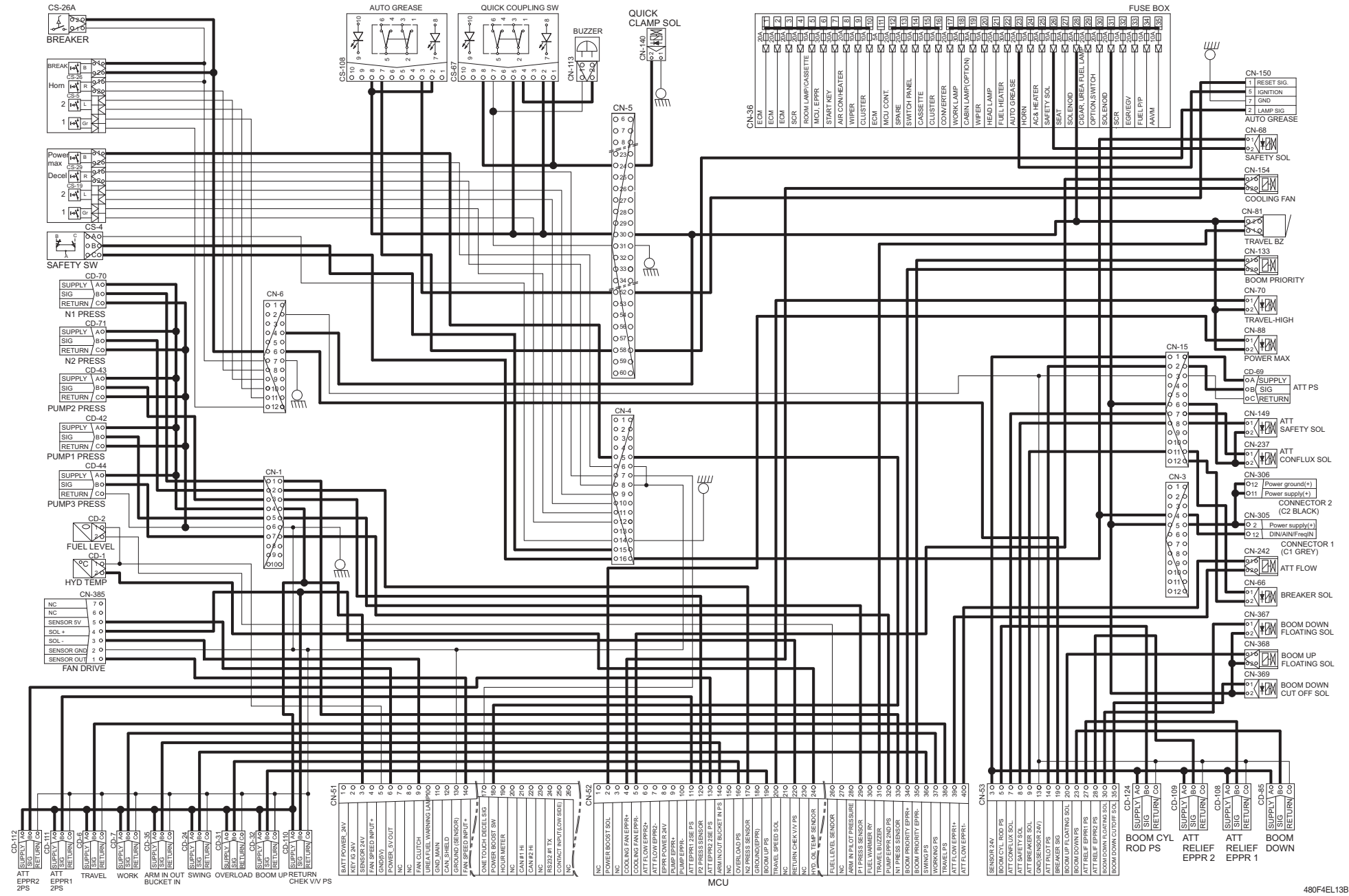
ELECTRIC CIRCUIT FOR HYDRAULIC

OLD VERSION

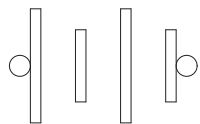
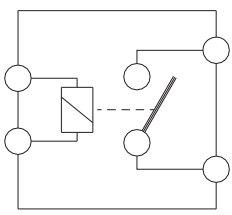
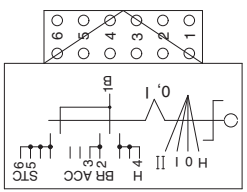
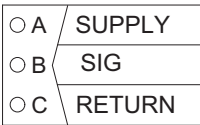
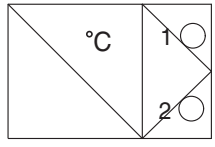
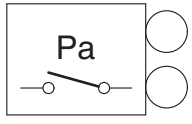


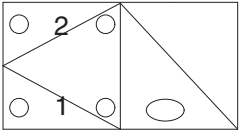
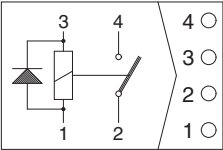
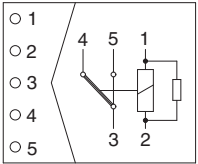
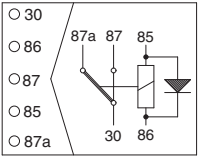
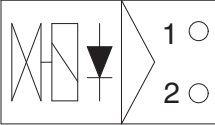

ELECTRIC CIRCUIT FOR HYDRAULIC

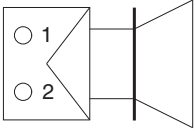
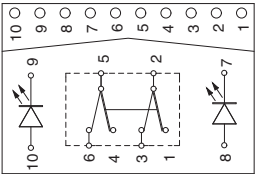
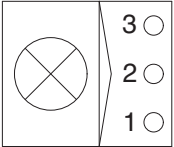
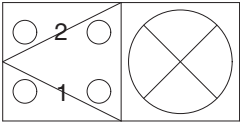
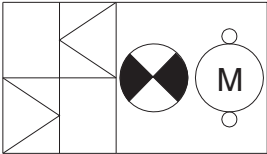
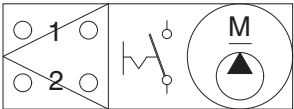
CURRENT VERSION

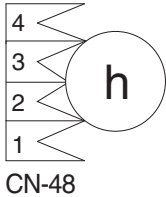
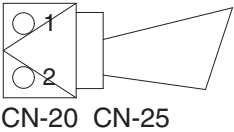
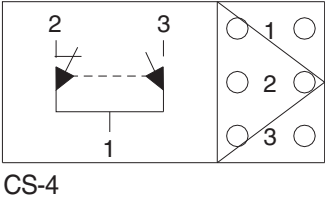
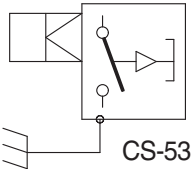
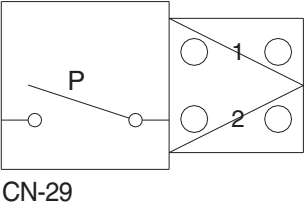
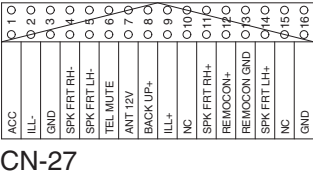


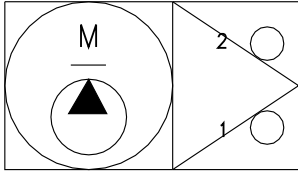
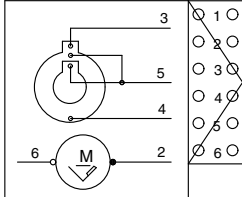
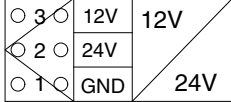
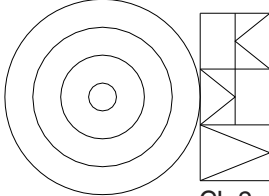
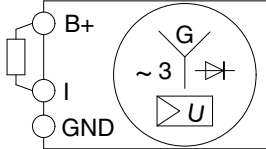

GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

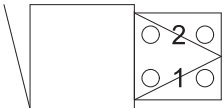
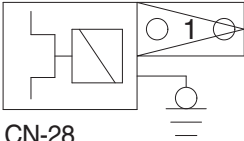
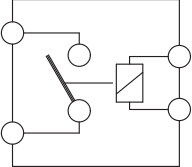
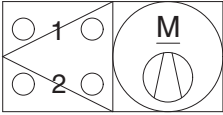
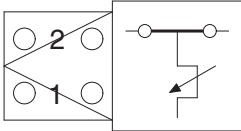
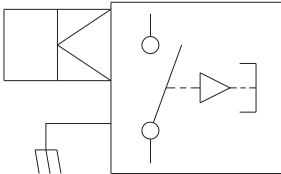
Part name	Symbol	Specifications	Check
Battery		12V × 160Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging
Battery relay	 CR-1	Rated load : 24V 100A (continuity) 1000A (30seconds)	※ Check coil resistance(M4 to M4) Normal : About 50 Ω ※ Check contact Normal : ∞ Ω
Start key	 CS-2A	B-BR : 24V 1A B-ACC : 24V 10A B-ST : 24V 40A	※ 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 sensor	 CD-6 CD-7 CD-24 CD-31 CD-32 CD-35 CD-42 CD-43 CD-44 CD-69 CD-70 CD-71 CD-85 CD-108 CD-109 CD-110 CD-111 CD-112 CD-124	8~30V	※ Check contact Normal : 0.1 Ω
Temperature sensor (hydraulic)	 CD-1	-	※ Check resistance 50°C : 804 Ω 80°C : 310 Ω 100°C : 180 Ω
Air cleaner pressure switch	 CD-10	(N.O TYPE)	※ Check contact High level : ∞ Ω Low level : 0 Ω

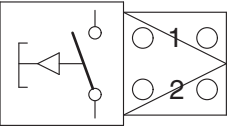
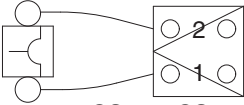
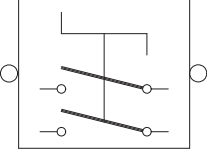
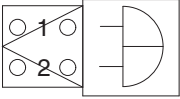
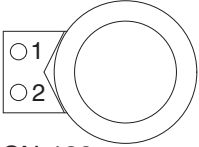
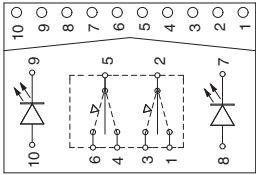
Part name	Symbol	Specifications	Check
Fuel sender	 CD-2	-	※ Check resistance Full : 50 Ω 6/12 : 350 Ω 11/12 : 100 Ω 5/12 : 400 Ω 10/12 : 150 Ω 4/12 : 450 Ω 9/12 : 200 Ω 3/12 : 500 Ω 8/12 : 250 Ω 2/12 : 550 Ω 7/12 : 300 Ω 1/12 : 600 Ω Empty warning : 700 Ω
Relay (air con blower)		24V 20A	※ Check resistance Normal : About 200 Ω (for terminal 1-3) 0 Ω (for terminal 2-4)
Relay	 CR-2 CR-5 CR-36	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 1-2) 0 Ω (for terminal 3-4) ∞ Ω (for terminal 3-5)
Relay	 CR-4 CR-7 CR-9 CR-13 CR-35 CR-46	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 85-86) 0 Ω (for terminal 30-87a) ∞ Ω (for terminal 30-87)
Solenoid valve	 CN-66 CN-70 CN-88 CN-140 CN-149 CN-237 CN-367 CN-368 CN-369	24V 1A	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
EPPR valve	 CN-75 CN-133 CN-154 CN-242 CN-309 CN-310 CN-365 CN-366 CN-378	700mA	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)

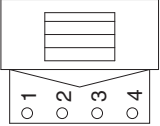
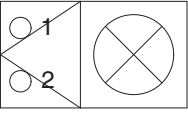
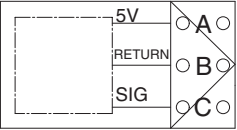
Part name	Symbol	Specifications	Check
Speaker	 CN-23(LH) CN-24(RH)	20W	※ Check resistance Normal : A few Ω
Switch (locking type)	 CS-50 CS-67 CS-83 CS-99 CS-107 CS-108 CS-111	24V 1.5A	※ Check contact Normal ON : 0 Ω (for terminal 3-7, 4-8) $\infty \Omega$ (for terminal 7-9, 8-10) OFF : $\infty \Omega$ (for terminal 3-7, 4-8) 0 Ω (for terminal 7-9, 8-10)
Room lamp	 CL-1	24V 10W	※ Check disconnection Normal : 1.0 Ω ON : 0 Ω (For terminal 1-2) $\infty \Omega$ (For terminal 1-3) OFF : $\infty \Omega$ (For terminal 1-2) 0 Ω (For terminal 1-3)
Head lamp, Work lamp, Cab lamp	 CL-3 CL-4 CL-5 CL-6 CL-8 CL-9 CL-10 CL-24 CL-36 CL-37	24V 65W (H3 Type)	※ Check disconnection Normal : 1.2 Ω
Beacon lamp	 CL-7	21V 70W (H1 Type)	※ Check disconnection Normal : A few Ω
Fuel filler pump	 CN-61	24V 10A 35 l /min	※ Check resistance Normal : 1.0 Ω

Part name	Symbol	Specifications	Check
Hour meter	 CN-48	16~32V	※ Check operation Supply power(24V) to terminal No.2 and connect terminal No.1 and ground
Horn	 CN-20 CN-25	DC22~28V 2A	※ Check operation Supply power(24V) to each terminal and connect ground.
Safety switch	 CS-4	24V 15A (N.C TYPE)	※ Check contact Normal : 0 Ω (for terminal 1-2) ∞ Ω (for terminal 1-3) Operating : ∞ Ω (for terminal 1-2) 0 Ω (for terminal 1-3)
Wiper cut switch	 CS-53	24V (N.O TYPE)	※ Check contact Normal : 0 Ω (one pin to ground)
Receiver dryer	 CN-29	24V 2.5A	※ Check contact Normal : ∞ Ω
Radio & USB player	 CN-27	24V 2A	※ Check voltage 20~25V (for terminal 1-3, 3-8)

Part name	Symbol	Specifications	Check
Washer pump	 <p>CN-22 CN-407</p>	24V 3.8A	※ Check contact Normal : 10.7 Ω (for terminal 1-2)
Wiper motor	 <p>CN-21</p>	24V 2A	※ Check disconnection Normal : 7 Ω (for terminal 2-6)
DC/DC Converter	 <p>CN-138</p>	12V 3A	※ Check voltage 24V (for terminal 1-2) 12V (for terminal 1-3)
Cigar lighter	 <p>CL-2</p>	24V 5A 1.4W	※ Check coil resistance Normal : About 1M Ω ※ Check contact Normal : ∞ Ω Operating time : 5~15sec
Alternator	 <p>CN-74</p>	Delco Remy 24V 100A	※ Check contact Normal : 0 Ω (for terminal B ⁺ -I) Normal : 24~27.5V
Starter	 <p>CN-45</p>	Denso 24V 5.5kW	※ Check contact Normal : 0.1 Ω

Part name	Symbol	Specifications	Check
Travel alarm	 CN-81	24V 0.5A	※ Check contact Normal : 5.2 Ω
Aircon compressor	 CN-28	24V 79W	※ Check contact Normal : 13.4 Ω
Start relay	 CR-23	24V 300A	※ Check contact Normal : 0.94 Ω (for terminal 1-2)
Blower motor		24V 9.5A	※ Check resistance Normal : 2.5 Ω (for terminal 1-2)
Duct sensor (switch)		1°C OFF 4°C ON	※ Check resistance Normal : 0 Ω (for terminal 1-2), the atmosphere temp : Over 4°C
Door switch	 CS-1	24V 2W	※ Check resistance Normal : About 5M Ω

Part name	Symbol	Specifications	Check
Switch (power max, one touch decel, horn, breaker)	 CS-5 CS-19 CS-26 CS-29	24V 6A	※ Check resistance Normal : $\infty \Omega$
Circuit breaker	 CS-60 CS-95	60A	※ Check disconnection Normal : 0Ω (connect ring terminal and check resist between terminal 1 and 2)
Master switch	 CS-74A, CS-74B	6-36V	※ Check disconnection Normal : 0.1Ω
Quick clamp buzzer	 CN-113	24V 200mA $107 \pm 4\text{dB}$	
Socket	 CN-139	12V 10A	
Switch	 CS-73 CS-79 CS-100	24V 8A	※ Check contact Normal ON : 0Ω (for terminal 3-7, 4-8) $\infty \Omega$ (for terminal 7-9, 8-10) OFF : $\infty \Omega$ (for terminal 3-7, 4-8) 0Ω (for terminal 7-9, 8-10)

Part name	Symbol	Specifications	Check
Fuel heater	 <p data-bbox="507 443 596 474">CN-147</p>	-	
DEF/AdBlue® fill up warning lamp (LED)	 <p data-bbox="496 725 564 757">CL-40</p>	-	
Proportional valve sensor	 <p data-bbox="485 1016 691 1048">CN-246 CN-247</p>	-	

GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	AMP	10	I/conn (Frame harness-Pump PS harness)	S816-010002	S816-110002
CN-2	DEUTSCH	4	I/conn (Frame harness-Engine harness)	DT06-4S-EP06	DT06-4P-E005
CN-3	DEUTSCH	6	I/conn (Frame harness-Engine harness)	DT06-4S-EP06	DT06-4P-E005
CN-4	AMP	16	I/conn (Console harness LH-Frame harness)	368047-1	368050-1
CN-5	DEUTSCH	60	I/conn (Side harness RH-Frame harness)	DRB16-60SAE-L018	DRB12-60P-L018
CN-6	AMP	16	I/conn (Console harness RH-Frame harness)	368047-1	368050-1
CN-7	AMP	15	I/conn (Console harness RH-Frame harness)	2-85262-1	368301-1
CN-8	AMP	10	I/conn (Console harness RH-Frame harness)	S816-010002	S816-110002
CN-9	DEUTSCH	12	I/conn (AAVM harness-Frame harness)	DT06-12SA-P021	DT04-12PA-P021
CN-10	DEUTSCH	12	I/conn (Cab harness-Side harness RH)	DT06-12S-EP06	DT04-12PA-P021
CN-11	DEUTSCH	8	I/conn (Frame harness-Aircon harness)	DT06-8S-EP06	-
CN-12	DEUTSCH	2	I/conn (Frame harness-Boom wire harness)	DT06-2S-EP06	DT04-2P-E005
CN-15	AMP	12	I/conn (Frame harness-Breaker sol)	S816-012002	S816-112002
CN-16	DEUTSCH	8	I/conn (Frame harness-Engine harness)	DT06-8S-EP06	-
CN-17	AMP	8	I/conn (Wiper harness-Side harness RH)	S816-008002	S816-108002
CN-20	DEUTSCH	2	Horn	DT06-2S-EP06	DT04-2P-E005
CN-21	AMP	6	Wiper motor	S810-006202	-
CN-22	KET	2	Washer pump	MG640605	-
CN-23	KET	2	Speaker-LH	MG610070	-
CN-24	KET	2	Speaker-RH	MG610070	-
CN-25	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-27A	KUM	16	Radio & USB player	PK145-16017	-
CN-27B	AMP	8	Radio & USB player	-	174984-2
CN-28	DEUTSCH	2	Aircon compressor	-	DT04-2P-E005
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	-	Fuse & relay box	21Q7-10910	-
CN-45	RING-TERM	-	Starter motor B+	S820-108000	-
CN-48	KET	1	Hour meter	2-520193-2	-
CN-51	DEUTSCH	40	MCU	DRC26-40SA	-
CN-52	DEUTSCH	40	MCU	DRC26-40SB	-
CN-53	DEUTSCH	40	MCU	DRC26-40SC	-
CN-56A	AMP	12	Cluster	-	174663-2
CN-56B	AMP	8	Cluster	-	174984-2
CN-60	YAZAKI	4	Circuit breaker	-	7222-4220-30
CN-61	DEUTSCH	2	Fuel filler pump	DT06-2S-EP06	DT04-2P-E005

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-66	DEUTSCH	2	Breaker solenoid	DT06-2S-EP06	-
CN-68	DEUTSCH	2	Safety solenoid	DT06-2S-EP06	-
CN-70	DEUTSCH	2	Travel high solenoid	DT06-2S-EP06	-
CN-74	RING-TERM	1	Alternator "I" terminal	S820-108000	-
CN-75	AMP	2	Pump EPPR	S816-002002	-
CN-81	DEUTSCH	2	Travel buzzer solenoid	DT06-2S-EP06	-
CN-88	DEUTSCH	2	Power max solenoid	DT06-2S-EP06	-
CN-95	YAZAKI	2	Circuit breaker	-	7222-4220-30
CN-113	KET	2	Buzzer	MG651205-5	-
CN-125	Econoseal J	4	RMS connector	S816-004002	S816-104002
CN-125A	DEUTSCH	12	RMS	DT06-12S-P021	DT04-12PA-P021
CN-126	AMP	10	Service tool	S816-010002	S816-110002
CN-133	DEUTSCH	2	Boom priority solenoid	DT06-2S-EP06	-
CN-138	FASTEN	3	DC/DC Converter	S810-003202	-
CN-139	FASTEN	2	12V socket	172434-2	-
CN-140	DEUTSCH	2	Quick clamp solenoid	DT06-2S-EP06	DT04-2P-E005
CN-141	AMP	13	Wiper motor controller	172498-1	-
CN-147	DEUTSCH	4	Fuel heater	DT06-2S-E003	-
CN-149	DEUTSCH	2	Attach safety solenoid	DT06-2S-EP06	-
CN-150	AMP	4	Auto grease	S816-004002	S816-104002
CN-154	DEUTSCH	2	Cooling fan	DT06-2S-EP06	DT04-2P-E005
CN-156	DEUTSCH	2	Air seat	DT06-2S-EP06	DT04-2P-E005
CN-157	AMP	1	Antena power	S822-014002	-
CN-237	DEUTSCH	2	Attach conflux solenoid	DT06-2S-EP06	-
CN-242	DEUTSCH	2	Attach EPPR 1	DT06-2S-EP06	-
CN-245	-	4	PTC power	4-1437290-1	-
CN-246	DEUTSCH	3	Proportional valve-RH	DT06-3S	DT04-3P
CN-247	DEUTSCH	3	Proportional valve-LH	DT06-3S	DT04-3P
CN-249	DEUTSCH	4	Rear view camera	DT06-4S-EP06	DT04-4P-E005
CN-258	KET	1	Air compressor power	MG640944-5	MG650943-5
CN-259	DEUTSCH	6	Camera	DT06-6S-EP06	DT04-6P-E005
CN-263	DEUTSCH	2	Air compressor relay	DT06-2S-EP06	DT04-2P-E005
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-E005	DT06-3P-EP06
CN-308	AMP	4	Proportional-PVG32	2-967056-1	-
CN-309	DEUTSCH	2	Proportional-EPPR valve-A1	DT06-2S-EP06	-
CN-310	DEUTSCH	2	Proportional-EPPR valve-A2	DT06-2S-EP06	-

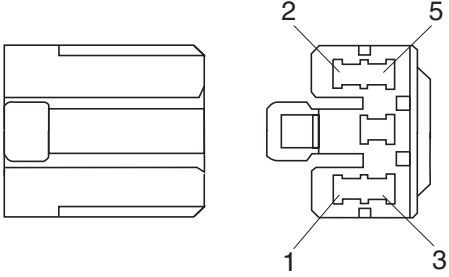
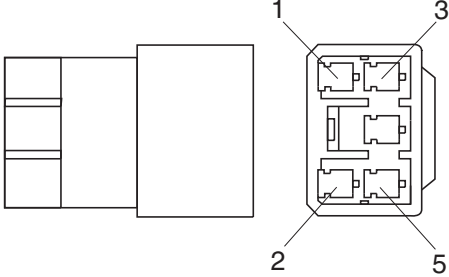
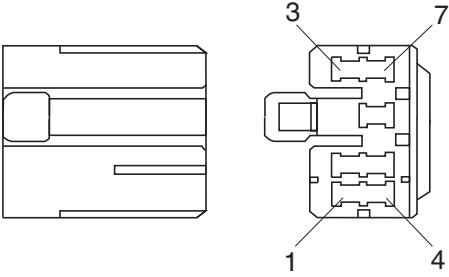
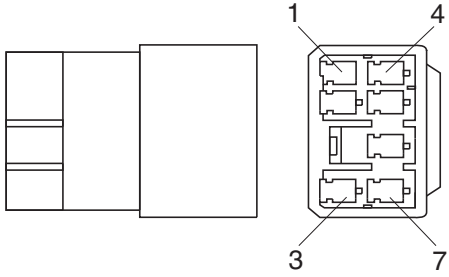
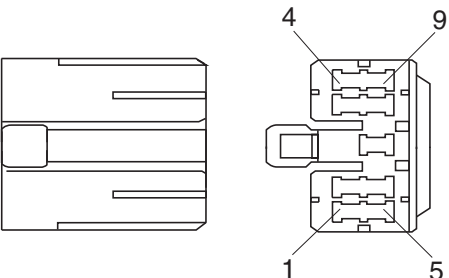
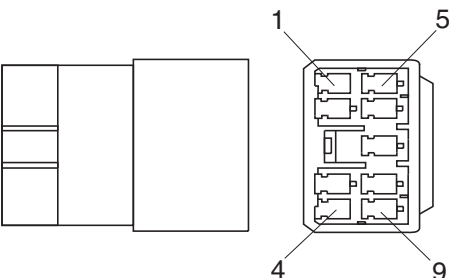
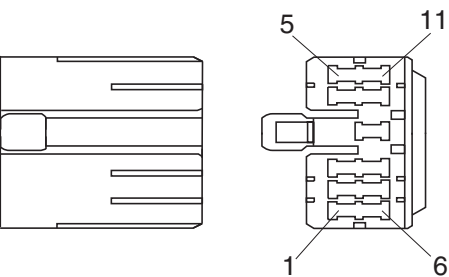
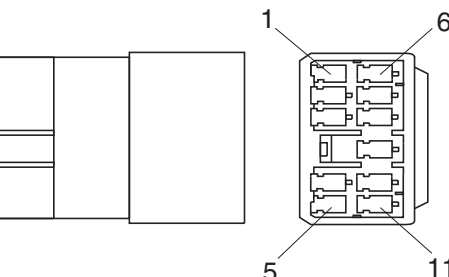
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-363	AMP	12	Haptic controller	174045-2	-
CN-365	DEUTSCH	2	Attach EPPR valve-LH	DT06-2S-EP06	DT04-2P-E005
CN-366	DEUTSCH	3	Attach EPPR valve-RH	DT06-2S-EP06	DT04-2P-E005
CN-367	DEUTSCH	2	Boom down floating solenoid	DT06-2S-EP06	DT04-2P-E005
CN-368	DEUTSCH	2	Boom up floating solenoid	DT06-2S-EP06	DT04-2P-E005
CN-369	DEUTSCH	2	Boom down cut off solenoid	DT06-2S-EP06	DT04-2P-E005
CN-376	TYCO	34	Membrane controller	4-1437290-1	-
CN-378	DEUTSCH	2	Attach EPPR 2	DT06-2S-EP06	-
CN-398	DEUTSCH	4	RS232	DT06-4S-EP06	DT06-4P-E005
CN-399	TYCO	4	DEF/AdBlue® tank level sensor	1-967325-1	-
CN-402	DEUTSCH	6	Front view camera	DT06-6S-EP06	DT04-6P-EP14
CN-403	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-EP14
CN-404	DEUTSCH	6	RH view camera	DT06-6S-EP06	DT04-6P-EP14
CN-405	DEUTSCH	6	LH view camera	DT06-6S-EP06	DT04-6P-EP14
CN-406	DEUTSCH	3	RS232	DT06-3S-EP06	DT06-3P-E005
CN-407	FCI	4	Low wiper motor	180900-0	-
CN-408	FCI	4	Washer tank	MG640795	-
CN-427	MOLEX	4	Reader-RMS	039012040	026013096
		12		5557-12R	5559-12P
· Relay					
CR-1	RING-TERM	-	Battery relay	ST710289-2	-
CR-2	-	5	Horn relay	-	-
CR-4	-	5	Working lamp relay	-	-
CR-5	-	5	Anti restart relay	-	-
CR-7	-	5	Aircon compressor relay	-	-
CR-9	-	5	Cabin lamp relay	-	-
CR-13	-	5	Head lamp relay	-	-
CR-23	KET	2	Start relay	S814-002001	S814-102001
CR-35	-	5	Power relay	-	-
CR-36	-	5	Preheat relay	-	-
CR-46	-	5	Fuel warmer relay	-	-
· Switch					
CS-1	SHUR	1	Door switch	S822-014002	S822-114002
CS-2	WP	6	Start key switch	S814-006100	-
CS-4	DEUTSCH	3	Safety switch	DT06-3S-EP06	-
CS-5	DEUTSCH	2	Horn switch	DT06-3S-EP06	DT04-2P-E005
CS-19	DEUTSCH	2	One touch decel switch	DT06-3S-EP06	DT04-2P-E005
CS-26	DEUTSCH	2	Breaker switch	DT06-2S-EP06	DT04-2P-E005
CS-26A	AMP	2	Breaker pedal switch	S816-002002	S816-102002
CS-29	DEUTSCH	2	Power max switch	DT06-2S-EP06	DT04-2P-E005

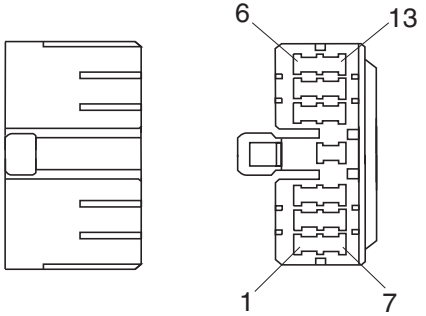
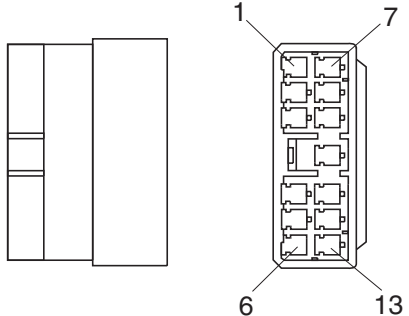
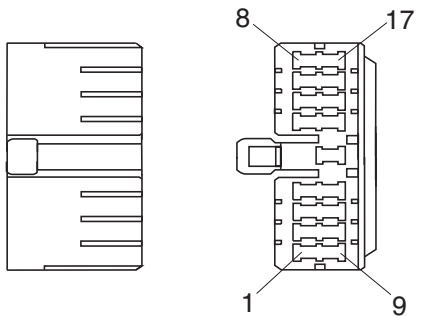
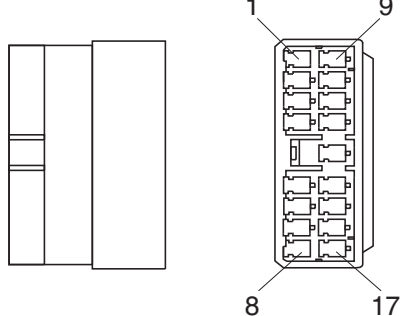
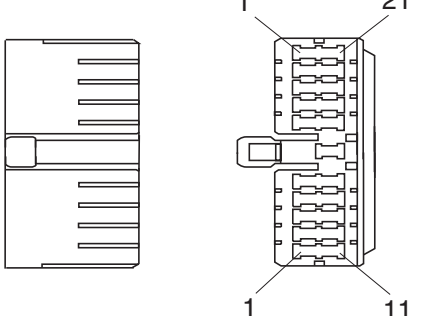
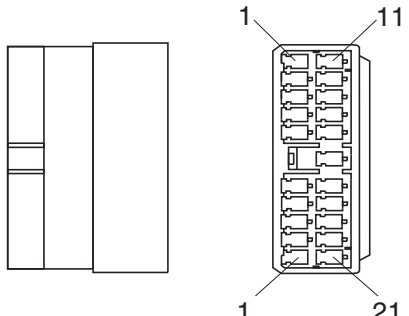
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CS-33	AMP	6	Emergency engine stop switch	S816-006002	S816-106002
CS-50	CARLING	10	Travel priority switch	VC2-01	-
CS-53	AMP	1	Wiper cut switch	S822-014002	-
CS-67	CARLING	10	Quick clamp switch	VC2-01	-
CS-73	CARLING	10	Swing lock & fine switch	VC2-01	-
CS-74A	KET	2	Master switch	MG610557-5	-
CS-74B	DEUTSCH	2	Master switch	DT06-2S-EP06	DT04-2P-E005
CS-78	CARLING	10	Lower wiper switch	VC2-01	-
CS-83	CARLING	10	Spare switch	VC2-01	-
CS-99	CARLING	10	Air compressor switch	VC2-01	-
CS-100	CARLING	10	SCR system cleaning switch	VC2-01	-
CS-107	CARLING	10	Travel straight switch	VC2-01	-
CS-108	CARLING	10	Auto grease switch	VC2-01	-
CS-111	CARLING	10	Boom floating switch	VC2-01	-
· Light					
CL-1	KET	3	Room lamp	MG651032	-
CL-2	AMP	1	Cigar light	S822-014002	S822-114002
CL-3	DEUTSCH	2	Head lamp-LH	DT06-2S-EP06	DT04-2P-E005
CL-4	DEUTSCH	2	Head lamp-RH	DT06-2S-EP06	DT04-2P-E005
CL-5	DEUTSCH	2	Work lamp-LH	DT06-2S-EP06	DT04-2P-E005
CL-6	DEUTSCH	2	Work lamp-RH	DT06-2S-EP06	DT04-2P-E005
CL-7	SHUR	1	Beacon lamp	S822-014002	S822-114002
CL-8	DEUTSCH	2	Cab light-LH	DT06-2S-EP06	DT04-2P-E005
CL-9	DEUTSCH	2	Cab light-RH	DT06-2S-EP06	DT04-2P-E005
CL-10	DEUTSCH	2	Cab light	DT06-2S-EP06	DT04-2P-E005
CL-24	DEUTSCH	2	Head lamp	DT06-2S-EP06	DT04-2P-E005
CL-36	DEUTSCH	2	Work lamp	DT06-2S-EP06	DT04-2P-E005
CL-37	DEUTSCH	2	Work lamp	DT06-2S-EP06	DT04-2P-E005
CL-40	DEUTSCH	2	DEF/AdBlue® lamp	DT06-2S-EP06	DT04-2P-E005
· Sensor, sendor					
CD-1	AMP	2	Hydraulic oil temp sender	85202-1	-
CD-2	DEUTSCH	2	Fuel sender	DT06-2S-EP06	DT06-4P-E005
CD-6	DEUTSCH	3	Travel pressure switch	DT06-3S-EP06	DT06-4P-E005
CD-7	DEUTSCH	3	Working pressure switch	DT06-3S-EP06	DT06-4P-E005
CD-10	AMP	2	Air cleaner switch	85202-1	-
CD-24	DEUTSCH	3	Swing sensor	DT06-3S-EP06	DT06-4P-E005
CD-31	DEUTSCH	3	Overload sensor	DT06-3S-EP06	DT06-4P-E005
CD-32	DEUTSCH	3	Boom up sensor	DT06-3S-EP06	DT06-4P-E005

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CD-35	DEUTSCH	3	Arm & bucket in sensor	DT06-3S-EP06	DT06-4P-E005
CD-42	DEUTSCH	3	Pump pressure 1	DT06-3S-EP06	DT06-4P-E005
CD-43	DEUTSCH	3	Pump pressure 2	DT06-3S-EP06	DT06-4P-E005
CD-44	DEUTSCH	3	Pump pressure 3	DT06-3S-EP06	DT06-4P-E005
CD-45	DEUTSCH	2	WIF sensor	DT06-2S-EP06	DT06-4P-E005
CD-52	AMP	2	Fan sensor	S816-002002	-
CD-69	DEUTSCH	3	Attach pressure sensor	DT06-3S-EP06	DT06-4P-E005
CD-70	DEUTSCH	3	N1 pressure sensor	DT06-3S-EP06	DT06-4P-E005
CD-71	DEUTSCH	3	N2 pressure sensor	DT06-3S-EP06	DT06-4P-E005
CD-85	DEUTSCH	3	Boom down sensor	DT06-3S-EP06	DT06-3P-E005
CD-108	DEUTSCH	3	Attach relief EPPR 1	DT06-3S-EP06	DT06-4P-E005
CD-109	DEUTSCH	3	Attach relief EPPR 2	DT06-3S-EP06	DT06-4P-E005
CD-111	DEUTSCH	3	Attach EPPR 1 pressure sensor	DT06-3S-EP06	DT06-4P-E005
CD-112	DEUTSCH	3	Attach EPPR 2 pressure sensor	DT06-3S-EP06	DT06-4P-E005
CD-124	DEUTSCH	3	Boom cylinder rod pressure snensor	DT06-3S-EP06	DT06-3P-E005

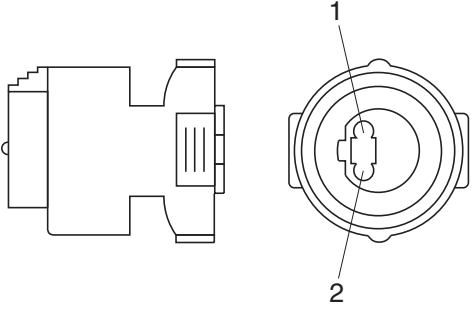
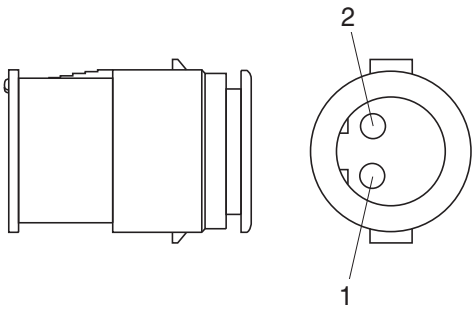
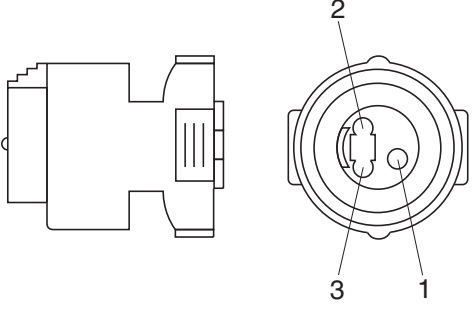
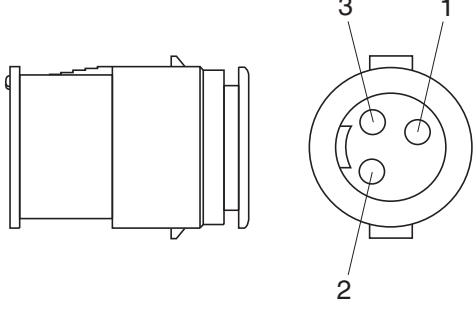
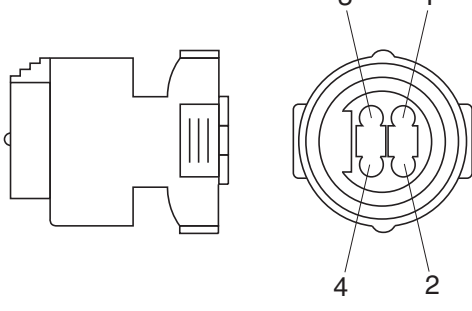
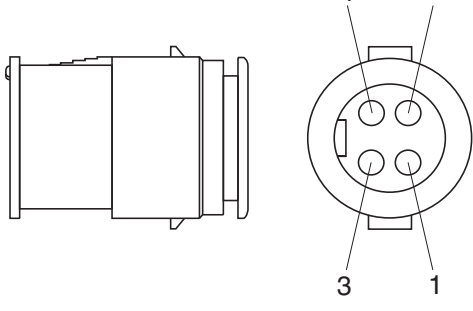
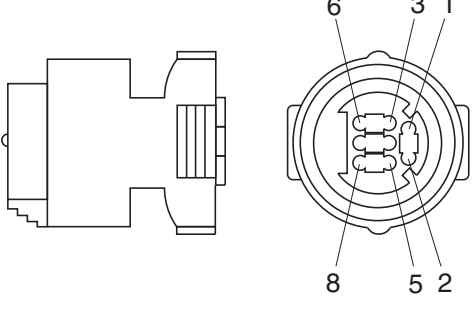
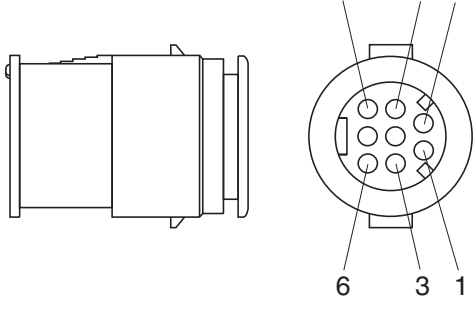
2. CONNECTION TABLE FOR CONNECTORS

1) PA TYPE CONNECTOR

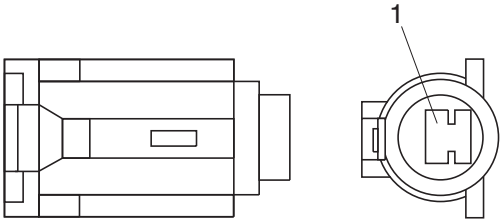
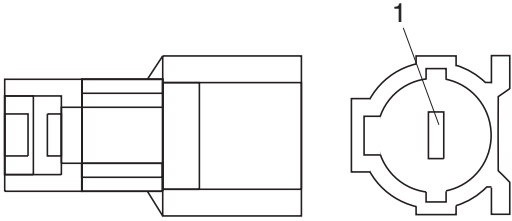
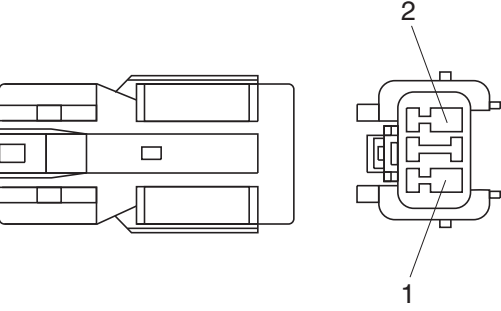
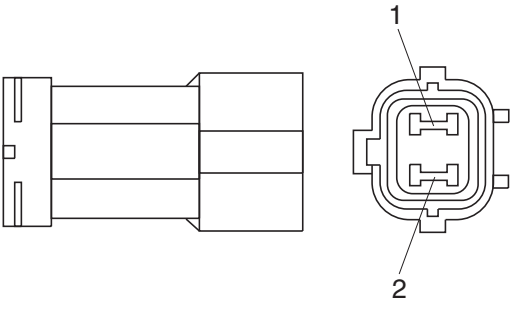
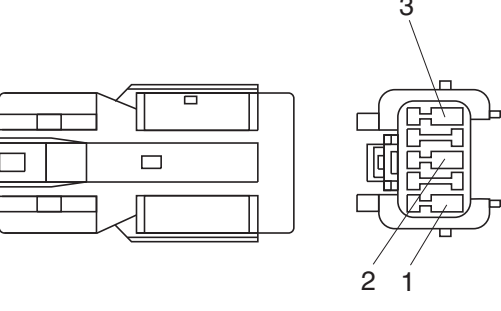
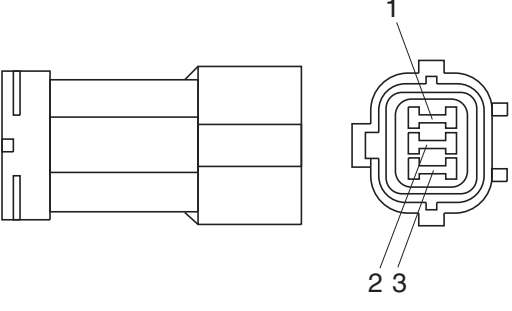
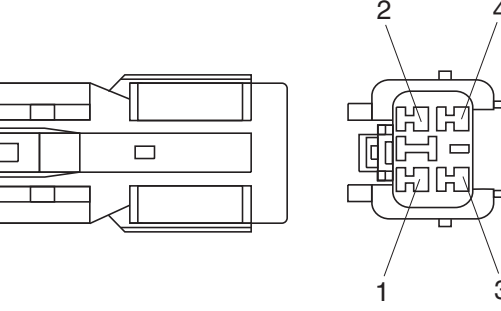
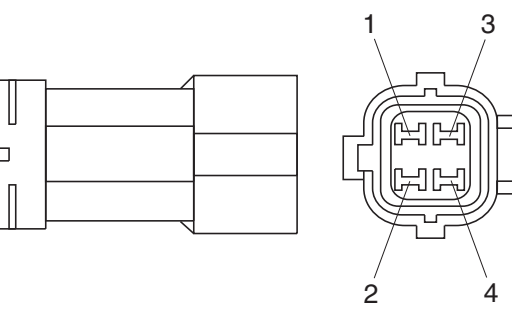
No. of pin	Receptacle connector (female)	Plug connector (male)
5	 <p style="text-align: center;">S811-005002</p>	 <p style="text-align: center;">S811-105002</p>
7	 <p style="text-align: center;">S811-007002</p>	 <p style="text-align: center;">S811-107002</p>
9	 <p style="text-align: center;">S811-009002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

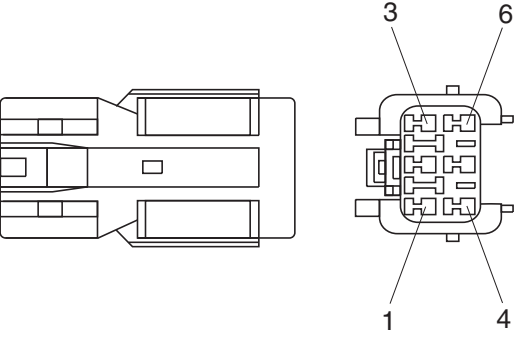
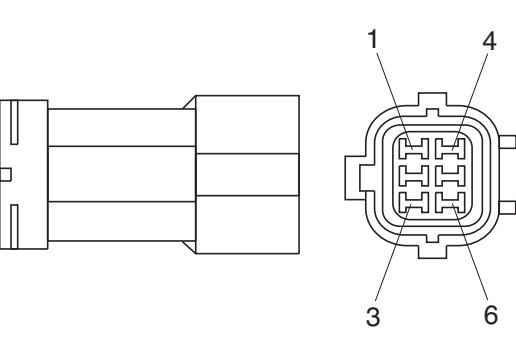
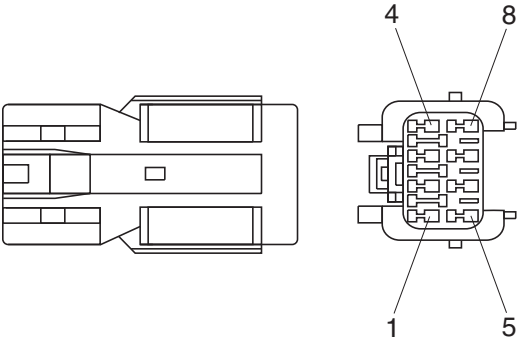
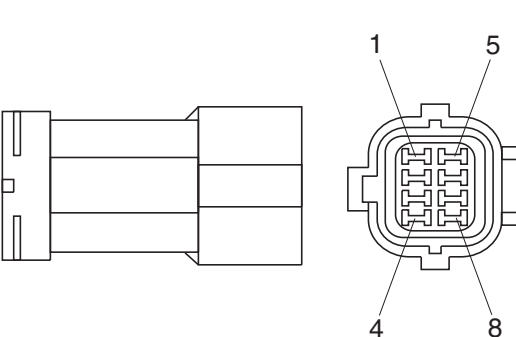
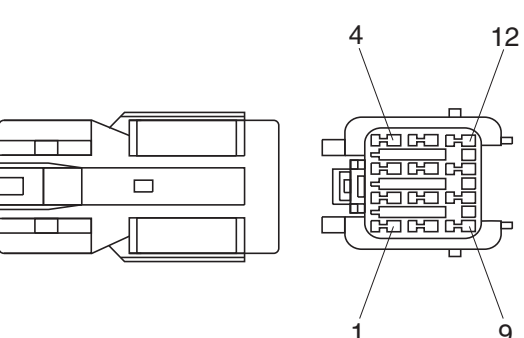
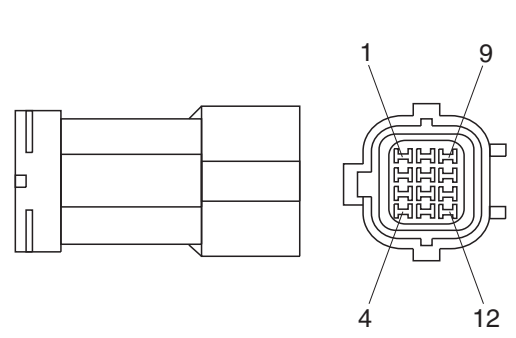
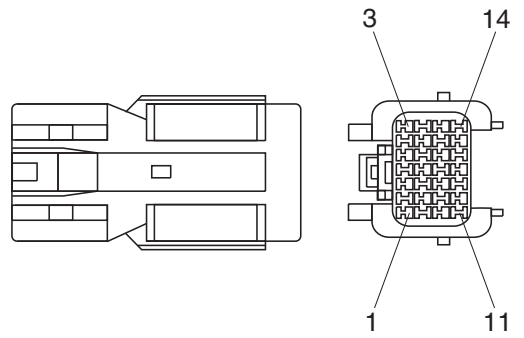
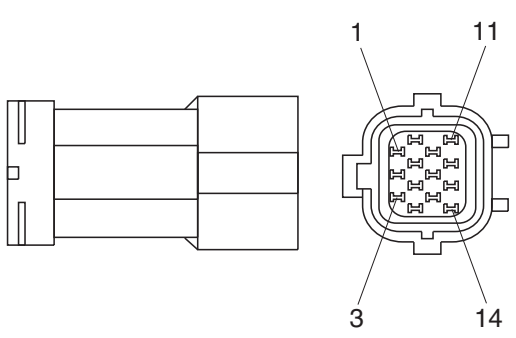
No. of pin	Receptacle connector (female)	Plug connector (male)
13	 <p style="text-align: center;">S811-013002</p>	 <p style="text-align: center;">S811-113002</p>
17	 <p style="text-align: center;">S811-017002</p>	 <p style="text-align: center;">S811-117002</p>
21	 <p style="text-align: center;">S811-021002</p>	 <p style="text-align: center;">S811-121002</p>

2) J TYPE CONNECTOR

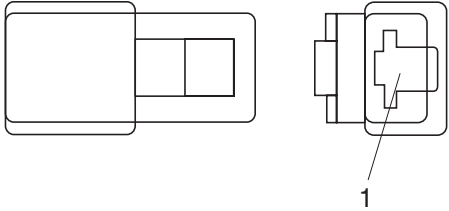
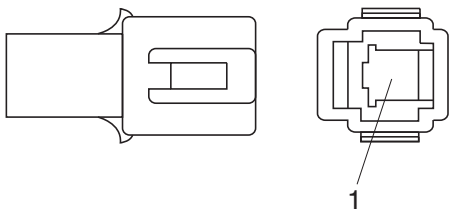
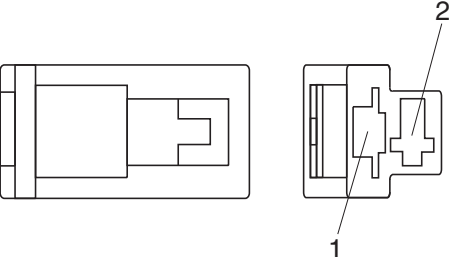
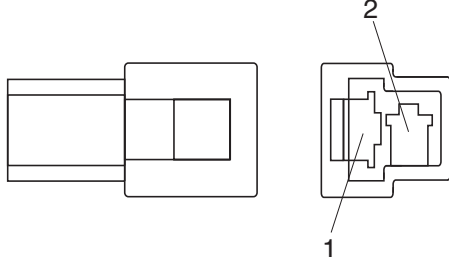
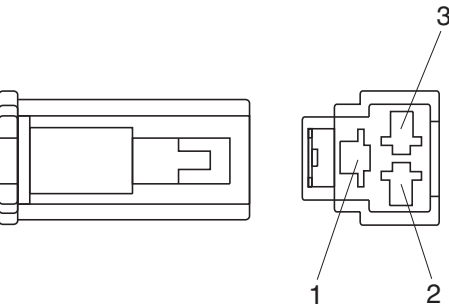
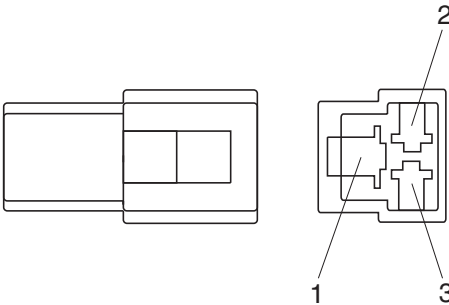
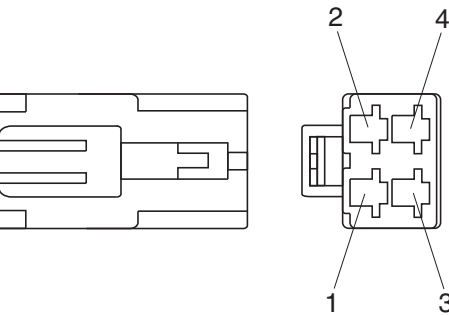
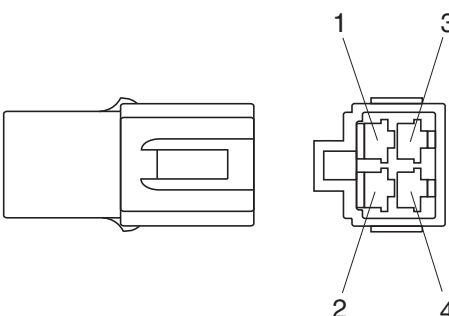
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: center;">S816-002001</p>	 <p style="text-align: center;">S816-102001</p>
3	 <p style="text-align: center;">S816-003001</p>	 <p style="text-align: center;">S816-103001</p>
4	 <p style="text-align: center;">S816-004001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

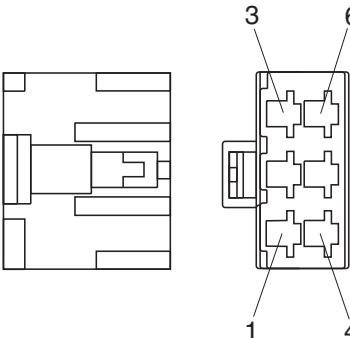
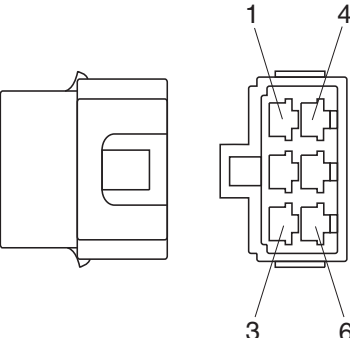
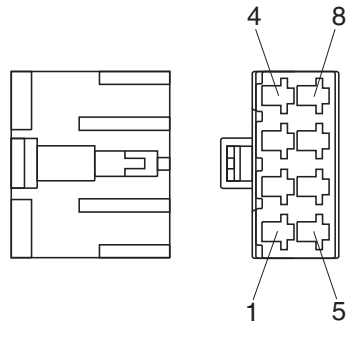
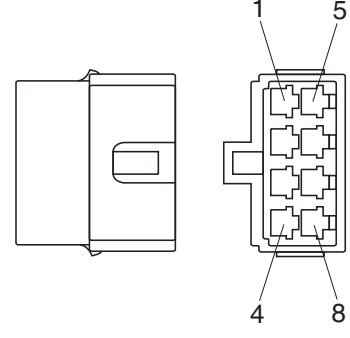
3) SWP TYPE CONNECTOR

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 1084 836 1111">S814-002000</p>	 <p data-bbox="1241 1084 1390 1111">S814-102000</p>
3	 <p data-bbox="687 1494 836 1520">S814-003000</p>	 <p data-bbox="1241 1494 1390 1520">S814-103000</p>
4	 <p data-bbox="687 1899 836 1926">S814-004000</p>	 <p data-bbox="1241 1899 1390 1926">S814-104000</p>

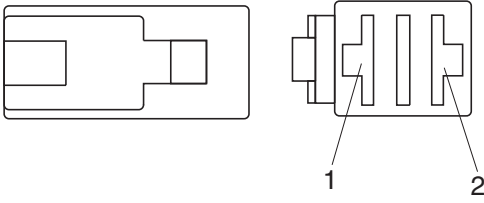
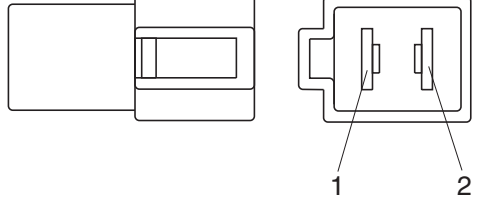
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S814-006000</p>	 <p data-bbox="1244 638 1396 672">S814-106000</p>
8	 <p data-bbox="686 1041 837 1075">S814-008000</p>	 <p data-bbox="1244 1041 1396 1075">S814-108000</p>
12	 <p data-bbox="686 1449 837 1482">S814-012000</p>	 <p data-bbox="1244 1449 1396 1482">S814-112000</p>
14	 <p data-bbox="686 1856 837 1890">S814-014000</p>	 <p data-bbox="1244 1856 1396 1890">S814-114000</p>

4) CN TYPE CONNECTOR

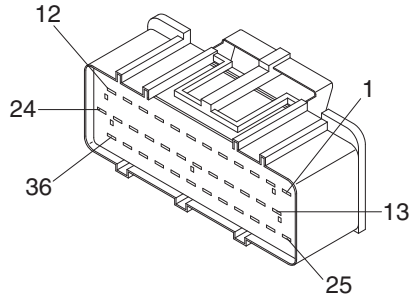
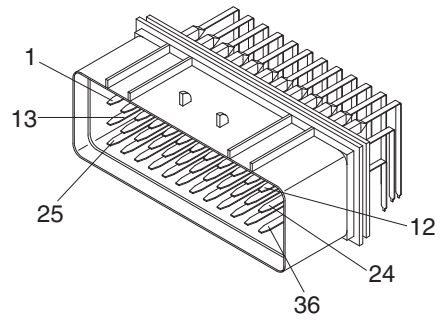
No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: center;">S810-001202</p>	 <p style="text-align: center;">S810-101202</p>
2	 <p style="text-align: center;">S810-002202</p>	 <p style="text-align: center;">S810-102202</p>
3	 <p style="text-align: center;">S810-003202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

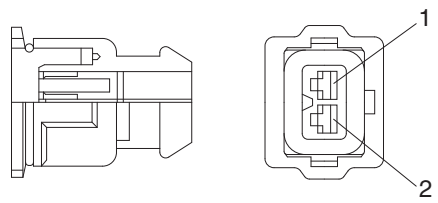
5) 375 FASTEN TYPE CONNECTOR

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>

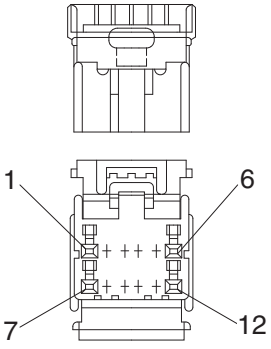
6) AMP ECONOSEAL CONNECTOR

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>

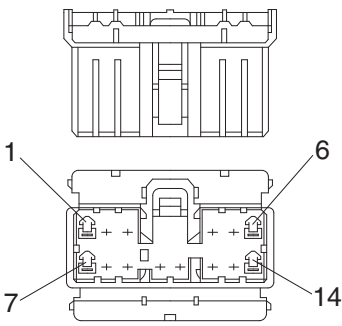
7) AMP TIMER CONNECTOR

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

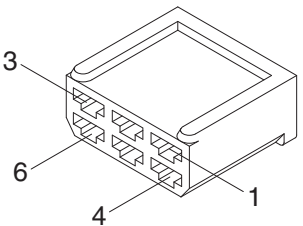
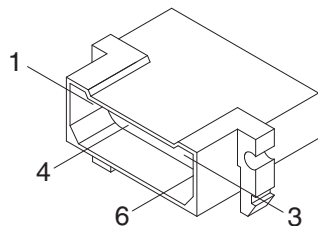
8) AMP 040 MULTILOCK CONNECTOR

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

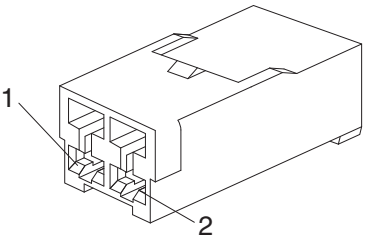
9) AMP 070 MULTILOCK CONNECTOR

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

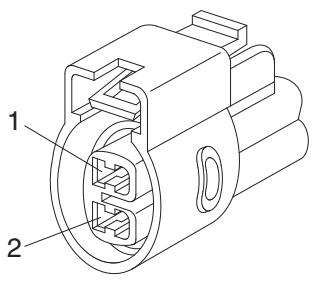
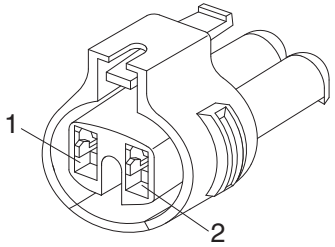
10) AMP FASTIN - FASTON CONNECTOR

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>

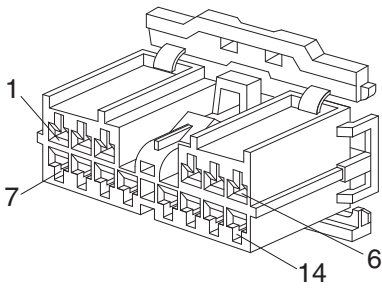
11) KET 090 CONNECTOR

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

12) KET 090 WP CONNECTORS

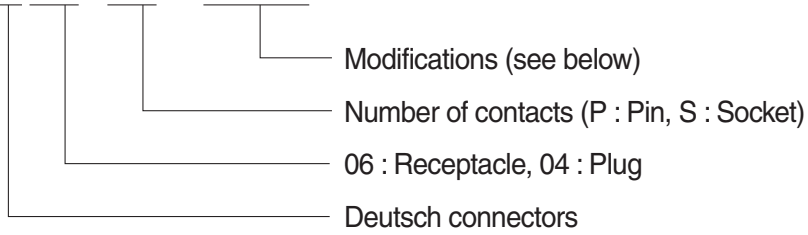
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">MG640605</p>	
2	 <p style="text-align: right;">MG640795</p>	

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

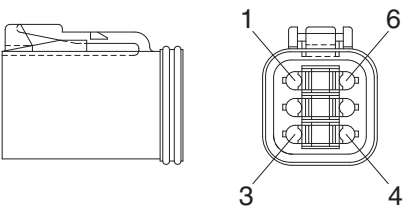
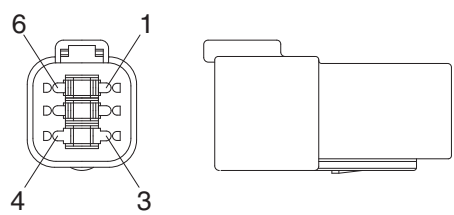
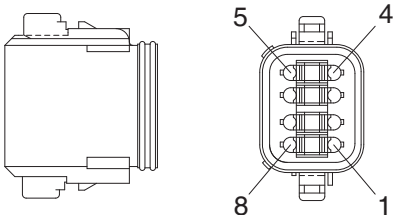
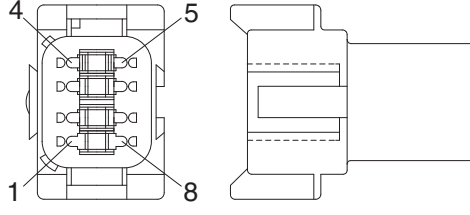
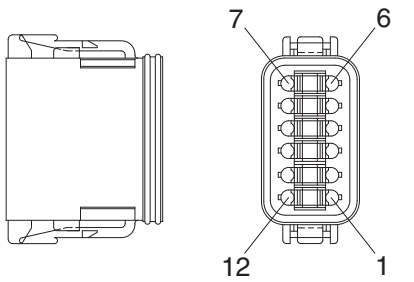
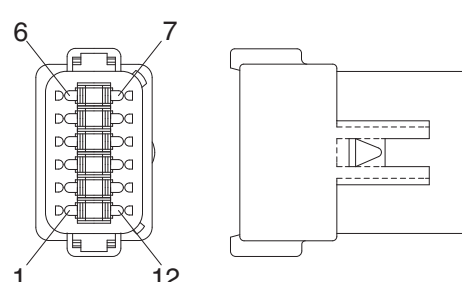
E005 : Combination - E004 & E003

EP04 : End cap

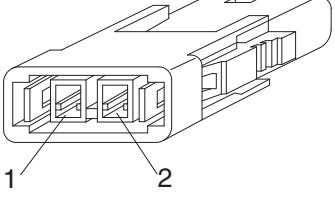
EP06 : Combination P012 & EP04

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

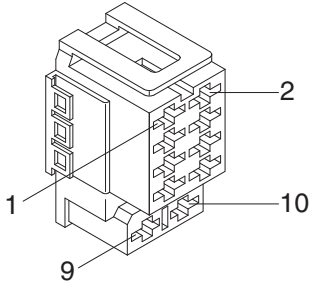
No. of pin	Receptacle connector (female)	Plug connector (male)
2	<p>DT06-2S</p>	<p>DT04-2P</p>
3	<p>DT06-3S</p>	<p>DT04-3P</p>
4	<p>DT06-4S</p>	<p>DT04-4P</p>

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>

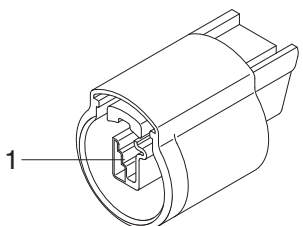
15) MOLEX 2CKTS CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="702 683 837 705">35215-0200</p>	

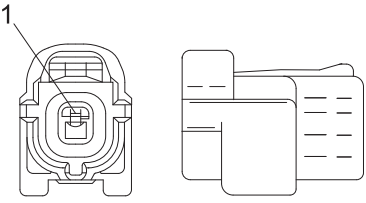
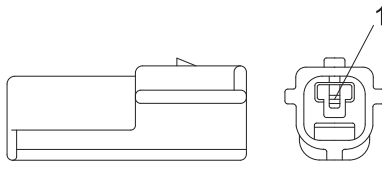
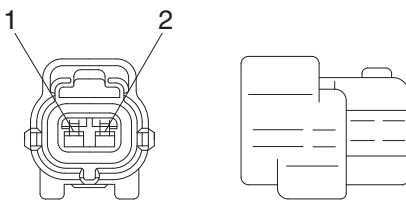
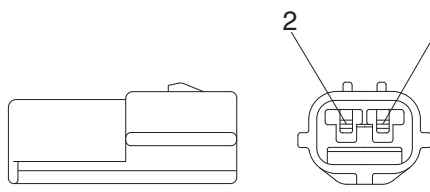
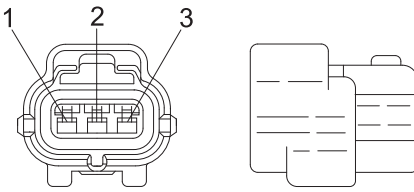
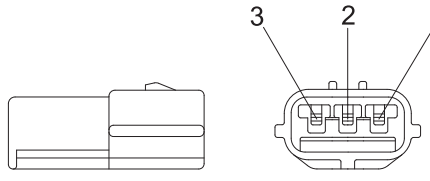
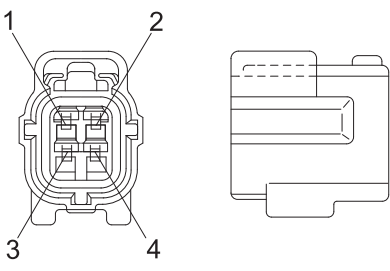
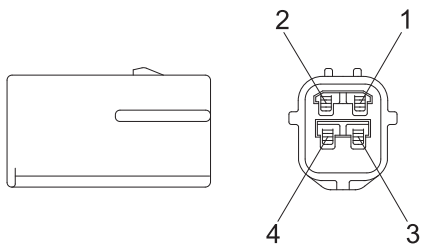
16) ITT SWF CONNECTOR

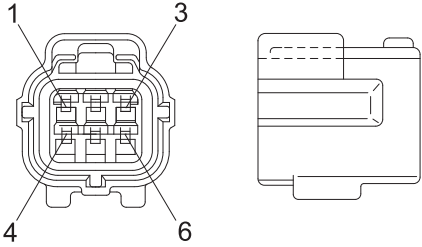
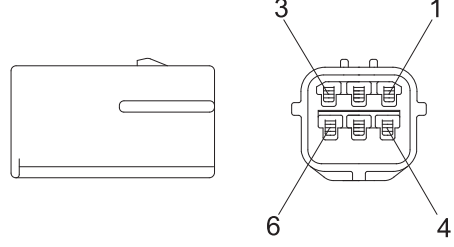
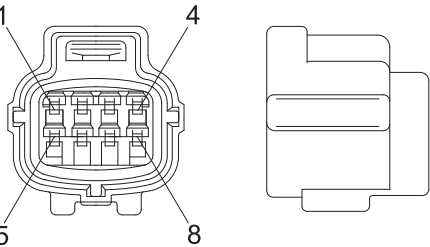
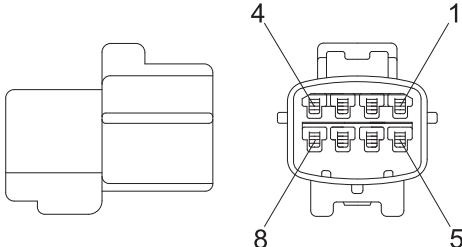
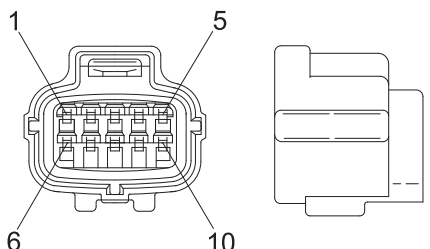
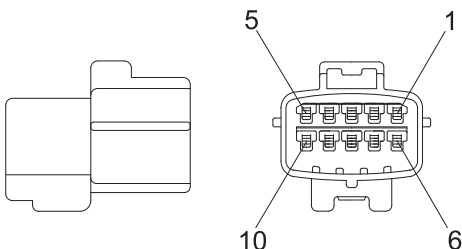
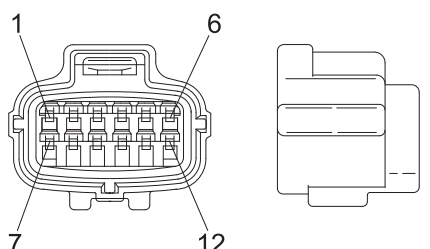
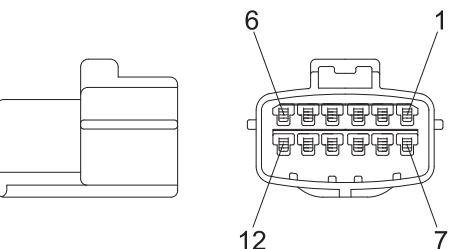
No. of pin	Receptacle connector (female)	Plug connector (male)
10	 <p data-bbox="694 1288 837 1310">SWF593757</p>	

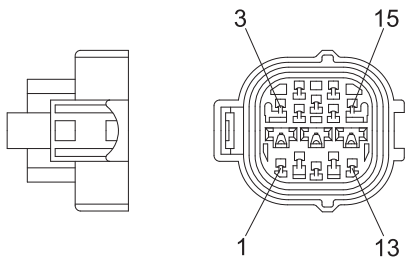
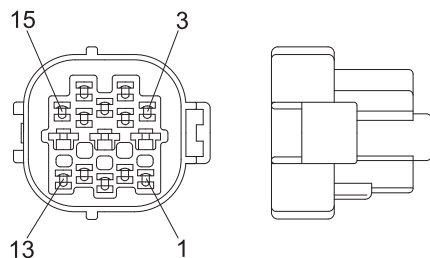
17) MWP NMWP CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p data-bbox="686 1892 837 1915">NMWP01F-B</p>	

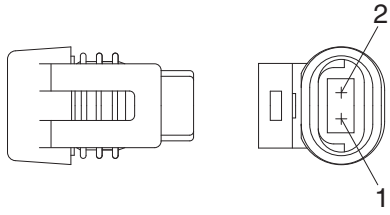
18) ECONOSEAL J TYPE CONNECTORS

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: right;">S816-001002</p>	 <p style="text-align: right;">S816-101002</p>
2	 <p style="text-align: right;">S816-002002</p>	 <p style="text-align: right;">S816-102002</p>
3	 <p style="text-align: right;">S816-003002</p>	 <p style="text-align: right;">S816-103002</p>
4	 <p style="text-align: right;">S816-004002</p>	 <p style="text-align: right;">S816-104002</p>

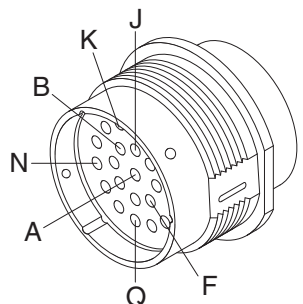
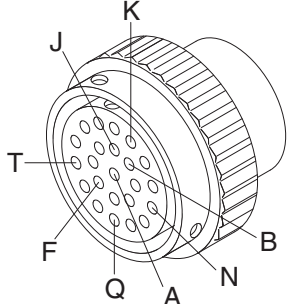
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S816-006002</p>	 <p data-bbox="1236 638 1388 672">S816-106002</p>
8	 <p data-bbox="686 1041 837 1075">S816-008002</p>	 <p data-bbox="1236 1041 1388 1075">S816-108002</p>
10	 <p data-bbox="686 1444 837 1478">S816-010002</p>	 <p data-bbox="1236 1444 1388 1478">S816-110002</p>
12	 <p data-bbox="686 1848 837 1881">S816-012002</p>	 <p data-bbox="1236 1848 1388 1881">S816-112002</p>

No. of pin	Receptacle connector (female)	Plug connector (male)
15	 <p style="text-align: right;">368301-1</p>	 <p style="text-align: right;">2-85262-1</p>

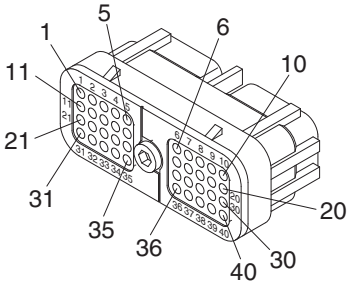
19) METRI-PACK TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">12040753</p>	

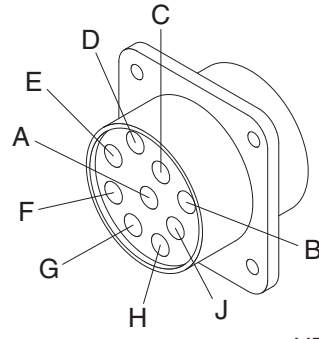
20) DEUTSCH HD30 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
23	 <p style="text-align: right;">HD36-24-23SN</p>	 <p style="text-align: right;">HD34-24-23PN</p>

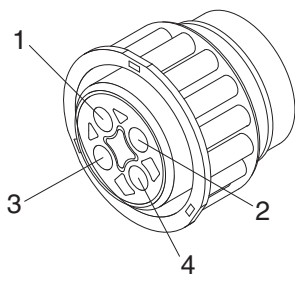
21) DEUTSCH MCU CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
40	 <p style="text-align: right;">DRC26-40SA/B</p>	

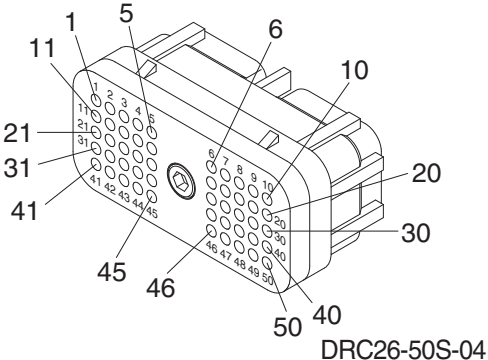
22) DEUTSCH SERVICE TOOL CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
9	 <p style="text-align: right;">HD10-9-96P</p>	

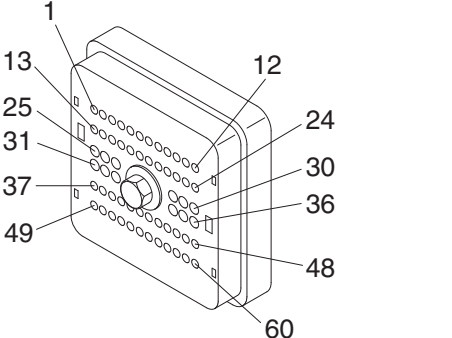
23) AMP FUEL WARMER CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
4	 <p style="text-align: right;">2-967325-3</p>	

24) DEUTSCH ENGINE ECM CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
50	 <p style="text-align: right;">DRC26-50S-04</p>	

25) DEUTSCH INTERMEDIATE CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
60	 <p style="text-align: right;">DRB16-60SAE-L018</p>	