

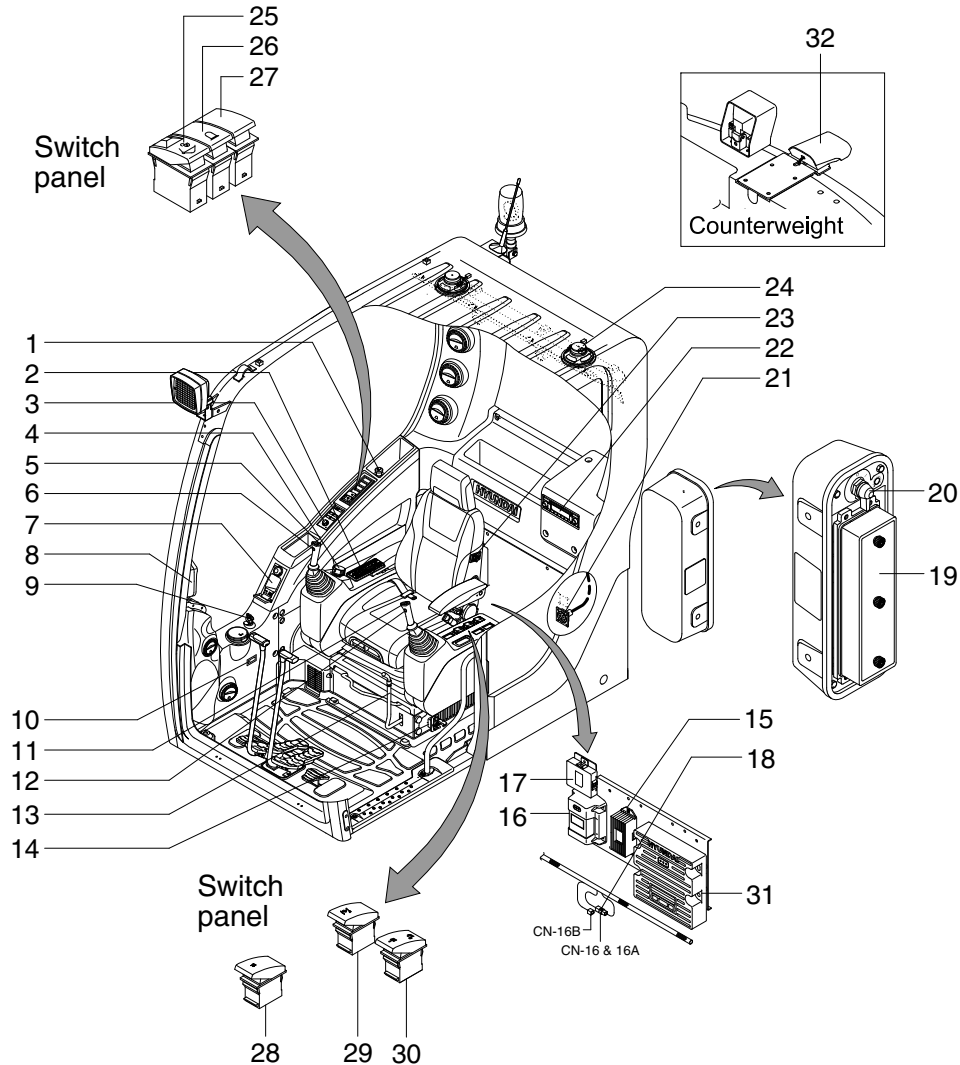
SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location	4-1
Group 2 Electrical Circuit	4-3
Group 3 Electrical Component Specification	4-23
Group 4 Connectors	4-35

SECTION 4 ELECTRICAL SYSTEM

GROUP 1 COMPONENT LOCATION

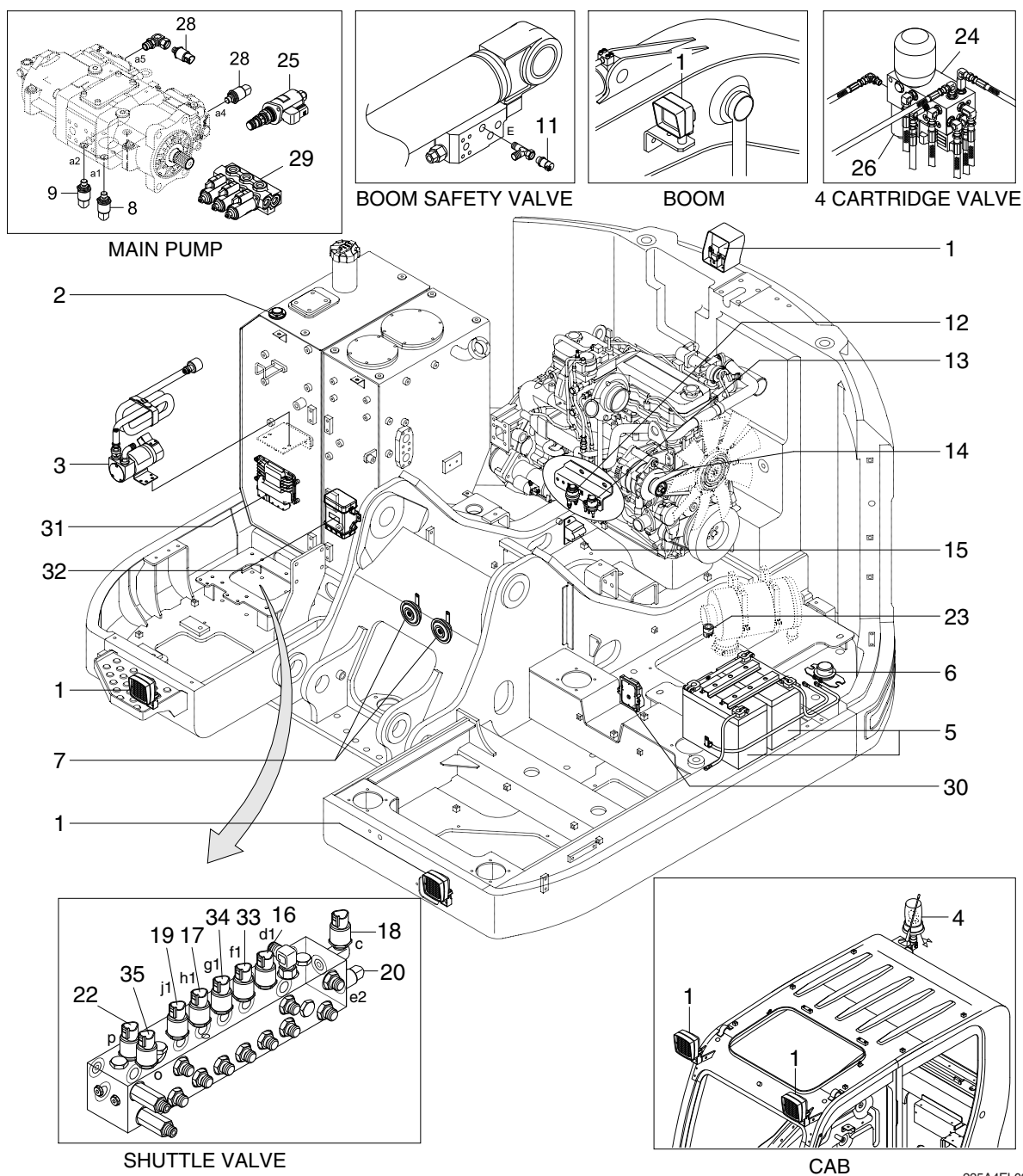
1. LOCATION 1



235A4EL01

1 Cigar lighter	12 Power max switch	23 Heated seat switch
2 Aircon and heater switch	13 Safety lever	24 Speaker
3 Remote controller	14 Emergency engine stop switch	25 Quick coupler switch
4 Accel dial switch	15 DC/DC converter	26 Air compressor switch
5 Horn switch	16 RMCU assy	27 Exhaust system cleaning switch
6 Breaker operation switch	17 Bluetooth control unit	28 Travel straight switch
7 Handsfree	18 Emergency engine connector	29 Fine swing switch
8 Cluster	19 Fuse & relay box	30 Swing lock switch
9 Start switch	20 Master switch	31 MCU
10 Service meter	21 RS232 & J1939 service socket	32 Rear view camera
11 One touch decel switch	22 Radio & USB player	

2. LOCATION 2

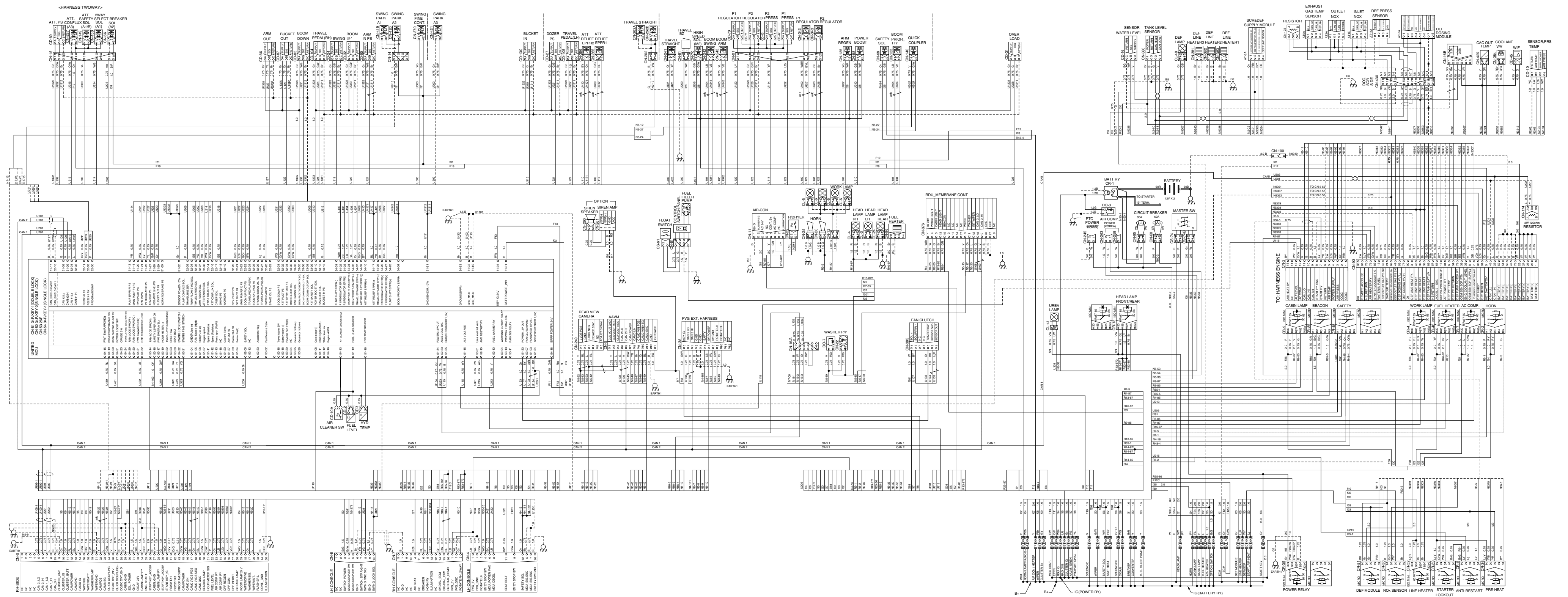


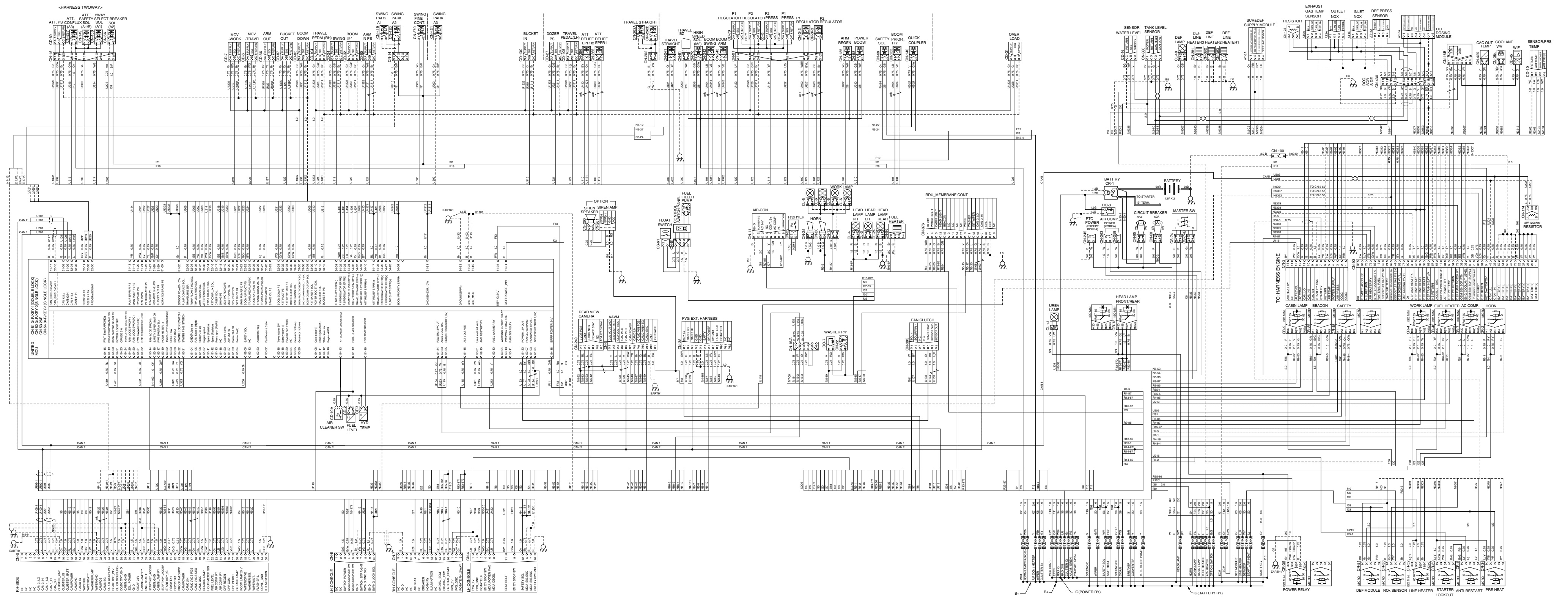
235A4EL02

- | | | |
|-----------------------------|------------------------------|---------------------------------|
| 1 Lamp | 13 Heater relay | 25 Pump EPPR valve |
| 2 Fuel sender | 14 Alternator | 26 Boom priority EPPR valve |
| 3 Fuel filler pump | 15 Travel alarm buzzer | 28 Nega-control pressure sensor |
| 4 Beacon lamp | 16 Arm out pressure sensor | 29 Flow control EPPR valve |
| 5 Battery | 17 Boom up pressure sensor | 30 Relay drive unit |
| 6 Battery relay | 18 Swing pressure sensor | 31 View controller |
| 7 Horn | 19 Boom down pressure sensor | 32 Cam image controller |
| 8 P1 pressure sensor | 20 Arm in pressure sensor | 33 Bucket in pressure sensor |
| 9 P2 pressure sensor | 22 Travel pressure sensor-RH | 34 Bucket out pressure sensor |
| 11 Overload pressure sensor | 23 Air cleaner sensor | 35 Travel pressure sensor-LH |
| 12 Start relay | 24 4 cartridge valve | |

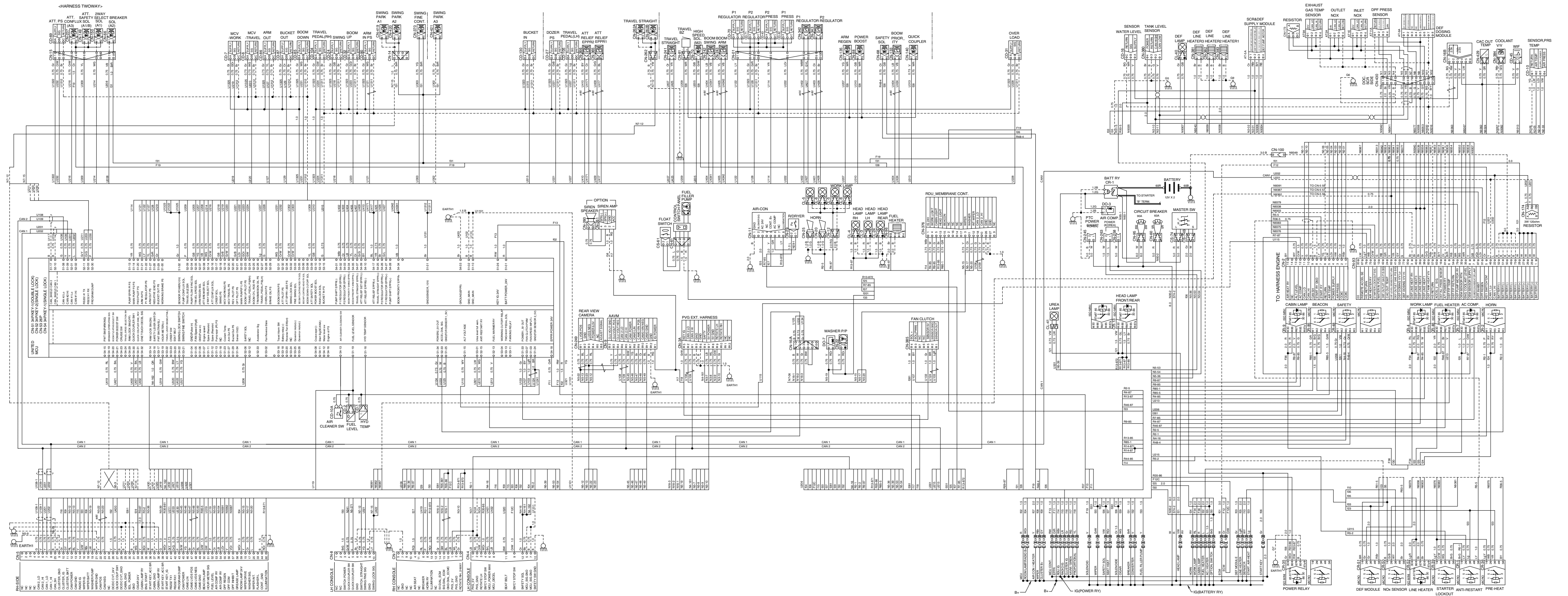
· ELECTRICAL CIRCUIT (1/3)
- MACHINE SERIAL NO. : -#0004





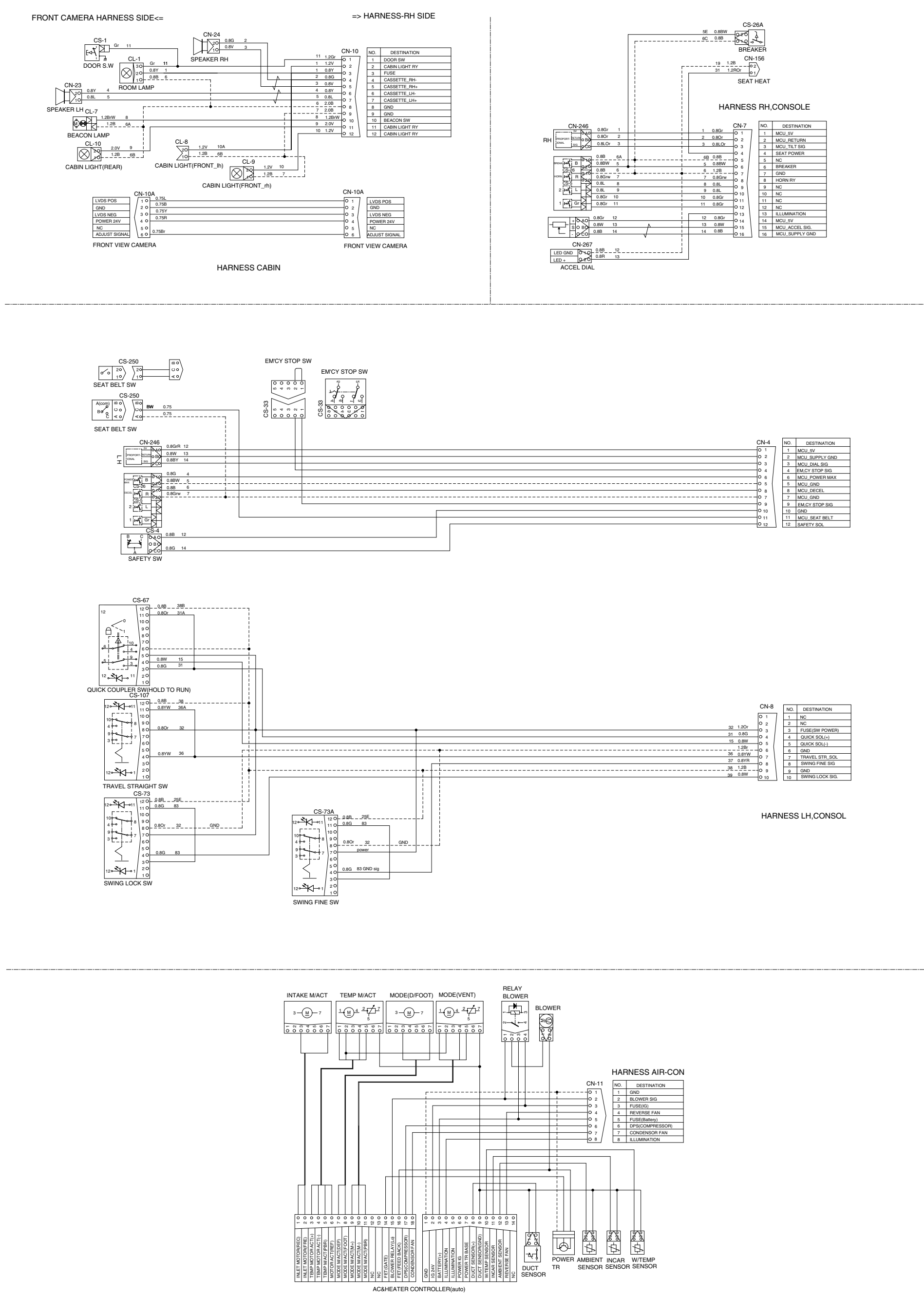
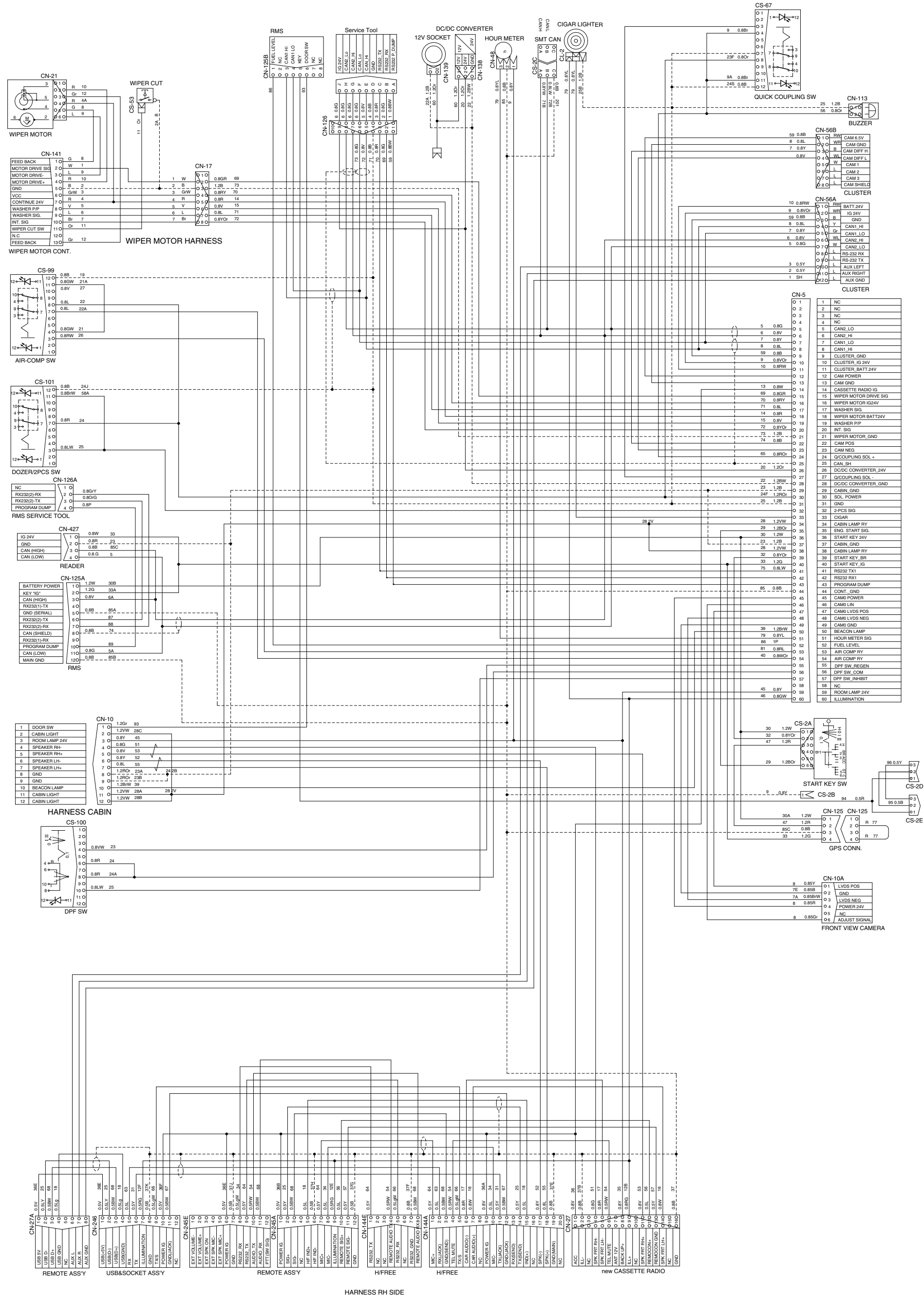


- MACHINE SERIAL NO. : #0223-

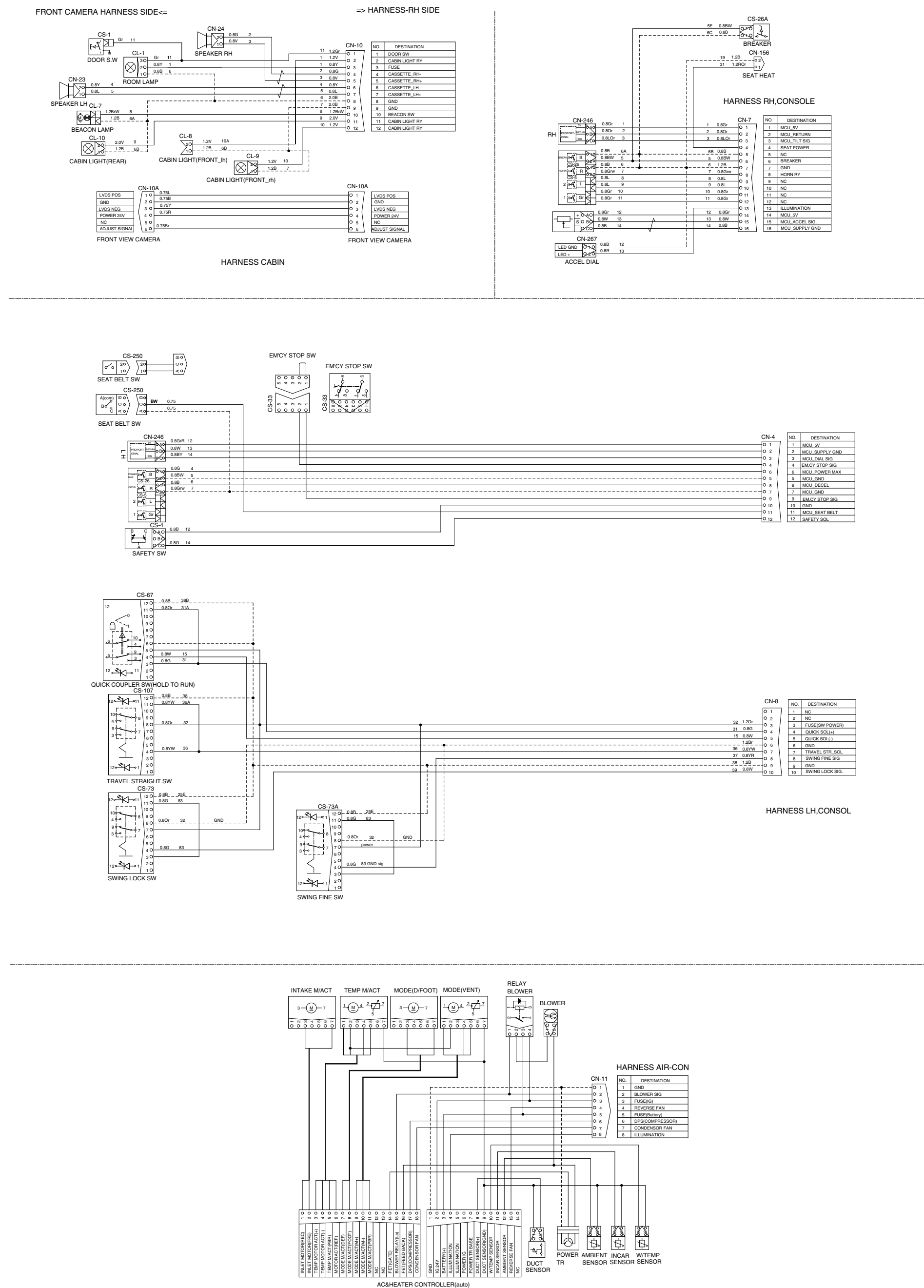
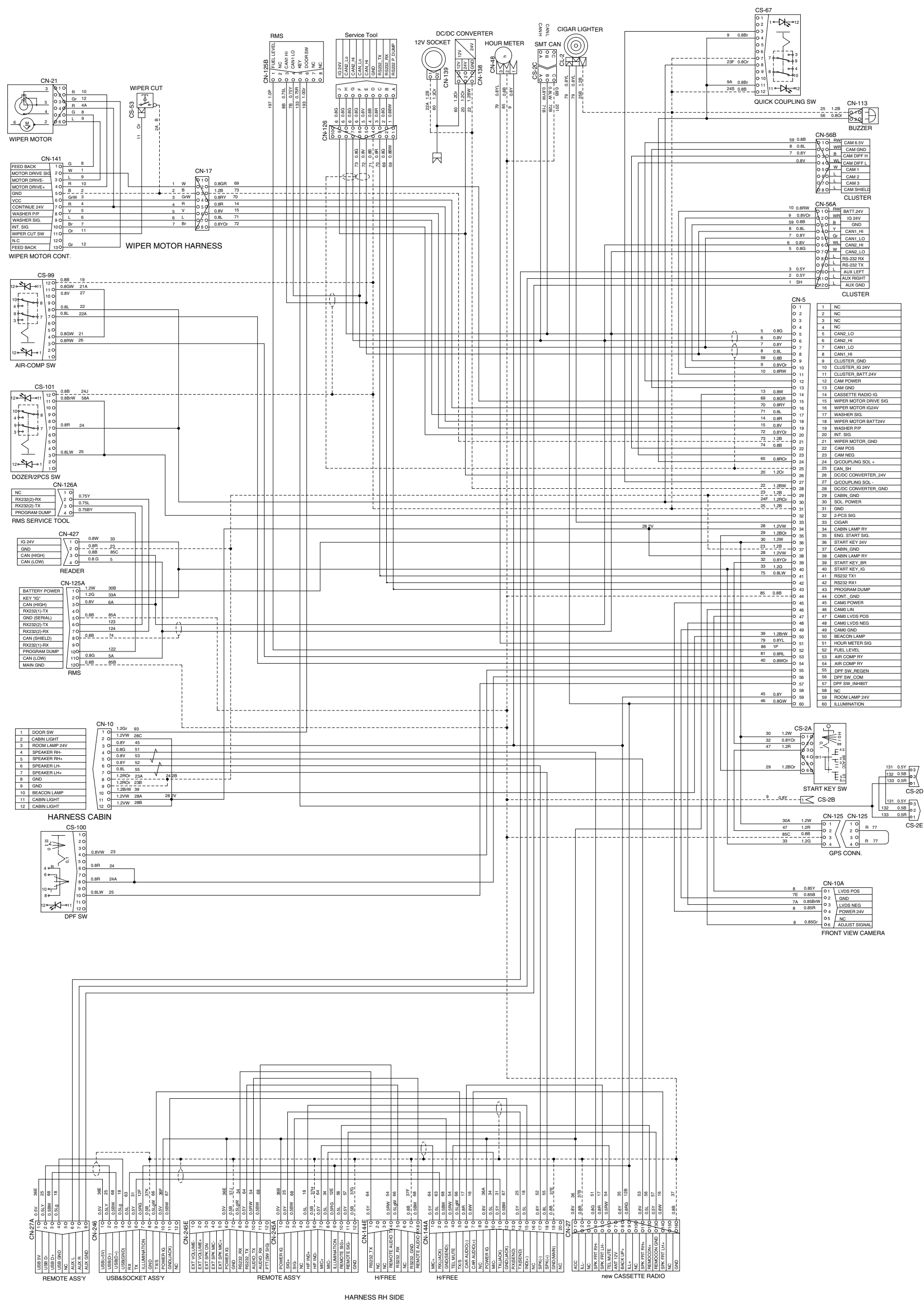


ELECTRICAL CIRCUIT (2/3)

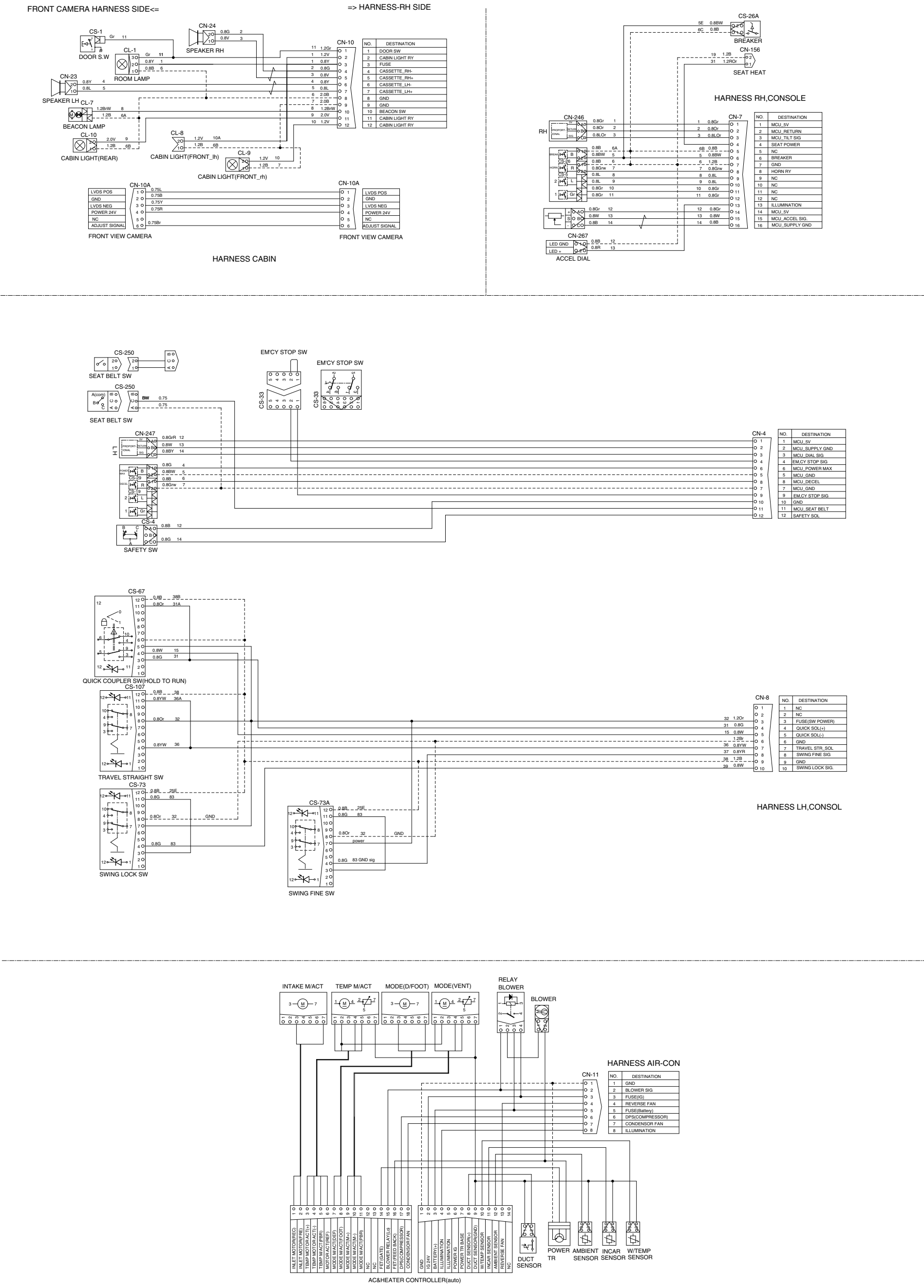
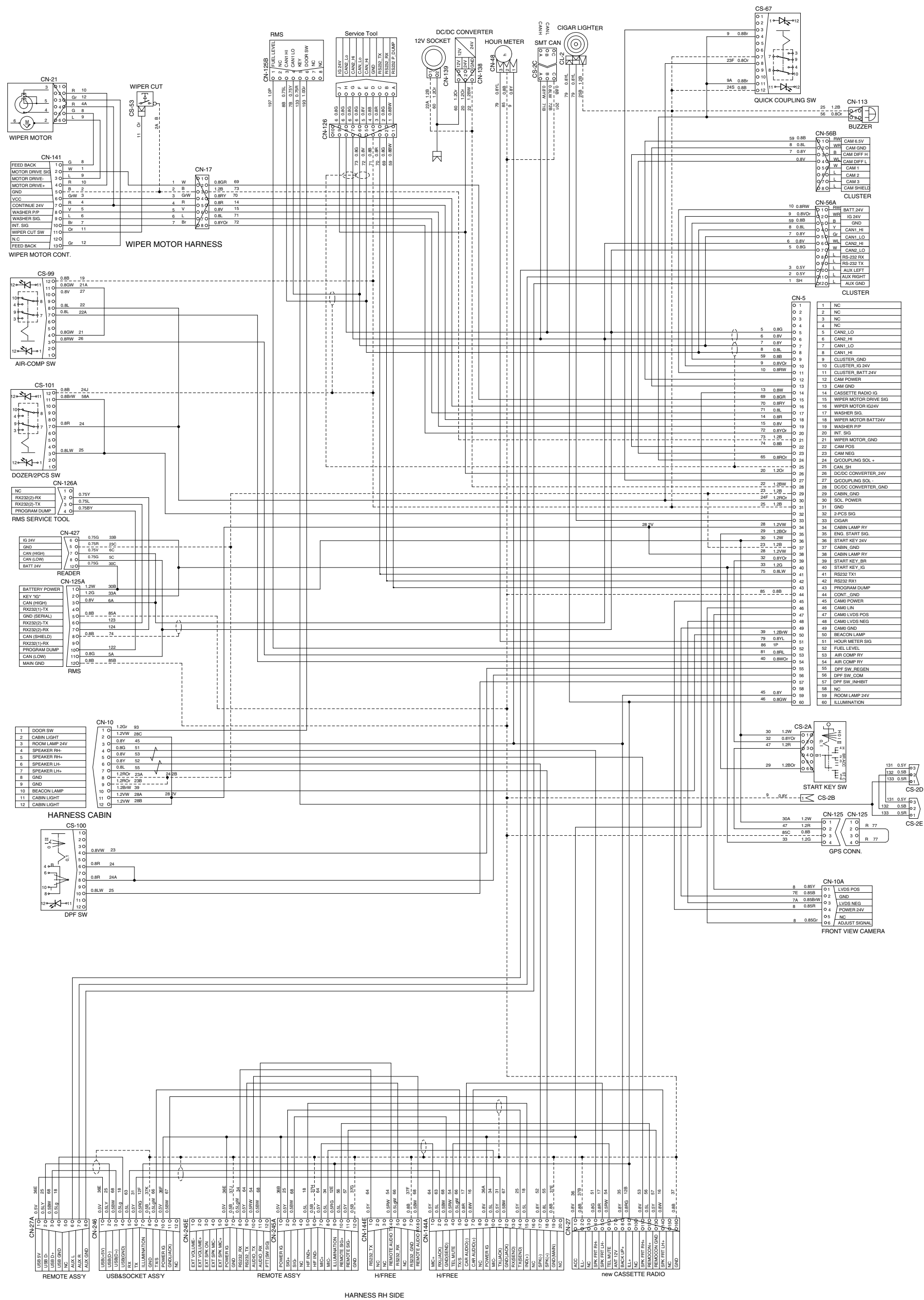
MACHINE SERIAL NO. : -#0004



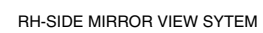
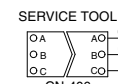
- MACHINE SERIAL NO. : #0005-#0073



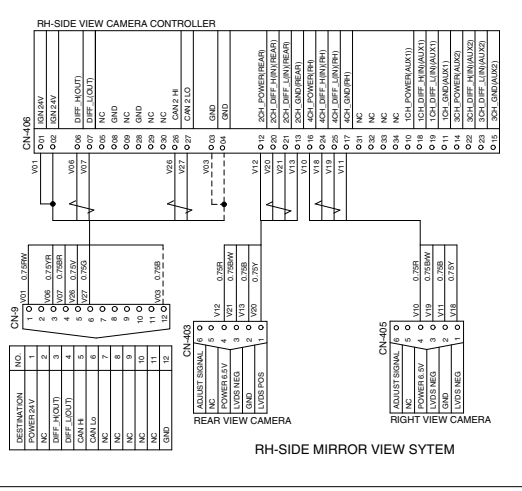
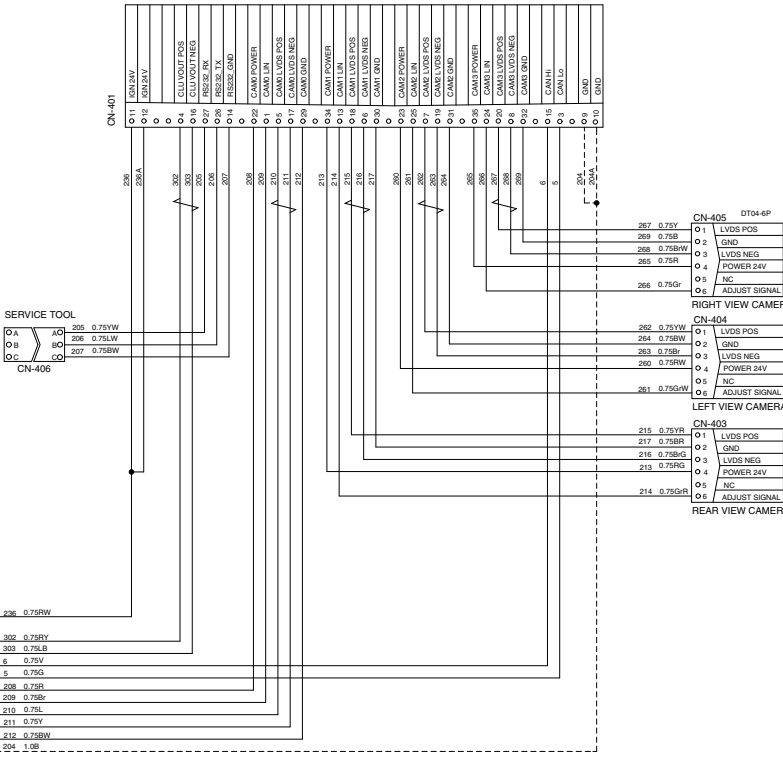
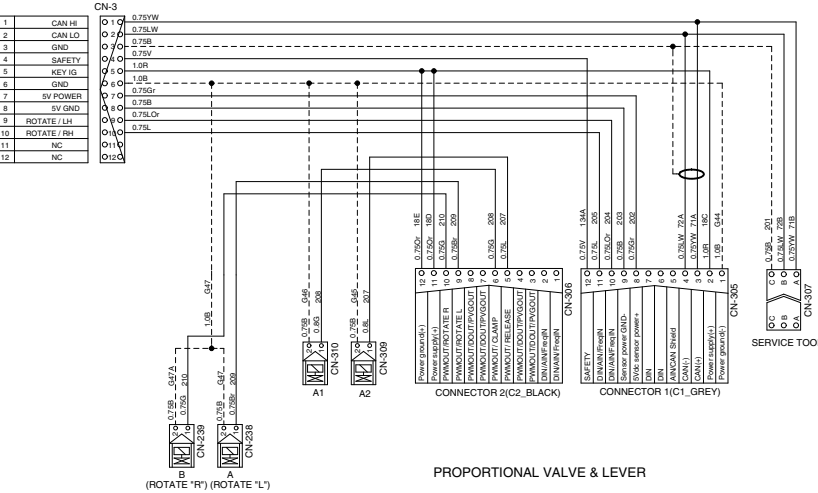
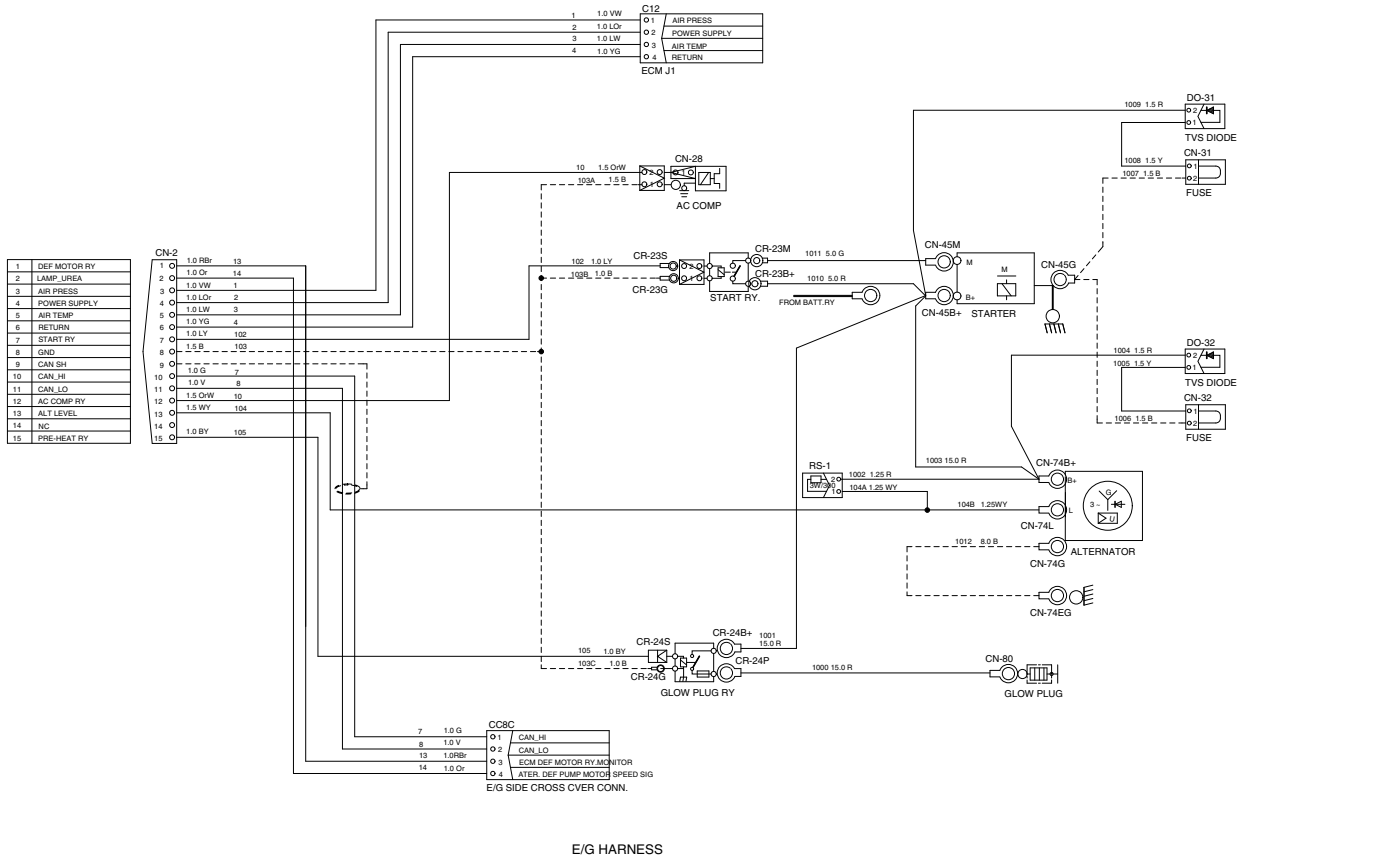
- MACHINE SERIAL NO. : #0075-#0222



- MACHINE SERIAL NO. : -#0004



- MACHINE SERIAL NO. : #0136-



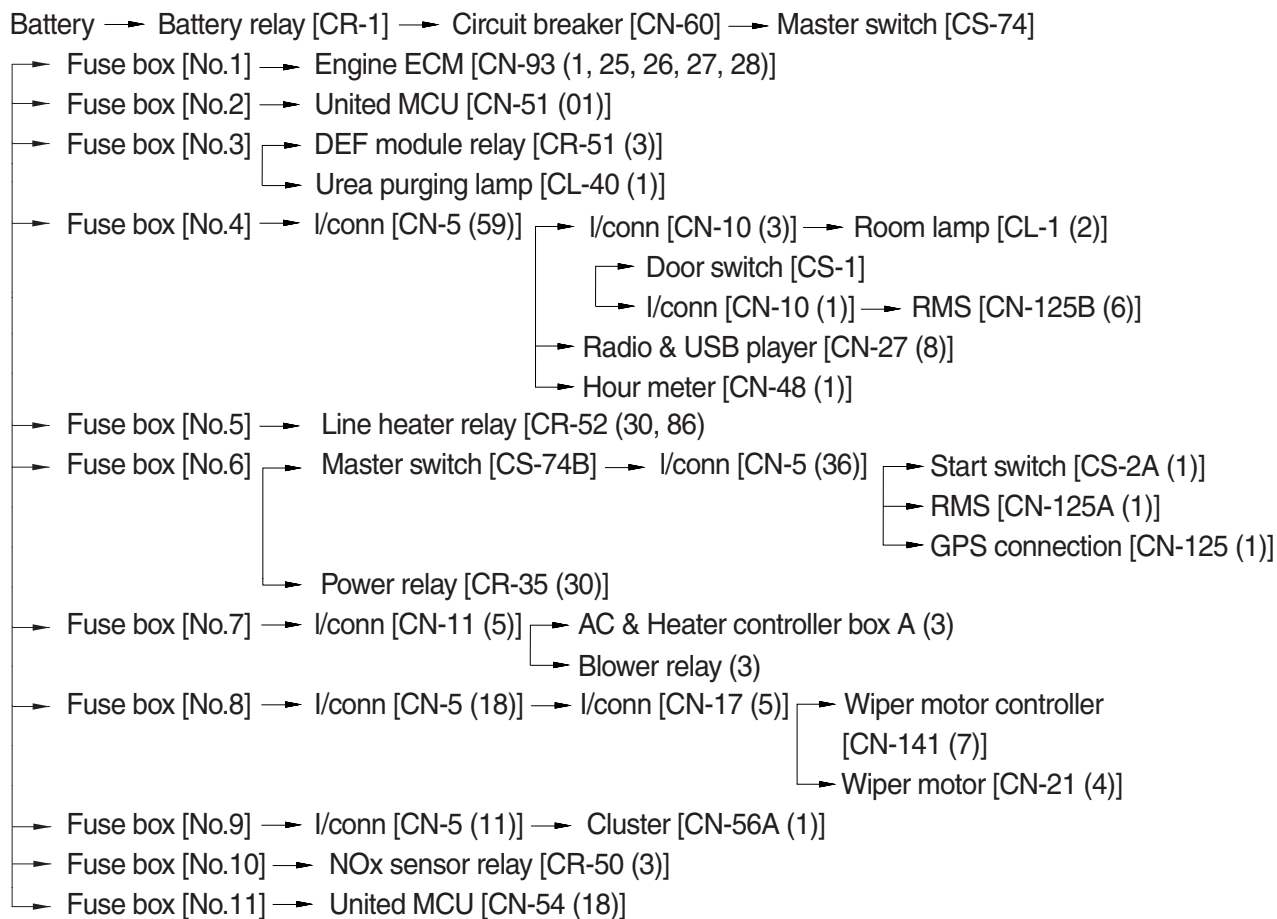
MEMORANDUM

1. POWER CIRCUIT (MACHINE SERIAL NO. : -#0037)

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

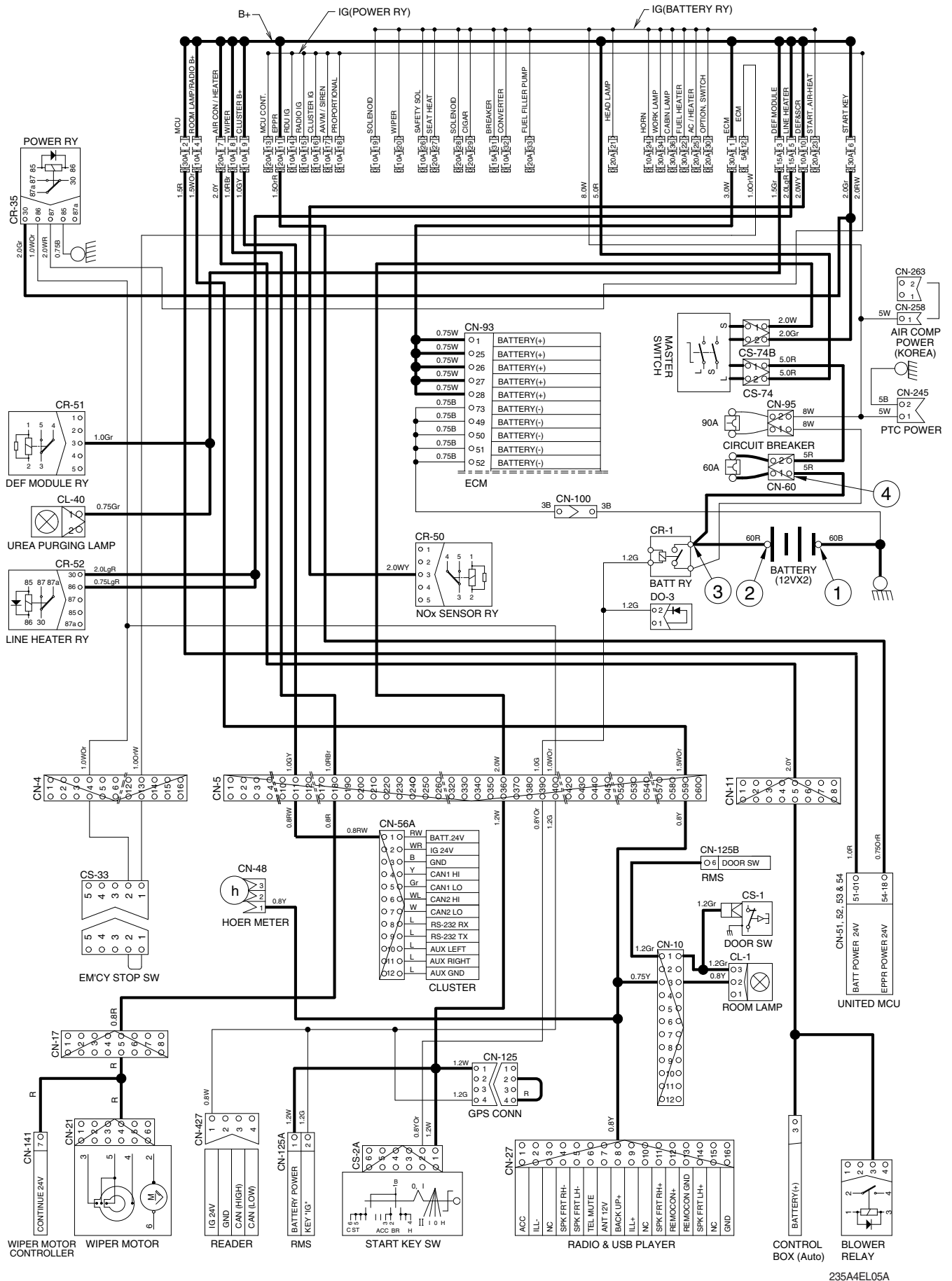
2) CHECK POINT

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

※ GND : Ground

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

POWER CIRCUIT (MACHINE SERIAL NO. : -#0037)



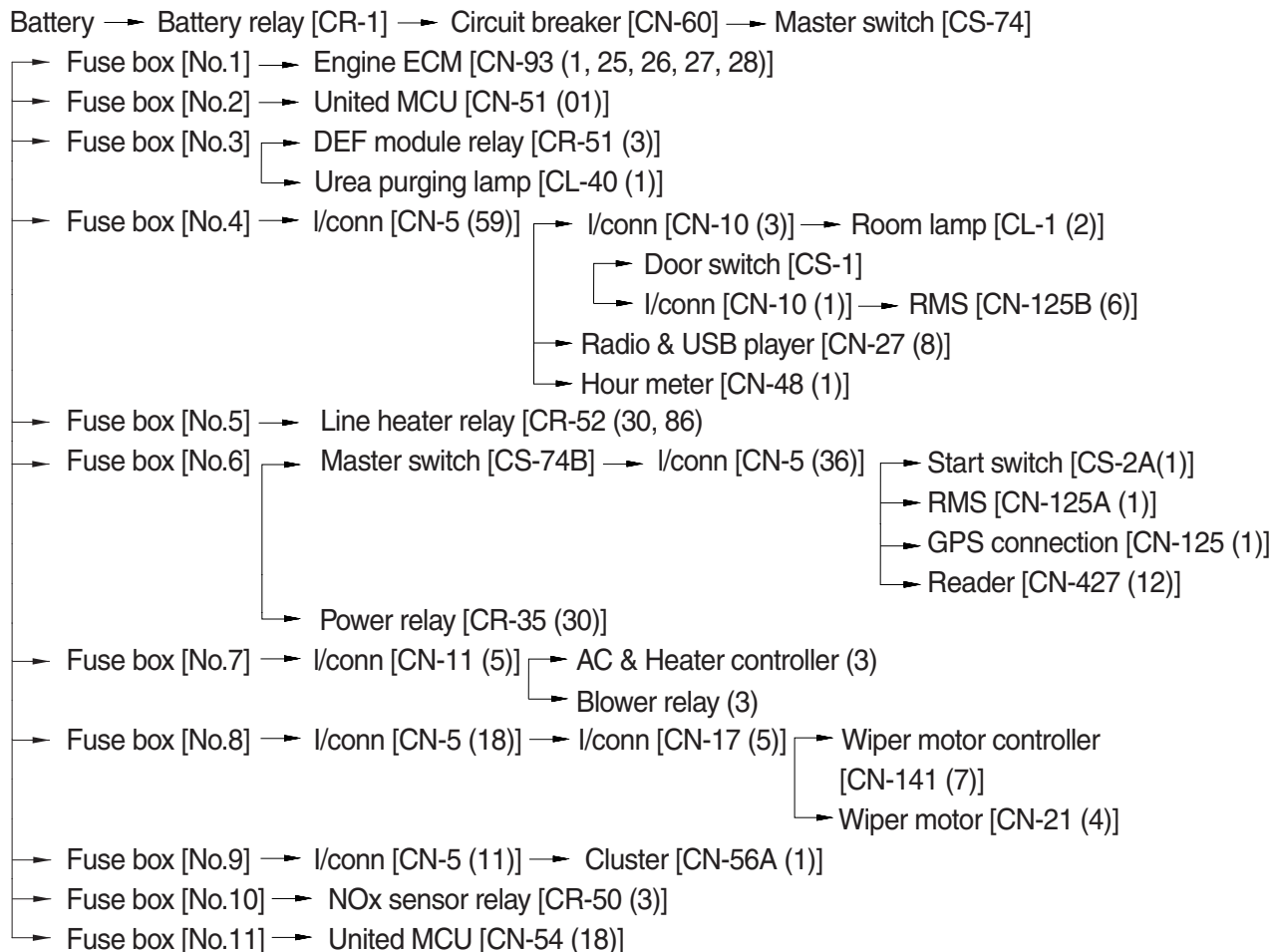
※ The circuit diagram may differ from the equipment, so please check before a repair.

POWER CIRCUIT (MACHINE SERIAL NO. : #0038-)

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

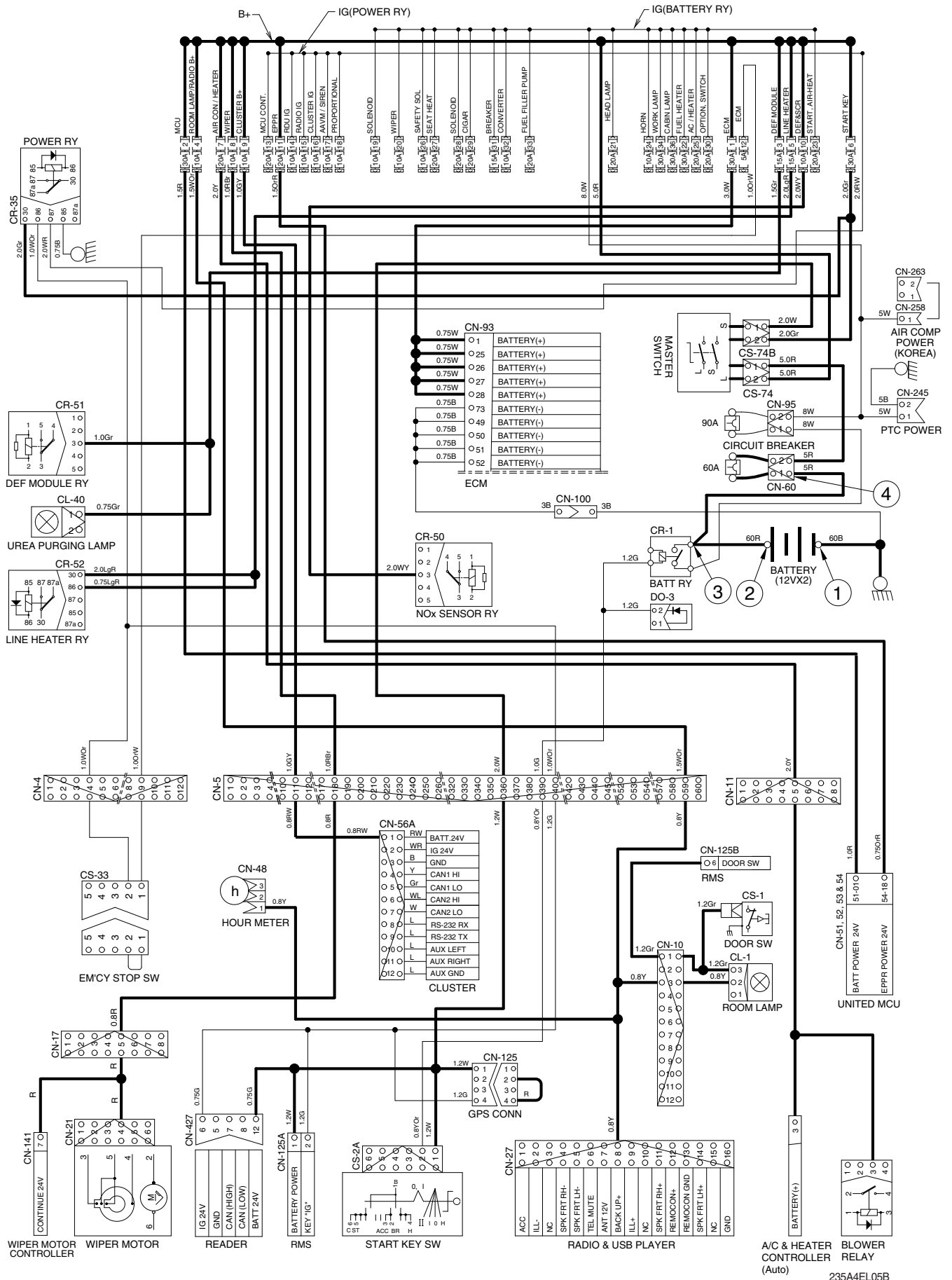
2) CHECK POINT

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

※ GND : Ground

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

POWER CIRCUIT (MACHINE SERIAL NO. : #0038-)



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

2. STARTING CIRCUIT (MACHINE SERIAL NO. : -#0073)

1) OPERATING FLOW

Battery (+) terminal → Battery relay [CR-1] → Circuit breaker [CN-60] → Master switch [CS-74]
→ Fuse box [No.6] → Master switch [CS-74B] → I/conn [CN-5 (36)] → Start switch [CS-2A (1)]
→ Power relay [CR-35 (30)]

(1) When start key switch is in ON position

```

graph LR
    A[Start switch ON [CS-2A (2)]] --> B[I/conn [CN-5 (39)]]
    B --> C[Battery relay [CR-1]]
    C --> D[Battery relay operating (all power is supplied with the electric component)]
    A --> E[Start switch ON [CS-2A (3)]]
    E --> F[GPS conn [CN-125 (2) → (4)]]
    A --> G[I/conn [CN-5 (40)]]
    G --> H[Power relay [CR-35 (86) → (87)]]
    H --> I[Fuse box [IG (power)]]
    G --> J[I/conn [CN-4 (4)]]
    J --> K[Emergency engine stop sw [CS-33 (2) → (1)]]
    K --> L[I/conn [CN-4 (9)]]
    J --> M[Fuse box [No. 12]]
    M --> N[Engine ECM [CN-93 (5)]]
    A --> O[Reader [CN-427 (1)]]
    A --> P[RMS [CN-125A (2)]]
  
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(2) When start key switch is in START position

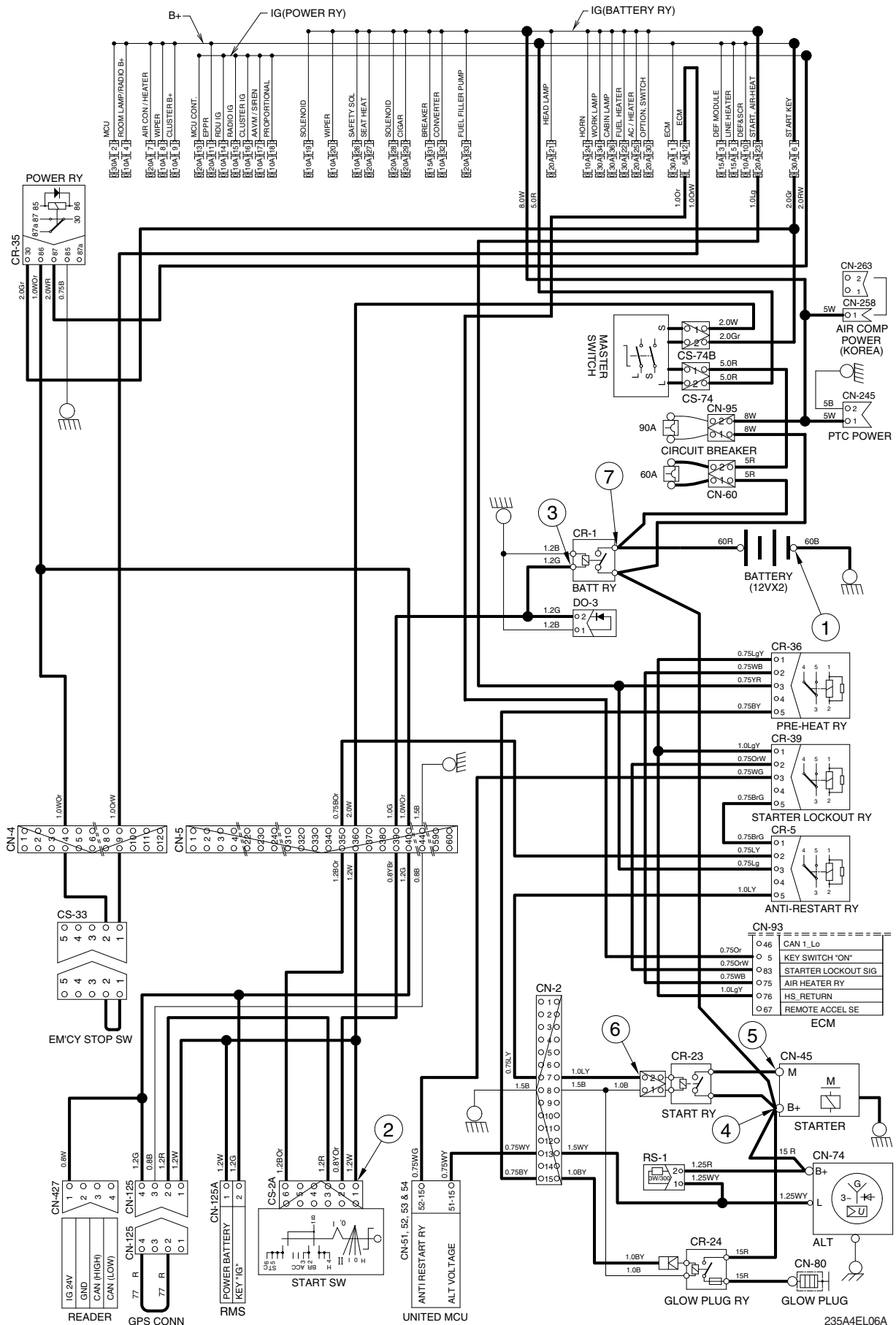
Start switch START [CS-2A (6)] → I/conn [CN-5 (35)] → Anti-restart relay [CR-5 (2) → (5)]
→ I/conn [CN-2 (7)] → Start relay [CR-23 (2)] → Starter motor operating

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

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

STARTING CIRCUIT (MACHINE SERIAL NO. : -#0073)



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

STARTING CIRCUIT (MACHINE SERIAL NO. : #0074-)

1) OPERATING FLOW

Battery (+) terminal → Battery relay [CR-1] → Circuit breaker [CN-60] → Master switch [CS-74]
→ Fuse box [No.6] → Master switch [CS-74B] → I/conn [CN-5 (36)] → Start switch [CS-2A (1)]
 └─ Power relay [CR-35 (30)]

(1) When start key switch is in ON position

```

graph LR
    A[Start switch ON [CS-2A (2)]] --> B[I/conn [CN-5 (39)]]
    B --> C[Battery relay [CR-1]]
    C --> D[Battery relay operating (all power is supplied with the electric component)]
    E[Start switch ON [CS-2A (3)]] --> F[GPS conn [CN-125 (2) → (4)]]
    G[I/conn [CN-5 (40)]] --> H[Power relay [CR-35 (86) → (87)]]
    H --> I[Fuse box [IG (power)]]
    G --> J[I/conn [CN-4 (4)]]
    J --> K[Emergency engine stop sw [CS-33 (2) → (1)]]
    K --> L[I/conn [CN-4 (9)]]
    J --> M[Fuse box [No. 12]]
    M --> N[Engine ECM [CN-93 (5)]]
    O[Reader [CN-427 (6)]]
    P[RMS [CN-125A (2)]]

```

(2) When start key switch is in START position

Start switch START [CS-2A (6)] → I/conn [CN-5 (35)] → Anti-restart relay [CR-5 (2) → (5)]
→ I/conn [CN-2 (7)] → Start relay [CR-23 (2)] → Starter motor 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

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

4-10-2

3. CHARGING CIRCUIT (MACHINE SERIAL NO. : #0001-)

When the starter is activated and the engine is started, the operator releases the start 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 "L" terminal → I/conn [CN-2 (13)] → United MCU alternator voltage [CN-51 (15)]
→ Cluster charging warning lamp (Via CAN interface)

(2) Charging flow

Alternator "B⁺" terminal → Starter [CN-45 (B⁺)] → Battery relay (CR-1)
→ Battery (+) terminal
→ Circuit breaker [CN-60] → Master switch [CS-74] → Fuse box [B⁺]
→ Circuit breaker [CN-95] → Fuse box [IG, battery] → Power relay [CR-35 (30→87)]
→ Fuse box [IG, power]
→ PTC power [CN-245 (1)]
→ Air comp power [CN-258 (1)]

2) CHECK POINT

Engine	Start switch	Check point	Voltage
OPERATING	ON	① - GND (battery voltage) ② - GND (battery relay) ③ - GND (alternator B ⁺ terminal) ④ - GND (alternator L terminal) ⑤ - GND (United MCU)	20~25V

※ GND : Ground

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

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

4. HEAD AND WORK LIGHT CIRCUIT (MACHINE SERIAL NO. : #0001-)

1) OPERATING FLOW

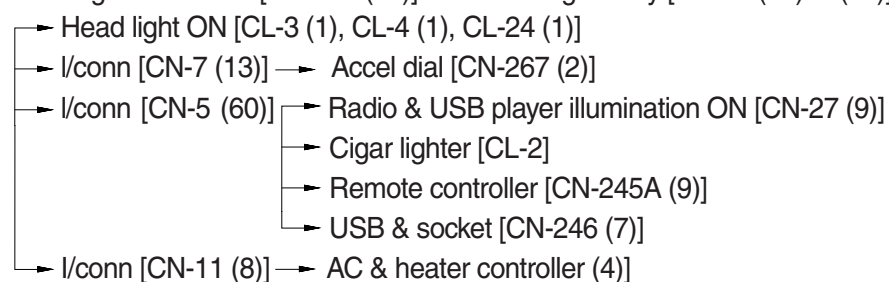
Fuse box (No.21) → Head light relay [CR-13 (30, 86)]

Fuse box (No.34) → Work light relay [CR-4 (30, 86)]

Fuse box (No.14) → RDU membrane controller [CR-376 (1)]

(1) Head light switch ON

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



(2) Work light switch ON

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

→ I/conn [CN-12 (1)] → Work light ON [CL-5 (1), CL-6 (1)]

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 input) ⑦ - GND (work light relay) ⑧ - GND (work light)	20~25V

※ GND : Ground

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

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

5. BEACON LAMP AND CAB LIGHT CIRCUIT (MACHINE SERIAL NO. : #0001-)

1) OPERATING FLOW

Fuse box (No.30) → Beacon lamp relay [CR-85 (2, 3)]

Fuse box (No.36) → Cab light relay [CR-9 (30, 86)]

Fuse box (No.14) → RDU membrane controller [CN-376 (1)]

(1) Beacon lamp switch ON

Beacon lamp switch ON [CN-376 (15)] → Beacon lamp relay [CR-85 (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 (2)] → Cab light ON [CL-8 (2)]
- I/conn [CN-10 (12)] → Cab light ON [CL-9 (2)]
- I/conn [CN-10 (11)] → Cab light ON [CL-10 (2)]

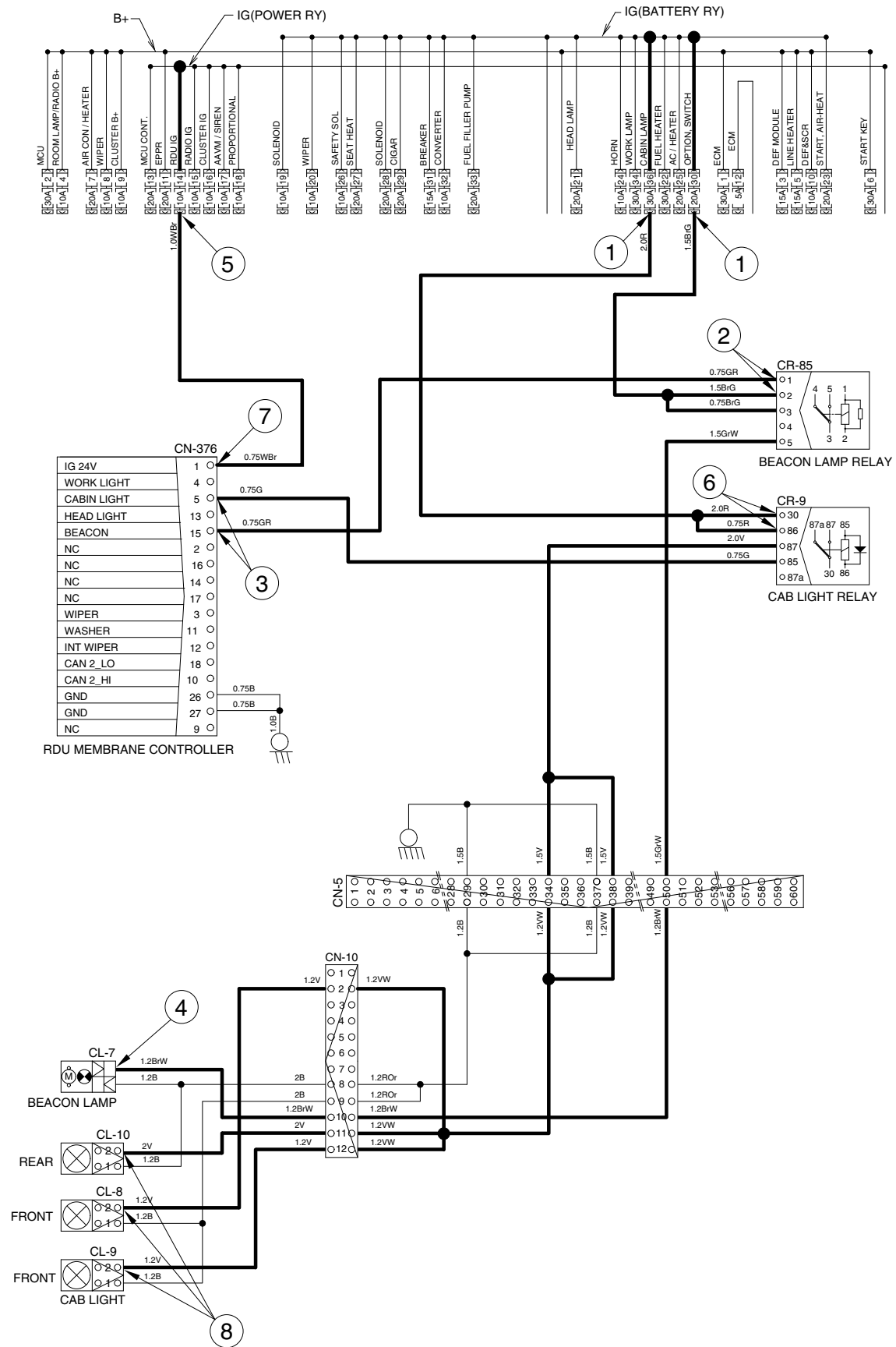
2) CHECK POINT

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 input) ⑧ - GND (cab light)	20~25V

※ GND : Ground

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

BEACON LAMP AND CAB LIGHT CIRCUIT (MACHINE SERIAL NO. : #0001-)



235A4EL09A

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

6. WIPER AND WASHER CIRCUIT (MACHINE SERIAL NO. : #0001-)

1) OPERATING FLOW

(1) Key switch ON

Fuse box (No.14) → RDU membrane controller [CN-376 (1)]

Fuse box (No.8) → I/conn [CN-5 (18)] → I/conn [CN-17 (5)] → Wiper motor controller [CN-141 (7)]
 → Wiper motor [CN-21 (4)]

Fuse box (No.20) → I/conn [CN-5 (16)] → I/conn [CN-17 (4)] → Wiper motor controller [CN-141 (6)]
 → Washer pump [CN-22 (2)]

(2) Wiper switch ON (Intermittent)

Wiper switch ON [CN-376 (12)] → I/conn [CN-5 (20)] → I/conn [CN-17 (8)]

→ Wiper motor controller [CN-141 (10)→(3)] → Wiper motor [CN-21 (6)] → Intermittently operating

(3) Wiper switch ON (continual)

Wiper switch ON [CN-376 (3)] → I/conn [CN-5 (15)] → I/conn [CN-17 (2)]

→ Wiper motor controller [CN-141 (2) → (4)] → Wiper motor [CN-21 (2)] → Continual operating

(4) Washer switch ON

Washer switch ON [CN-376 (11)] → I/conn [CN-5 (17)] → I/conn [CN-17 (7)]

→ Wiper motor controller [CN-141 (9) → (8)] → I/conn [CN-17 (6)] → I/conn [CN-5 (19)]

→ Washer pump [CN-22 (1)] → Washer operating

Wiper switch ON [CN-376 (3)] → I/conn [CN-5 (15)] → I/conn [CN-17 (2)]

→ Wiper motor controller [CN-141 (2) → (4)] → Wiper motor [CN-21 (2)] → Continual operating

(5) Auto parking (when switch OFF)

Switch OFF [CN-376 (3, 12)] → Wiper motor parking position by wiper motor controller

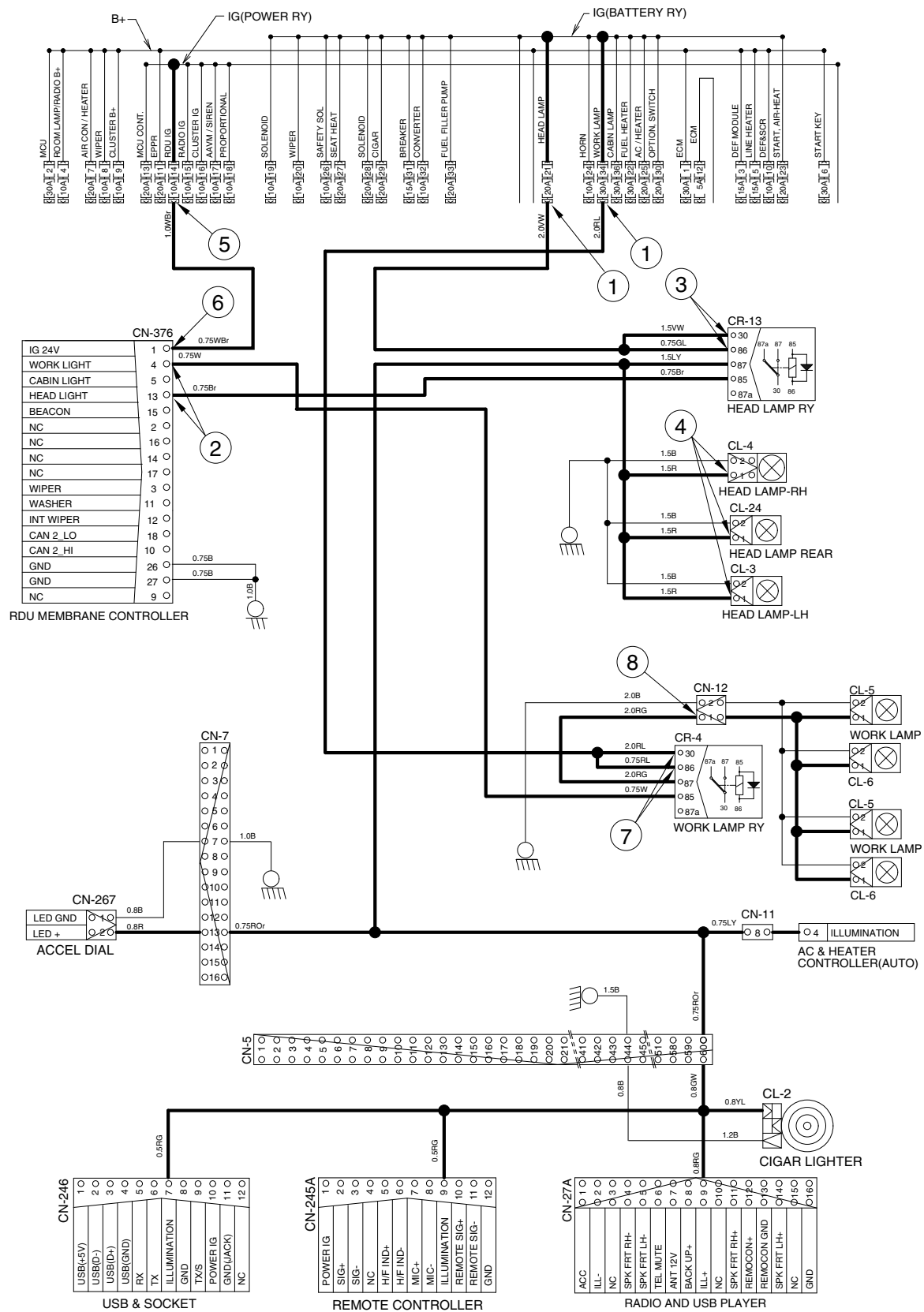
3) CHECK POINT

Engine	Start switch	Check point	Voltage
STOP	ON	① - GND (fuse box)	20~25V
		② - GND (switch power input)	
		③ - GND (wiper power input)	
		④ - GND (switch power output)	0 ~ 5V
		⑤ - GND (wiper power switch input)	
		⑥ - GND (wiper power output)	24V
		⑦ - GND (wiper motor)	0 or 24V

※ GND : Ground

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

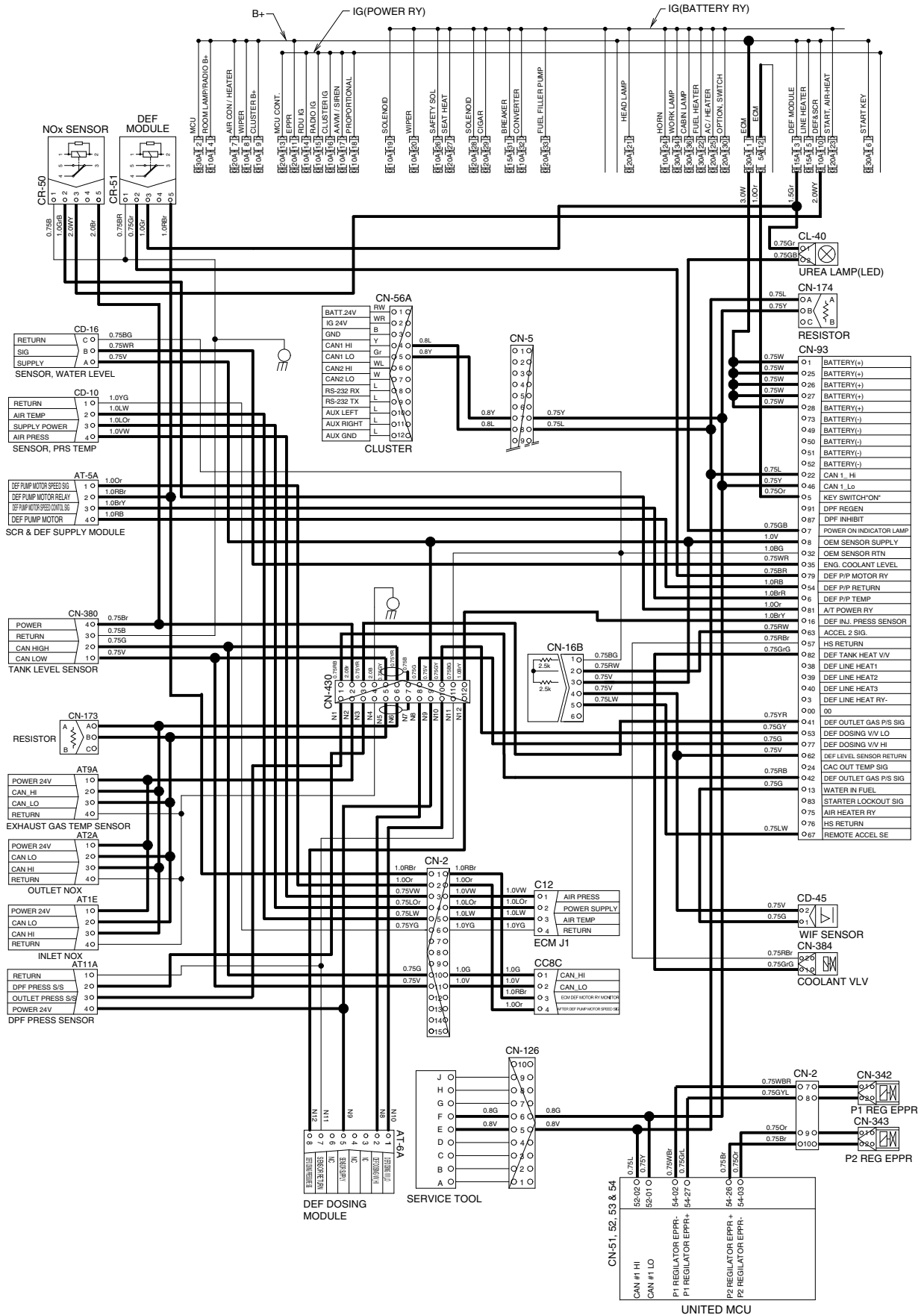
WIPER AND WASHER CIRCUIT (MACHINE SERIAL NO. : #0001-)



235A4EL10A

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

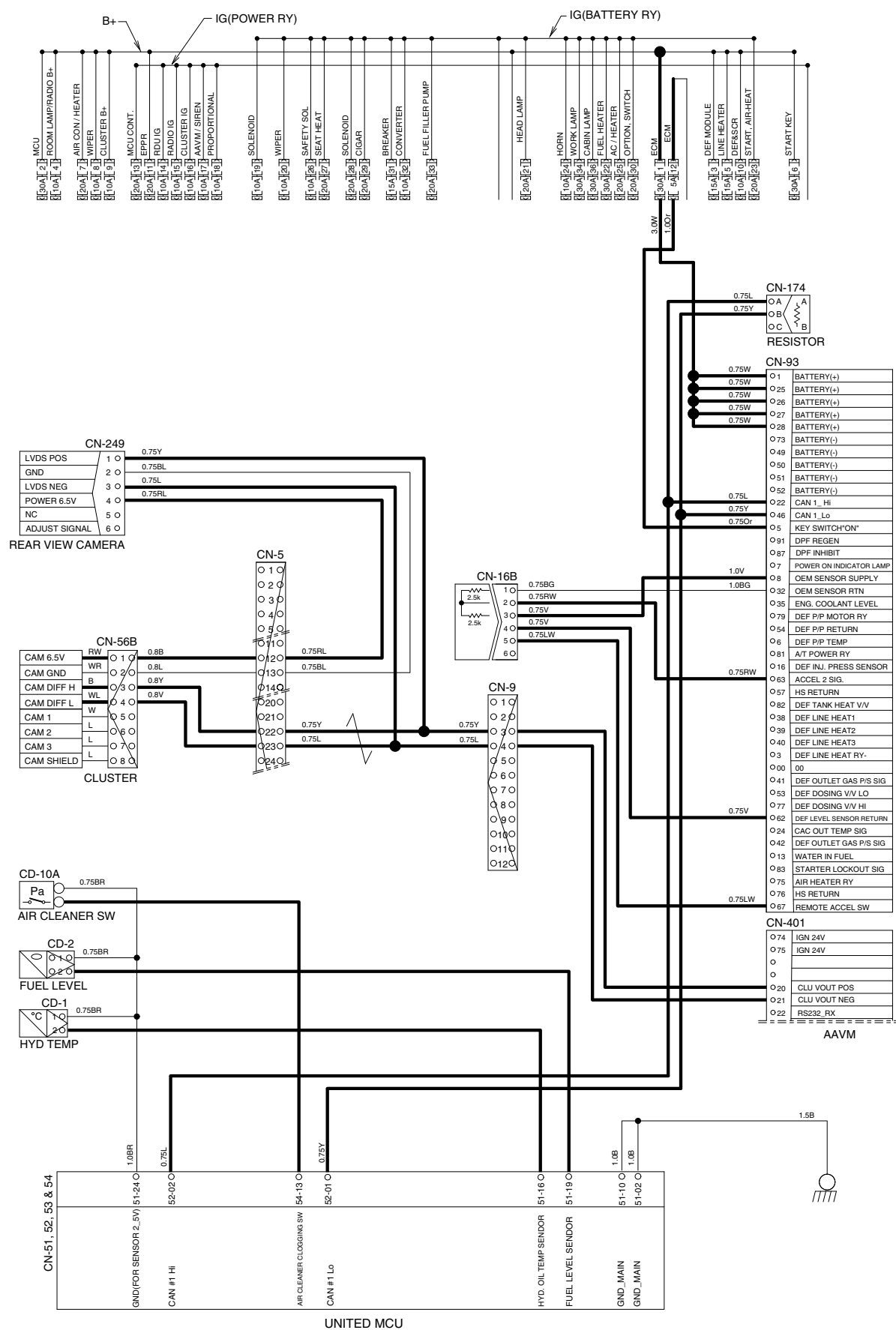
7. CONTROLLER CIRCUIT (MACHINE SERIAL NO. : #0001-)



235A4EL11A

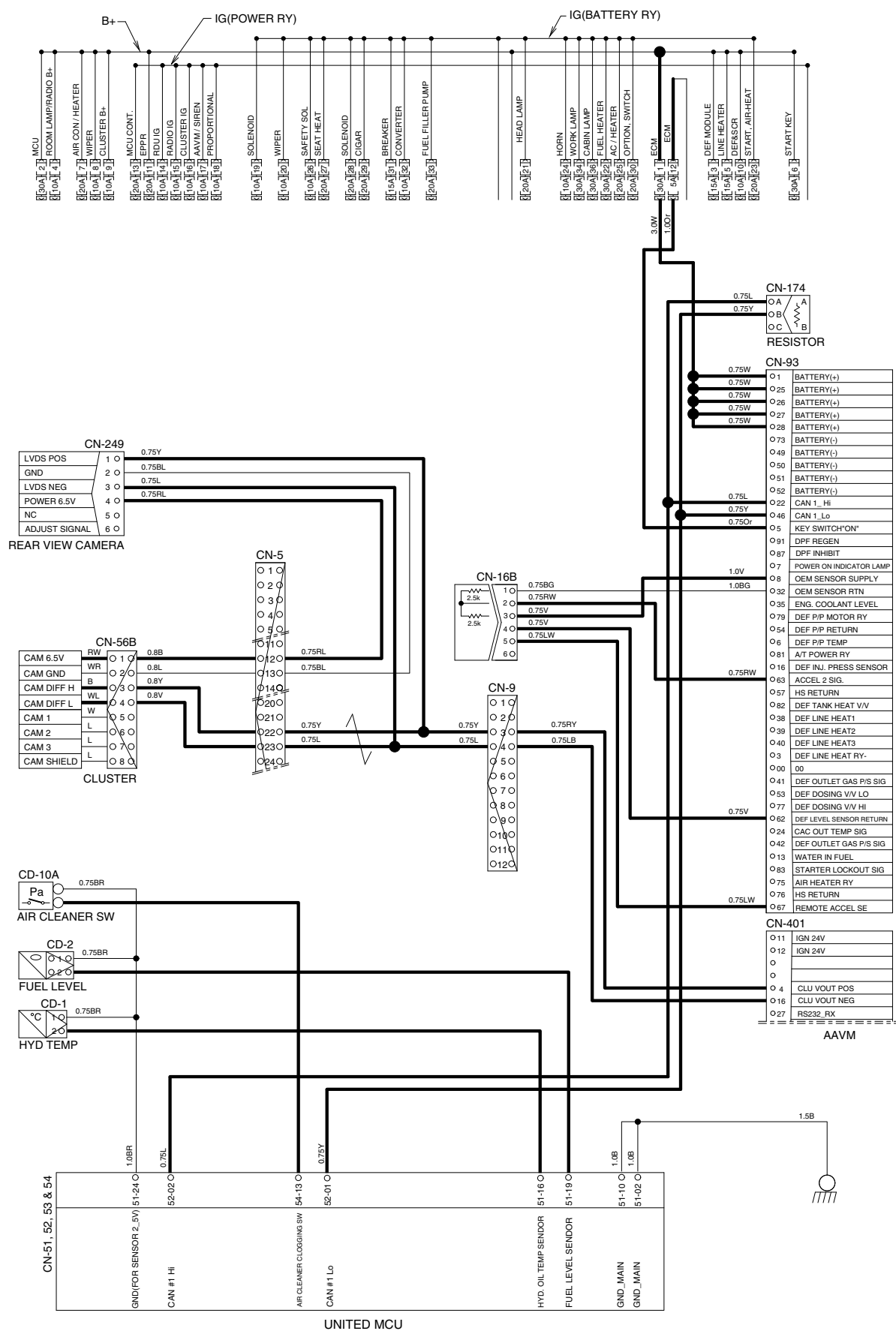
※ The circuit diagram may differ from the equipment, so please check before a repair.

8. MONITORING CIRCUIT (MACHINE SERIAL NO. : -#0003)



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

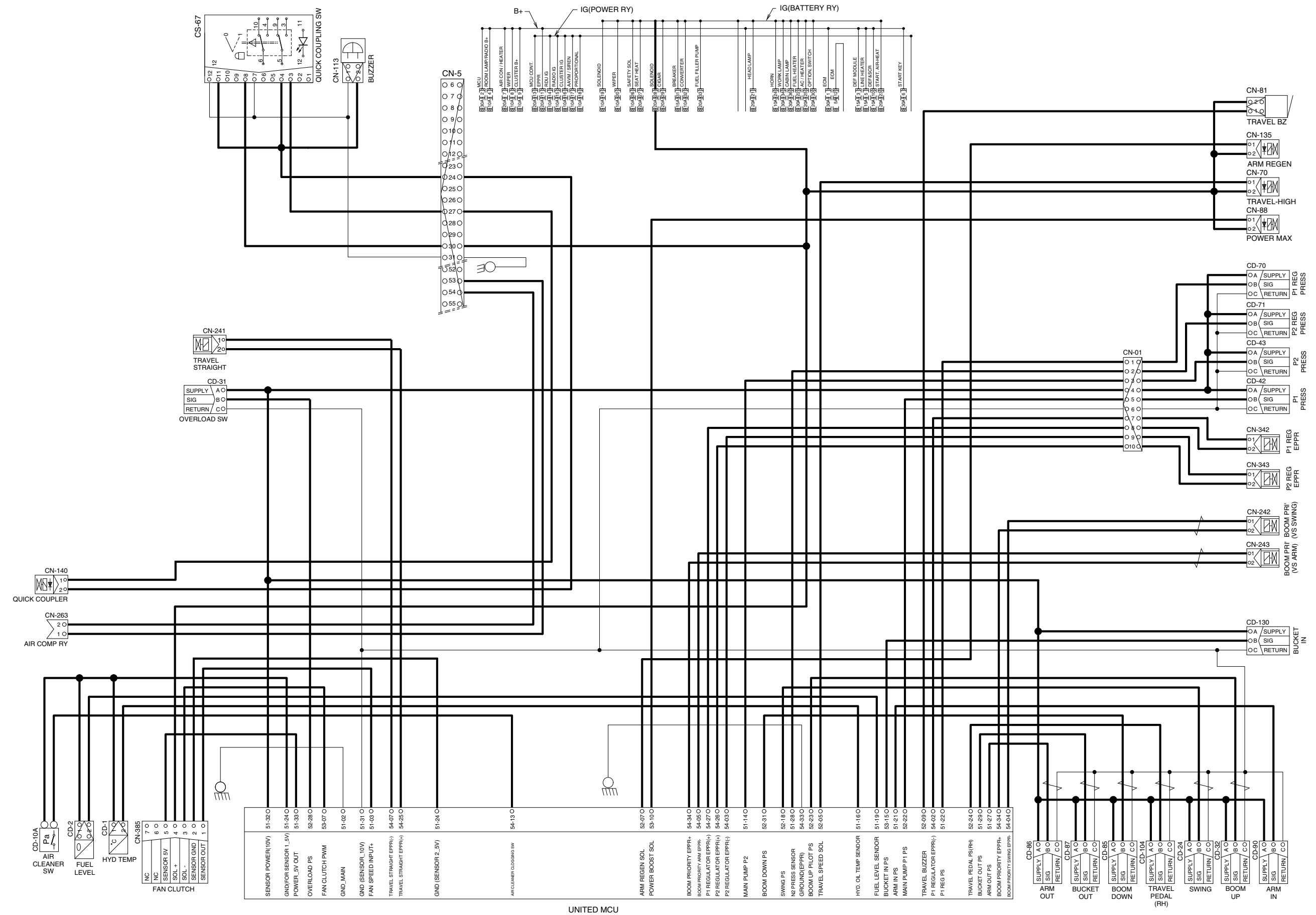
MONITORING CIRCUIT (MACHINE SERIAL NO. : #0004-)



235A4EL12B

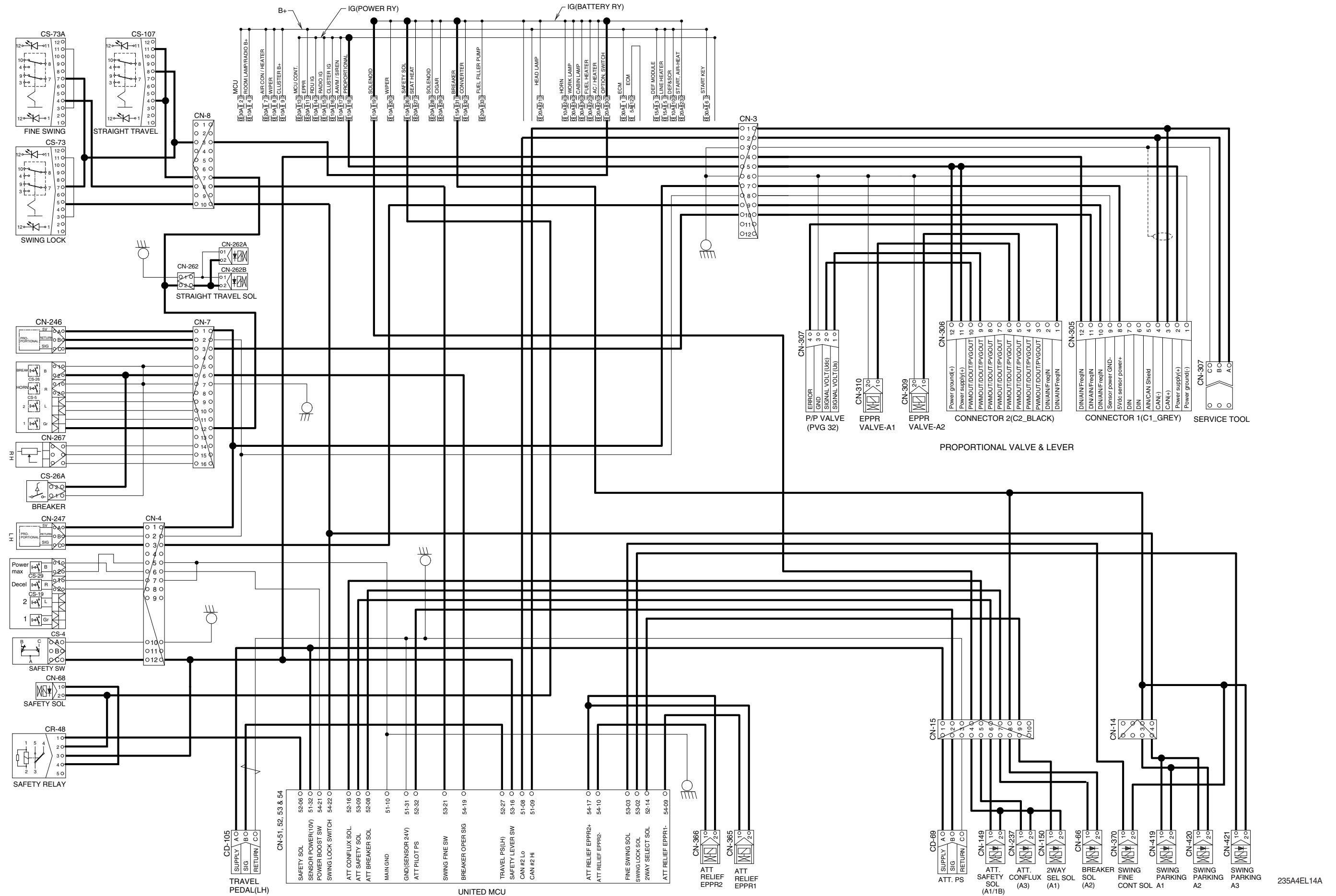
※ The circuit diagram may differ from the equipment, so please check before a repair.

9. ELECTRIC CIRCUIT FOR HYDRAULIC (1/2, MACHINE SERIAL NO. : #0001-)



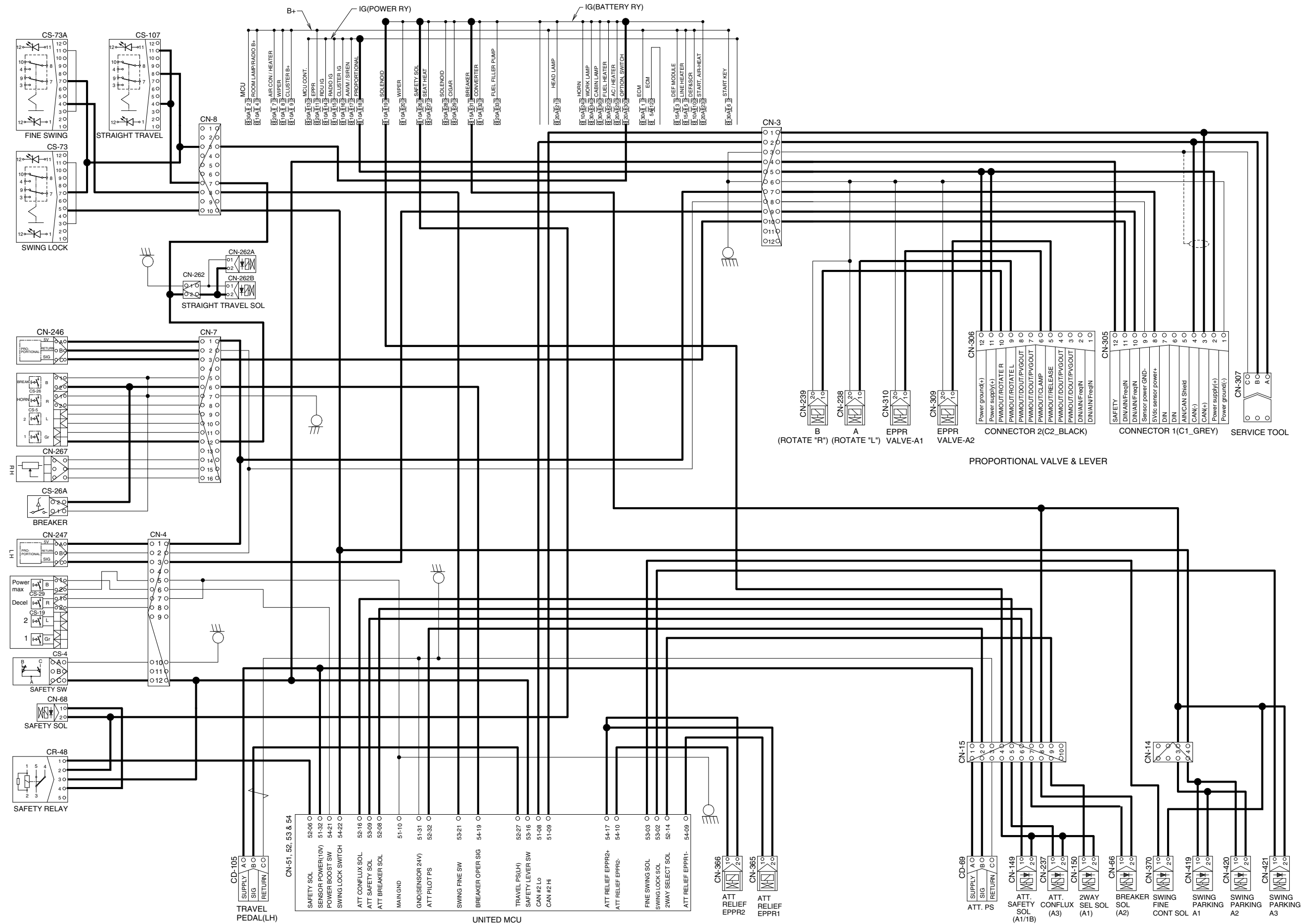
※ The circuit diagram may differ from the equipment, so please check before a repair.

10. ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : -#0003)



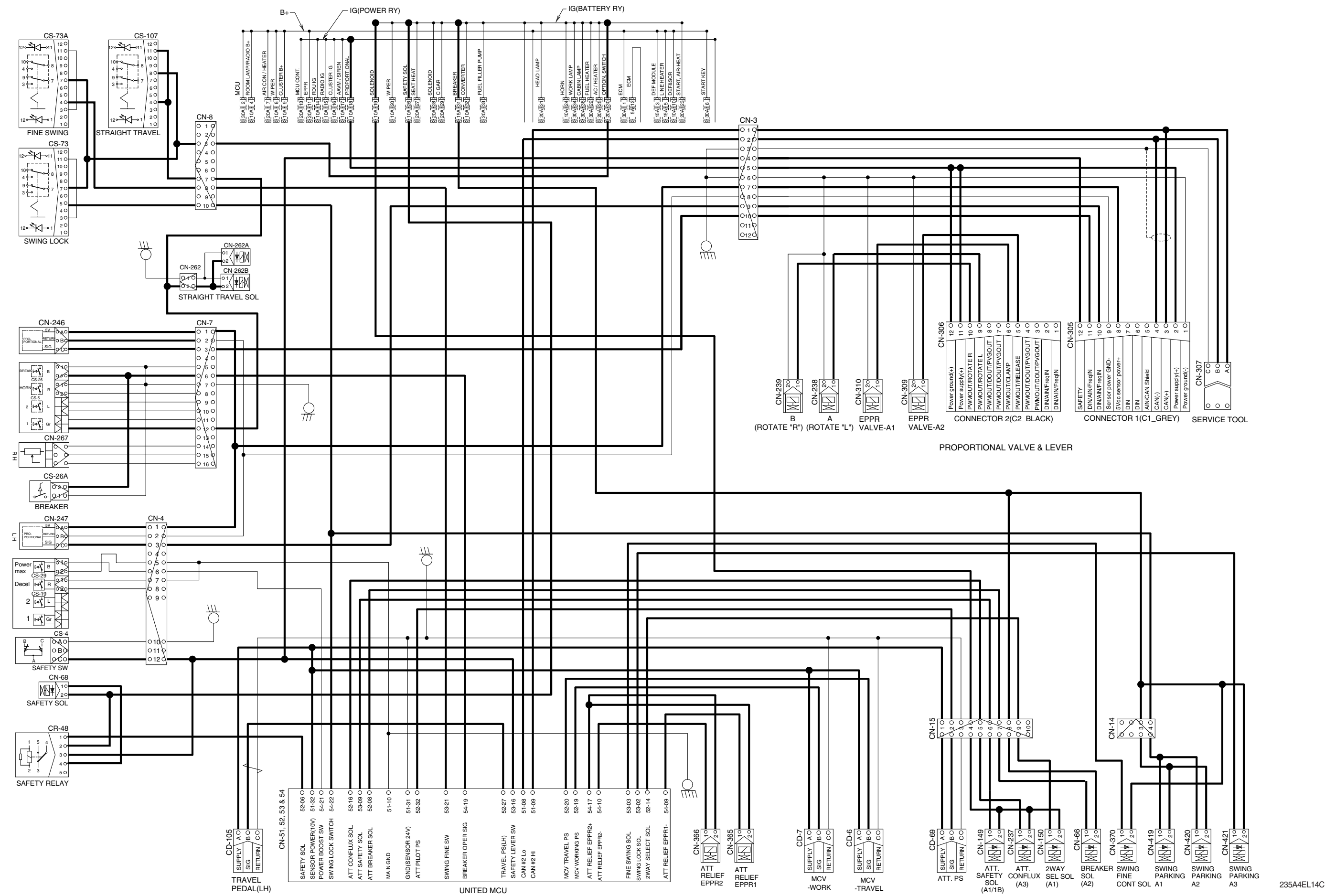
※ The circuit diagram may differ from the equipment, so please check before a repair.

ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : #0004-#0037)



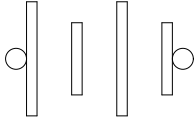
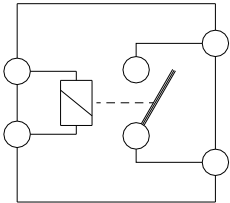
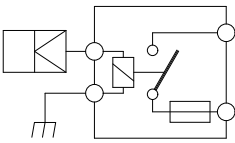
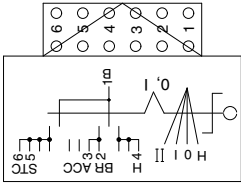
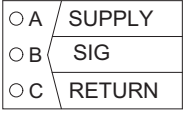
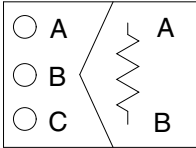
※ The circuit diagram may differ from the equipment, so please check before a repair.

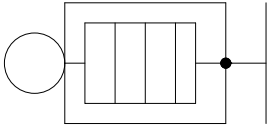
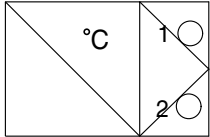
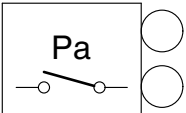
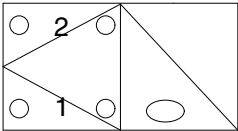
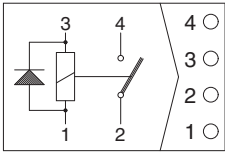
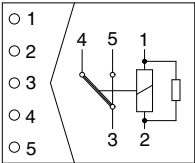
ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : #0038-)

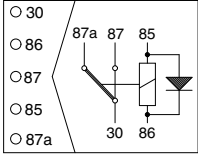
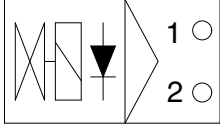
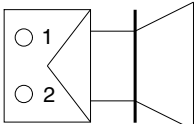
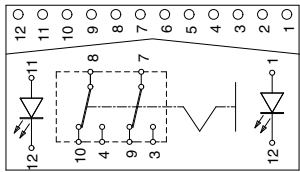
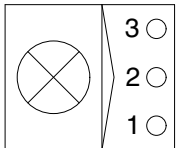


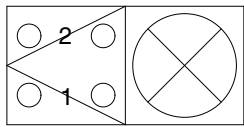
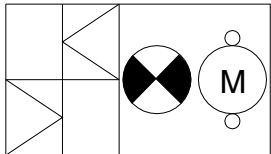
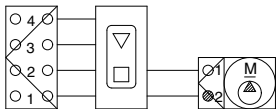
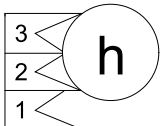
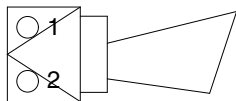
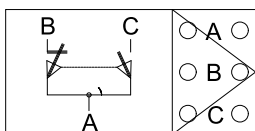
※ The circuit diagram may differ from the equipment, so please check before a repair.

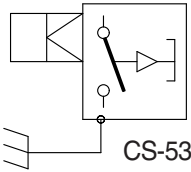
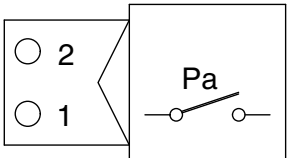
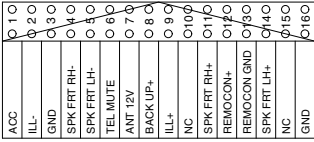
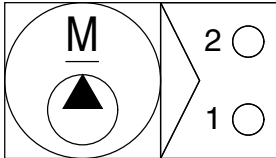
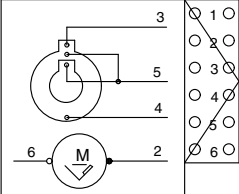
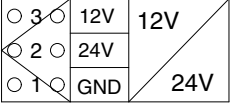
GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

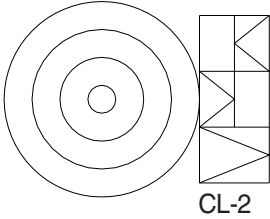
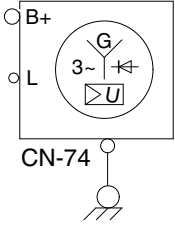
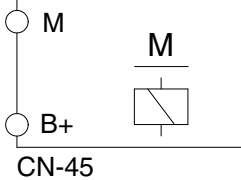
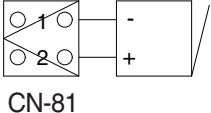
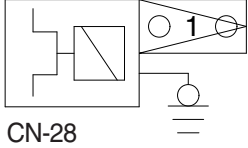
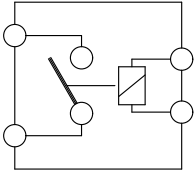
Part name	Symbol	Specifications	Check
Battery		12V×100Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging
Battery relay	 CR-1	Rated load : 24V 100A (continuity) 1000A (30seconds)	※ Check coil resistance(M4 to M4) Normal : About 50Ω ※ Check contact Normal : ∞Ω
Glow plug relay	 CR-24	24V 200A	※ Check contact Normal : 0.942Ω (for terminal 1-GND)
Start key	 CS-2A	B-BR : 24V 1A B-ACC : 24V 10A B-ST : 24V 40A	※ Check contact OFF : ∞Ω (for each terminal) ON : 0Ω (for terminal 1-3 and 1-2) START : 0Ω (for terminal 1-6)
Pressure sensor	 CD-6 (#0038-) CD-7 (#0038-) CD-16 CD-24 CD-27 CD-31 CD-32 CD-37 CD-42 CD-43 CD-69 CD-70 CD-71 CD-85 CD-86 CD-87 CD-90 CD-104 CD-105 CD-130	8~30V	※ Check contact Normal : 0.1Ω
Resistor	 CN-173 CN-174	3W 120Ω	※ Check resistance A-B : 120Ω

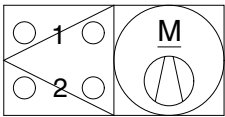
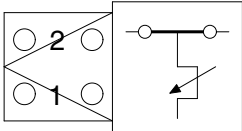
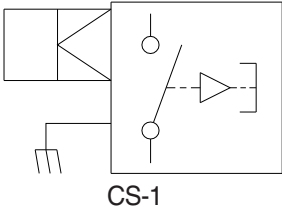
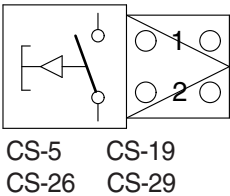
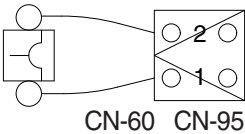
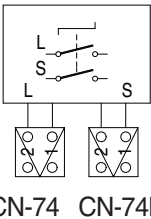
Part name	Symbol	Specifications	Check
Glow plug	 CN-80	24V 200A	※ Check resistance 0.25~0.12Ω
Temperature sensor (hydraulic)	 CD-1	-	※ Check resistance 50°C : 804Ω 80°C : 310Ω 100°C : 180Ω
Air cleaner pressure switch	 CD-10A	N.O TYPE	※ Check contact High level : ∞Ω Low level : 0Ω
Fuel level sender	 CD-2	-	※ Check resistance Full : 50Ω 6/12 : 350Ω 11/12 : 100Ω 5/12 : 400Ω 10/12 : 150Ω 4/12 : 450Ω 9/12 : 200Ω 3/12 : 500Ω 8/12 : 250Ω 2/12 : 550Ω 7/12 : 300Ω 1/12 : 600Ω Empty warning : 700Ω
Relay (air con blower)		24V 20A	※ Check resistance Normal : About 200Ω (for terminal 1-3) ∞Ω (for terminal 2-4)
Relay	 CR-2 CR-5 CR-36 CR-39 CR-48 CR-50 CR-51 CR-85	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 1-2) 0Ω (for terminal 3-4) ∞Ω (for terminal 3-5)

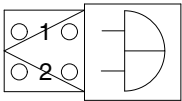
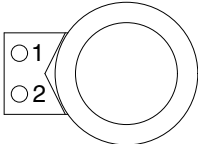
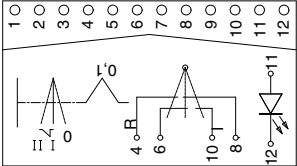
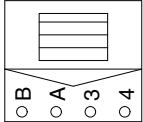
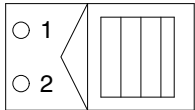
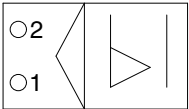
Part name	Symbol	Specifications	Check
Relay	 CR-4 CR-7 CR-9 CR-13 CR-35 CR-46 CR-52	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 85-86) 0 Ω (for terminal 30-87a) ∞ Ω (for terminal 30-87)
Solenoid valve	 CN-66 CN-68 CN-70 CN-88 CN-133 CN-135 CN-140 CN-149 CN-150 CN-237 CN-262A CN-262B CN-370 CN-419 CN-420 CN-421	24V 1A	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
EPPR valve	 CN-238 (#0004-) CN-239 (#0004-) CN-241 CN-242 CN-243 CN-309 CN-310 CN-342 CN-343 CN-365 CN-366	700mA	※ Check resistance Normal : 15~25 Ω (for terminal 1-2)
Speaker	 CN-23(LH) CN-260 CN-24(RH)	20W	※ Check resistance Normal : A few Ω
Switch (locking type)	 CS-67 CS-73 CS-73A CS-99 CS-101 CS-107	24V 1.5A	※ Check contact Normal OFF : ∞ Ω (for terminal 7-9, 8-10) 0 Ω (for terminal 7-3, 8-4)
Room lamp	 CL-1	24V 10W	※ Check disconnection Normal : 1.0 Ω ON : 0 Ω (For terminal 1-2) ∞ Ω (For terminal 1-3) OFF : ∞ Ω (For terminal 1-2) 0 Ω (For terminal 1-3)

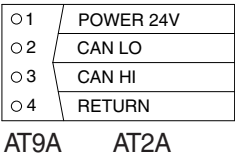
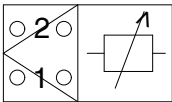
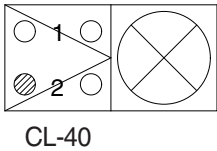
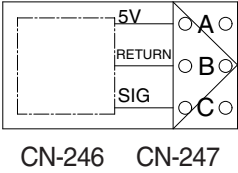
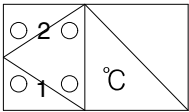
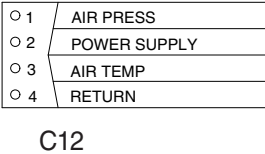
Part name	Symbol	Specifications	Check
Head lamp, Work lamp, Cab lamp	 CL-3 CL-4 CL-5 CL-6 CL-8 CL-9 CL-10 CL-24	24V 65W (H3 Type)	※ Check disconnection Normal : 1.2Ω
Beacon lamp	 CL-7	21V 70W (H1 Type)	※ Check disconnection Normal : A few Ω
Fuel filler pump	 CN-61	24V 10A 35 ℓ /min	※ Check resistance Normal : 1.0Ω
Hour meter	 CN-48	16~32V	※ Check operation Supply power (24V) to terminal No.1 and connect terminal No.2 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 : 0Ω (for terminal A-B) ∞Ω (for terminal A-C) Operating : ∞Ω (for terminal A-B) 0Ω (for terminal A-C)

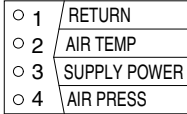
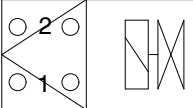
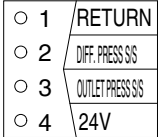
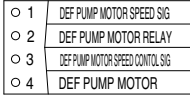
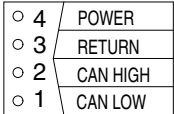
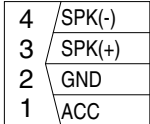
Part name	Symbol	Specifications	Check
Wiper cut switch	 CS-53	24V (N.O TYPE)	※ Check contact Normal : 0Ω (one pin to ground)
Receiver dryer	 CN-29	24V 2.5A	※ Check contact Normal : ∞Ω
Radio & USB player	 CN-27	24V 2A	※ Check voltage 20~25V (for terminal 1-3, 3-8)
Washer pump	 CN-22	24V 3.8A	※ Check contact Normal : 10.7Ω (for terminal 1-2)
Wiper motor	 CN-21	24V 2A	※ Check disconnection Normal : 7Ω (for terminal 2-6)
DC/DC Converter	 CN-138	12V 3A	※ Check voltage 24V (for terminal 1-2) 12V (for terminal 1-3)

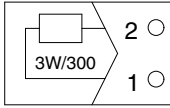
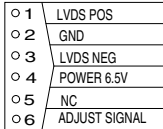
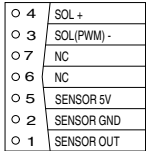
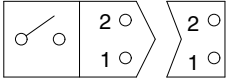
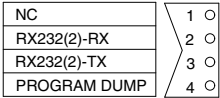
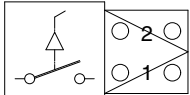
Part name	Symbol	Specifications	Check
Cigar lighter	 CL-2	24V 5A 1.4W	※ Check coil resistance Normal : About 1M Ω ※ Check contact Normal : $\infty \Omega$ Operating time : 5~15sec
Alternator	 CN-74	24V 95A	※ Check contact Normal : 0 Ω (for terminal B ⁺ -L) Normal : 24~27.5V
Starter	 CN-45	24V 4.8kW	※ Check contact Normal : 0.1 Ω
Travel alarm	 CN-81	24V 0.5A	※ Check contact Normal : 5.2 Ω
Air conditioner 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)

Part name	Symbol	Specifications	Check
Blower motor		24V 9.5A	※ Check resistance Normal : 2.5Ω (for terminal 1-2)
Thermistor (switch)		1°C OFF 4°C ON	※ Check resistance Normal : 0Ω (for terminal 1-2), the atmosphere temp : Over 4°C
Door switch		24V 2W	※ Check resistance Normal : About 5MΩ
Switch (power max, one touch decel, horn, breaker)		24V 6A	※ Check resistance Normal : ∞Ω
Circuit breaker		CN-60 : 60A CN-95 : 90A	※ Check disconnection Normal : 0Ω (connect ring terminal and check resist between terminal 1 and 2)
Master switch		6-36V	※ Check disconnection Normal : 0.1Ω

Part name	Symbol	Specifications	Check
Quick coupler buzzer	 CN-113	24V 200mA 107 ± 4dB	-
Socket	 CN-139	12V 10A	-
Exhaust system cleaning switch	 CS-100	24V 8A	-
Fuel heater	 CN-96	-	-
DEF/AdBlue® line heater	 CN-381 CN-382 CN-383	-	-
WIF sensor	 CD-45	-	-

Part name	Symbol	Specifications	Check
NOx sensor		-	-
Temperature sensor (A/C)		-	-
DEF/AdBlue® lamp (LED)		-	-
Proportional valve sensor		-	-
CAC out temp sensor		-	-
Sensor		-	-

Part name	Symbol	Specifications	Check
Pressure temp sensor	 CD-10	-	
Coolant valve	 CN-384	-	
DPF pressure sensor	 AT11A	-	
SCR and DEF supply module	 AT-5A	-	
Tank level sensor	 CN-380	-	
Siren AMP	 CN-261	-	

Part name	Symbol	Specifications	Check
Resistor	 RS-1	3W 300Ω	※ Check resistance Normal : 300Ω
Camera (front, rear, side)	 CN-10A CN-249 CN-403 CN-404 CN-405	-	
Fan clutch	 CN-385	-	
Seat belt sw	 CS-250	-	
RMS service tool	 CN-126A	-	
Breaker switch	 CS-26A	-	

Part name	Symbol	Specifications	Check
GPS connector	○ 1 ○ 2 ○ 3 ○ 4 1 ○ 2 ○ 3 ○ 4 ○ R 77 R 77 CN-125	-	
Reader	#0073 IG 24V GND CAN (HIGH) CAN (LOW) 1 ○ 2 ○ 3 ○ 4 ○ #0074- IG 24V GND CAN (HIGH) CAN (LOW) BATT 24V 6 ○ 5 ○ 7 ○ 8 ○ 12 ○ CN-427	-	
Proportional valve	ERROR GND SIGNAL VOLT(Udc) SIGNAL VOLT(Us) 4 ○ 3 ○ 2 ○ 1 ○ CN-307	-	
Engine side cross over connector	○ 1 ○ 2 ○ 3 ○ 4 CAN_HI CAN_LO ECM DEF MOTOR RY.MONITOR ATER. DEF PUMP MOTOR SPEED SIG CC8C	-	
Accel dial	LED GND LED + ○ 1 ○ ○ 2 ○ CN-267	-	
Float switch	○ 2 ○ 1 ○ ○ ○ ○ CS-61	-	

GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	TYCO	10	I/conn (Frame harness-Pump PS harness)	174655-2	S816-110002
CN-2	TYCO	15	I/conn (Frame harness-Engine harness)	2-85262-1	368301-1
CN-3	TYCO	12	I/conn (Frame harness-Pro vlv harness)	174661-2	368537-1
CN-4	TYCO	12	I/conn (Console harness LH-Frame harness)	174661-2	368050-1
CN-5	DEUTSCH	60	I/conn (Side harness RH-Frame harness)	DRB16-60SAE-L018	DRB14-60PAE-L018
CN-7	AMP	16	I/conn (Console harness RH-Frame harness)	368047-1	368050-1
CN-8	AMP	10	I/conn (Console harness RH-Frame harness)	S816-010002	174655-2
CN-9	DEUTSCH	12	I/conn (Frame harness- AAVM harness)	DT06-12SA	DT04-12PA
CN-10	TYCO	12	I/conn (Cab harness-Side harness RH)	368542-1	368507-1
CN-10A	DEUTSCH	6	Front camera	DT06-6S	DT04-6P
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-14	AMP	4	I/conn (Frame harness-S/f & parking harness)	174257-2	174259-2
CN-15	AMP	10	I/conn (Frame harness-2-way harness)	174655-2	174657-2
CN-16	AMP	6	Emergency engine start & speed control	-	S816-106002
CN-16A	AMP	6	Emergency engine start & speed control	S816-006002	-
CN-16B	AMP	6	Emergency engine start & speed control	S816-006002	S816-106002
CN-17	AMP/DEUTSCH	8	I/conn (Side harness RH-Wiper harness)	S816-008002	DT04-8P
CN-20	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-21	AMP	6	Wiper motor	925276-0	-
CN-22	KET	2	Washer tank	MG640605	-
CN-23	KET	2	Speaker-LH	MG610070	-
CN-24	KET	2	Speaker-RH	MG610070	-
CN-25	DEUTSCH	2	Horn	DT06-2S-EP06	-
CN-27	KUM	16	Radio & USB player	PK145-16017	-
CN-27A	AMP	8	Radio & USB player	-	S816-108002
CN-28	KUM	1	Aircon compressor	MNWP01FB	-
CN-29	KET	2	Receiver dryer	MG640795	-
CN-36	-	-	Fuse box	21Q7-10910	-
CN-45	RING-TERM	-	Starter motor B ⁺	S820-108000	-
CN-48	KET	1	Hour meter	2-520193-2	-
CN-51	TYCO	34	United MCU	2-1473285-3	-
CN-52	TYCO	34	United MCU	4-1437290-1	-
CN-53	TYCO	26	United MCU	1473416-1	-
CN-54	TYCO	34	United MCU	4-1437290-0	-
CN-56A	AMP	12	Cluster	-	174663-2

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-56B	AMP	8	Cluster	-	174984-2
CN-60	YAZAKI	2	Circuit breaker	-	7222-4220-30
CN-61	DEUTSCH	4	Fuel filler pump	DT06-4S-EP06	DT04-4P-E005
CN-66	DEUTSCH	2	Breaker (A2)	DT06-2S-EP06	-
CN-68	DEUTSCH	2	Safety solenoid (A1)	DT06-2S-EP06	-
CN-70	DEUTSCH	2	Travel high solenoid (A3)	DT06-2S-EP06	-
CN-74	RING-TERM	1	Alternator "B+" terminal	S820-108000	-
CN-74	RING-TERM	1	Alternator "L" terminal	S820-105000	-
CN-80	RING-TERM	-	Glow plug	S820-306000	-
CN-81	DEUTSCH	2	Travel buzzer solenoid	DT06-2S-EP06	-
CN-88	DEUTSCH	2	Power max solenoid (A2)	DT06-2S-EP06	-
CN-93	DELPHI	96	ECM	13964572	-
CN-95	YAZAKI	2	Circuit breaker	-	7222-4220-30
CN-96	-	2	Fuel heater	15300027	-
CN-100	KET	1	ECM ground	MG640944-5	-
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-EP06	DT04-12P
CN-125B	DEUTSCH	8	RMS	DT06-8S	DT04-8P
CN-126	-	10	Service tool	S816-010002	-
CN-126A	-	4	RMS service tool	DT06-4S	DT04-4P
CN-135	DEUTSCH	2	Arm regeneration solenoid (A5)	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 coupler solenoid	DT06-2S-EP06	DT04-2P-E005
CN-141	AMP	13	Wiper motor controller	172498-1	-
CN-142	DEUTSCH	3	Accel dial	DT06-3S-EP06	-
CN-144A	KET	20	Hand free	MG610240	-
CN-144E	-	8	Hand free	175964-2	-
CN-149	DEUTSCH	2	Attachment safety (A1)	DT06-2S-EP06	-
CN-150	DEUTSCH	2	Pedal safety (B1)	DT06-2S-EP06	-
CN-156	-	2	Air seat	180907-0	-
CN-157	AMP	1	Antena power	S822-014002	-
CN-173	DEUTSCH	3	Resistor	DT06-3S-EP06	DT04-3P-EP10
CN-174	DEUTSCH	3	Resistor	DT06-3S-EP06	DT04-3P-EP10
CN-237	DEUTSCH	2	Attachment conflux (A3)	DT06-2S-EP06	-
CN-241	DEUTSCH	2	Travel straight solenoid (A3)	DT06-2S-EP06	-
CN-242	DEUTSCH	2	Boom swing solenoid (A2)	DT06-2S-EP06	-
CN-243	DEUTSCH	2	Boom arm solenoid (A1)	DT06-2S-EP06	-

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-245A	-	12	Remocon	368542-1	-
CN-245E	-	12	Remocon	174045-2	-
CN-246	DEUTSCH	3	Proportional valve-RH	DT06-3S	DT04-3P
CN-246	-	12	USB socket	174045-2	-
CN-247	DEUTSCH	3	Proportional valve-LH	DT06-3S	DT04-3P
CN-249	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-E005
CN-258	KET	1	Air compressor power	MG640944-5	MG650943-5
CN-260	MTA	4	Siren speaker	03 01315	-
CN-261	MTA	4	Siren AMP	MG610047	-
CN-262	DEUTSCH	2	I/conn (Frame harness - S/travel harness)	DT06-2S-EP06	DT04-2P-E005
CN-262A	DEUTSCH	2	Straight travel solenoid 1	DT06-2S-EP06	-
CN-262B	DEUTSCH	2	Straight travel solenoid 2	DT06-2S-EP06	-
CN-263	DEUTSCH	2	Air compressor relay	DT06-2S-EP06	DT04-2P-E005
CN-267	-	2	Accel dial pilot lamp	S816-002002	-
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-EP06	DT06-3P-E005
CN-308	AMP	4	Proportional-PVG32	2-967059-1	-
CN-309	DEUTSCH	2	Proportional-EPPR valve-A2	DT06-2S-EP06	-
CN-310	DEUTSCH	2	Proportional-EPPR valve-A1	DT06-2S-EP06	-
CN-342	AMP	2	P1 pump regulator solenoid	S816-002002	-
CN-343	AMP	2	P2 pump regulator solenoid	S816-002002	-
CN-365	DEUTSCH	2	Attach EPPR valve 1 (A)	DT06-2S-EP06	DT04-2P-E005
CN-366	DEUTSCH	2	Attach EPPR valve 2 (B)	DT06-2S-EP06	DT04-2P-E005
CN-370	DEUTSCH	2	Swing fine control solenoid	DT06-2S-EP06	DT04-2P-E005
CN-376	TYCO	34	Membrane controller	4-1437290-1	-
CN-381	DEUTSCH	2	DEF line heater 1	DT06-2S-EP06	-
CN-382	DEUTSCH	2	DEF line heater 2	DT06-2S-EP06	-
CN-383	DEUTSCH	2	DEF line heater 3	DT06-2S-EP06	-
CN-384	TYCO	2	Coolant valve solenoid	1-967325-3	-
CN-385	TYCO	7	Fan clutch	1718230-1	-
CN-399	DEUTSCH	4	DEF tank level sensor	DT06-4S-EP06	-
CN-401	TE	35	AAVM controller	776164-1	-
CN-403	DEUTSCH	6	Rear view camera	DT06-6S-EP06	DT04-6P-E005
CN-404	DEUTSCH	6	LH view camera	DT06-6S-EP06	DT04-6P-E005
CN-405	DEUTSCH	6	RH view camera	DT06-6S-EP06	DT04-6P-E005
CN-406	DEUTSCH	4	Service tool	DT06-4S-EP05	DT04-4P-E005
CN-419	DEUTSCH	2	Swing parking-A1	DT06-2S-EP06	-
CN-420	DEUTSCH	2	Swing parking-A2	DT06-2S-EP06	-

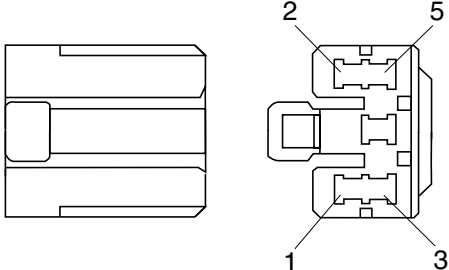
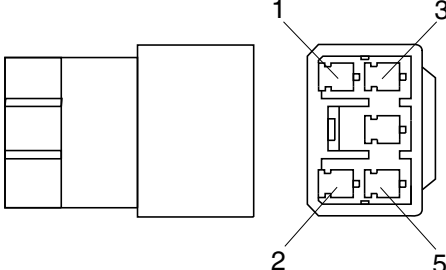
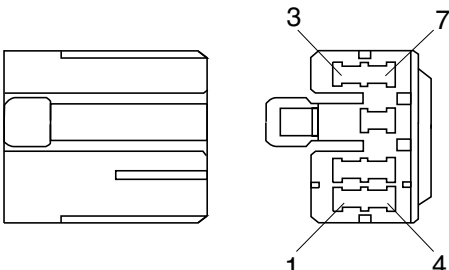
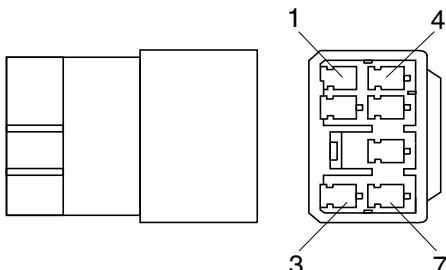
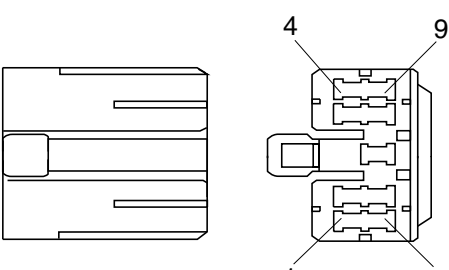
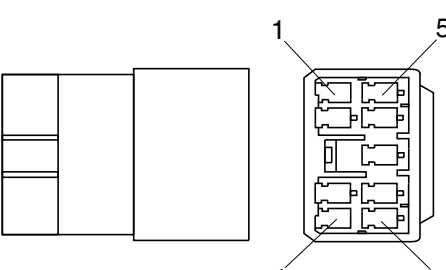
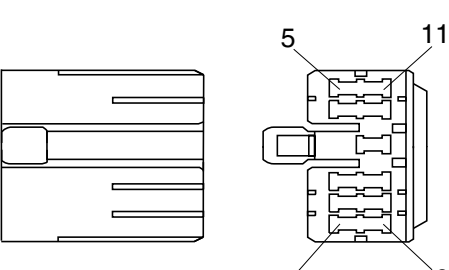
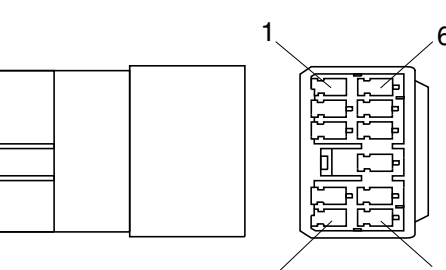
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-421	DEUTSCH	2	Swing parking-A3	DT06-2S-EP06	-
CN-427	MOLEX	4	Reader-RMS	039012040	026013096
		12		5557-12R	5559-12P
CN-429	-	1	CAC out temp sensor	S822-11400	-
CN-430	TYCO	12	I/conn (Frame harness - DEF harness)	174661-2	S816-112002
AT-1E	TYCO	4	DOC NOx sensor (inlet)	2-1418390-1	-
AT-2A	TYCO	4	SCR NOx sensor (outlet)	1-1418390-1	-
AT-5A	TYCO	4	SCR supply module	2-418390-1	-
AT-6A	TYCO	8	DEF dosing module	1-1418479-1	-
AT-9A	TYCO	4	SCR temperature sensor	4-1418390-1	-
AT-11A	DELPHI	4	DEF pressure sensor	F715600	-
C12	FCI	4	Air cleaner	-	54200419
CC8C	DEUTSCH	4	Cross over connector - Engine side	DT06-4S-EP06	-
· 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	MG610320	S814-102001
CR-24	-	1	Preheat relay	S822-014000	-
CR-35	-	5	Power relay	-	-
CR-36	-	5	Preheat relay	-	-
CR-39	-	5	Starter lock out relay	-	-
CR-46	-	5	Fuel warmer relay	-	-
CR-48	-	5	Safety relay	-	-
CR-50	-	5	NOx sensor relay	-	-
CR-51	-	5	DEF module relay	-	-
CR-52	-	5	Line heater relay	-	-
CR-85	-	5	Beacon lamp relay	-	-
· Switch					
CS-1	SHUR	1	Door switch	S822-014002	-
CS-2A	WP	6	Start switch	S814-006100	-
CS-2B	KET	1	Start button	MG610278-5	MG640280-5
CS-2C	DEUTSCH	3	Smart CAN	DT06-3S	-
CS-2D	KET	3	Start button	MG651032	-
CS-2E	KET	3	Start button	-	MG641035

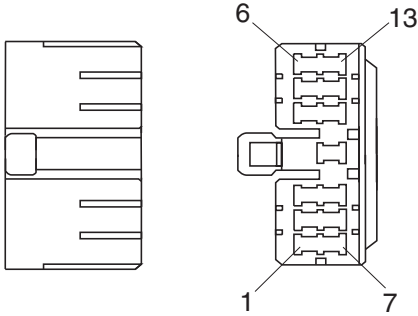
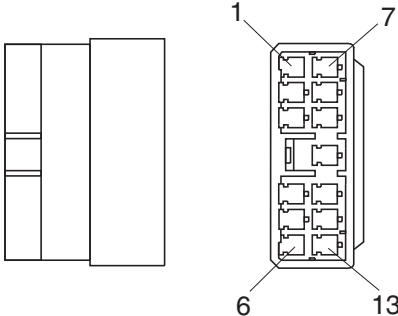
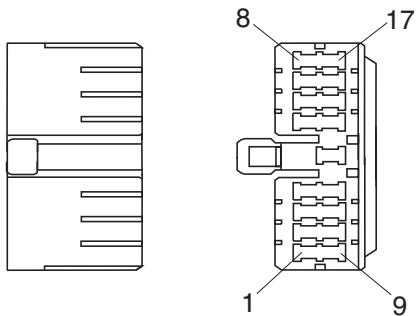
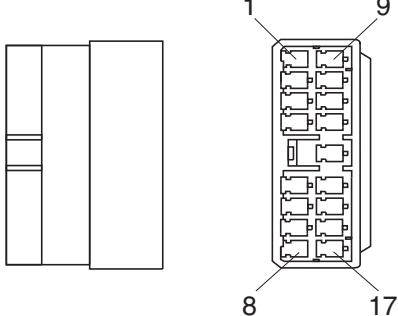
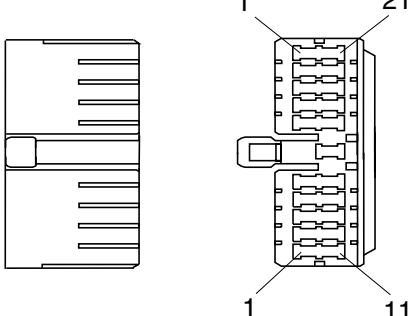
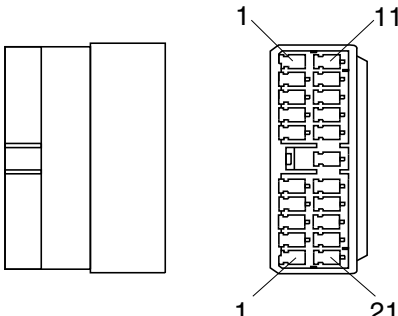
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CS-4	AMP	3	Safety switch	S816-003002	-
CS-5	DEUTSCH	2	Horn switch	-	DT04-2P-E005
CS-19	DEUTSCH	2	One touch decel switch	-	DT04-2P
CS-26	DEUTSCH	2	Breaker switch	DT06-2S-EP06	-
CS-26A	AMP	2	Breaker pedal switch	S816-002002	S816-102002
CS-29	DEUTSCH	2	Power max switch	DT06-2S	-
CS-33	AMP	6	Emergency engine stop switch	S816-006002	S816-106002
CS-53	AMP	1	Wiper cut switch	S822-014002	-
CS-61	TYCO	2	Floating switch	174352-2	174354-2
CS-67	SWF	12	Quick coupler switch	SWF589790	-
CS-73	SWF	12	Swing lock switch	SWF589790	-
CS-73A	SWF	12	Fine swing switch	SWF589790	-
CS-74	KET	2	Master switch	MG640605	-
CS-74B	DEUTSCH	2	Master switch	DT06-2S-EP06	-
CS-99	SWF	12	Air compressor switch	SWF589790	-
CS-100	SWF	12	Exhaust system cleaning switch	SWF589790	-
CS-101	SWF	12	Dozer/2pcs switch	SWF589790	-
CS-107	SWF	12	Travel straight switch	SWF589790	-
CS-250	DEUTSCH	3	Seat switch	DT06-3S	-
· Light					
CL-1	KET	3	Room lamp	MG651032	-
CL-2	AMP	1	Cigar lighter	S822-014002	S822-114002
CL-2	AMP	1	Cigar lighter	S810-001202	-
CL-3	DEUTSCH	2	Head lamp-LH	DT06-2S-EP06	DT04-2P
CL-4	DEUTSCH	2	Head lamp-RH	DT06-2S-EP06	DT04-2P
CL-5	DEUTSCH	2	Work lamp-LH	DT06-2S-EP06	DT04-2P
CL-6	DEUTSCH	2	Work lamp-RH	DT06-2S-EP06	DT04-2P
CL-7	SHUR	1	Beacon lamp	S822-014002	S822-114002
CL-8	DEUTSCH	2	Cab light-LH	DT06-2S-EP06	DT04-2P
CL-9	DEUTSCH	2	Cab light-RH	DT06-2S-EP06	DT04-2P
CL-10	DEUTSCH	2	Cab light-rear	DT06-2S-EP06	DT04-2P
CL-24	DEUTSCH	2	Head lamp-rear	DT06-2S-EP06	DT04-2P-E005
CL-40	DEUTSCH	2	DEF/AdBlue® purging lamp	DT06-2S-EP06	DT04-2P-E005
· Sensor, sender					
CD-1	TYCO	2	Hydraulic oil temp sender	85202-1	-
CD-2	DEUTSCH	2	Fuel sender	DT06-2S-EP06	-
CD-6	DEUTSCH	3	Travel pilot pressure sw	DT06-3S-EP06	-
CD-7	DEUTSCH	3	Working pilot pressure sw	DT06-3S-EP06	-
CD-10	SUMITOMO	4	Air cleaner switch	6908-0144	-

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CD-10A	TYCO	2	Air cleaner switch	85202-1	-
CD-16	TYCO	4	Water level sensor	1-967325-1	-
CD-24	DEUTSCH	3	Swing pilot pressure sw	DT06-3S-EP06	-
CD-27	DEUTSCH	3	Dozer pilot pressure sw	DT06-3S-EP06	DT04-3P-E005
CD-31	DEUTSCH	3	Overload pressure sensor	DT06-3S-EP06	DT04-3P-E005
CD-32	DEUTSCH	3	Boom up pilot pressure sw	DT06-3S-EP06	-
CD-42	DEUTSCH	3	A1 pump delivery pressure sw	DT06-3S-EP06	-
CD-43	DEUTSCH	3	A2 pump delivery pressure sw	DT06-3S-EP06	-
CD-45	DEUTSCH	2	WIF sensor	DT06-2S-EP06	-
CD-69	DEUTSCH	3	Attach pressure sensor	DT06-3S-EP06	-
CD-70	DEUTSCH	3	A4 pressure sensor (main pump)	DT06-3S-EP06	-
CD-71	DEUTSCH	3	A5 pressure sensor (main pump)	DT06-3S-EP06	-
CD-85	DEUTSCH	3	Boom down pilot pressure sw	DT06-3S-EP06	-
CD-86	DEUTSCH	3	Arm out pilot pressure sw	DT06-3S-EP06	-
CD-87	DEUTSCH	3	Bucket out pilot pressure sw	DT06-3S-EP06	-
CD-90	DEUTSCH	3	Arm in pilot pressure sw	DT06-3S-EP06	-
CD-104	DEUTSCH	3	RH travel pilot pressure sw	DT06-3S-EP06	-
CD-105	DEUTSCH	3	LH travel pilot pressure sw	DT06-3S-EP06	-
CD-130	DEUTSCH	3	Bucket in pilot pressure sw	DT06-3S-EP06	-

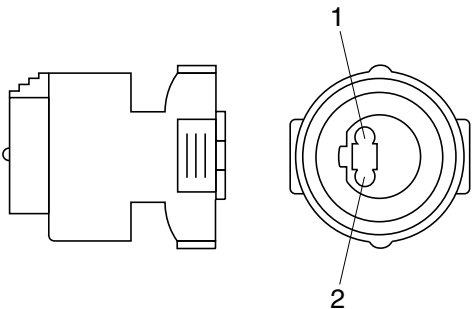
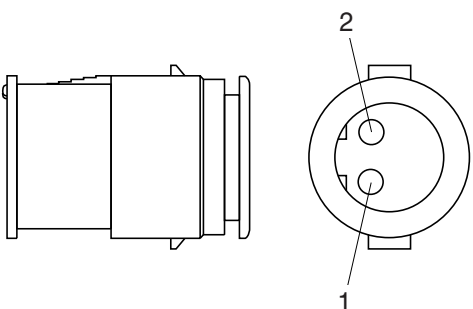
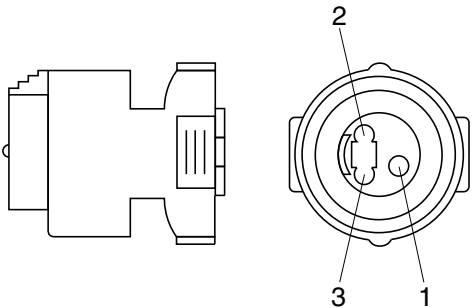
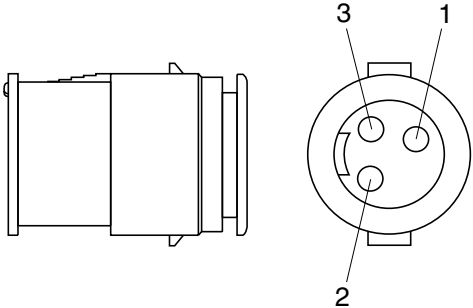
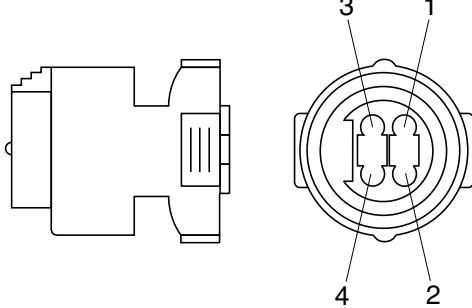
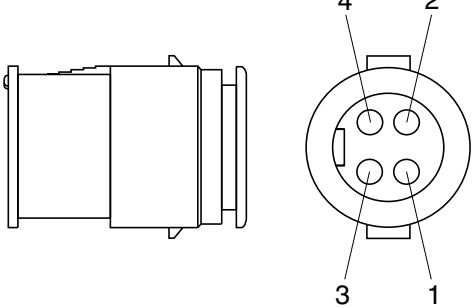
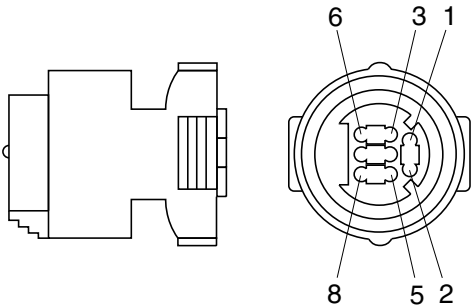
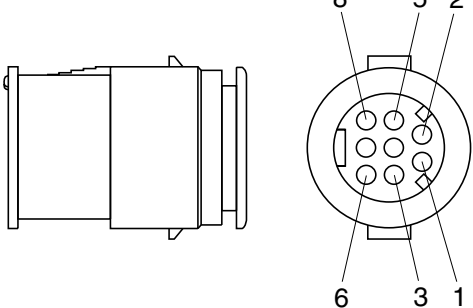
2. CONNECTION TABLE FOR CONNECTORS

1) PA TYPE CONNECTOR

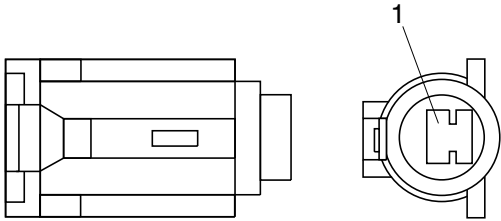
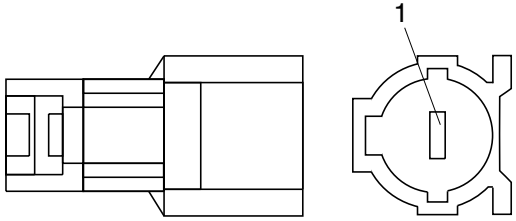
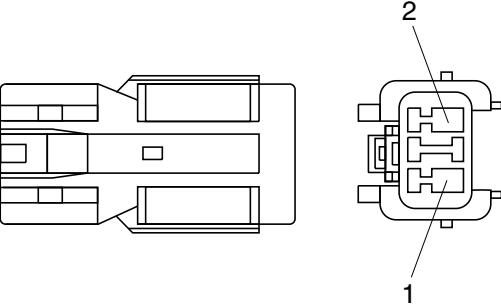
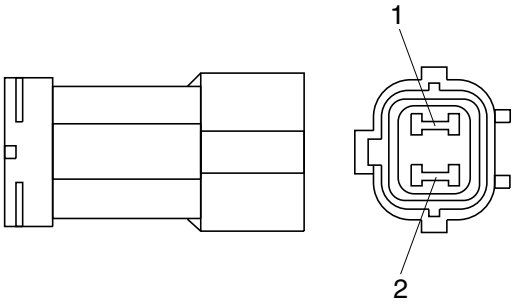
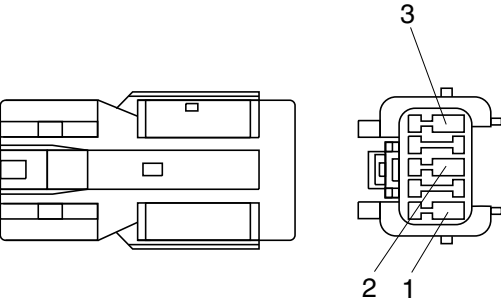
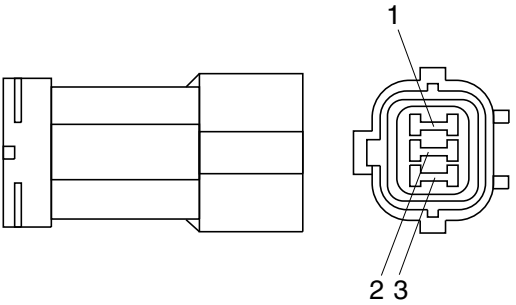
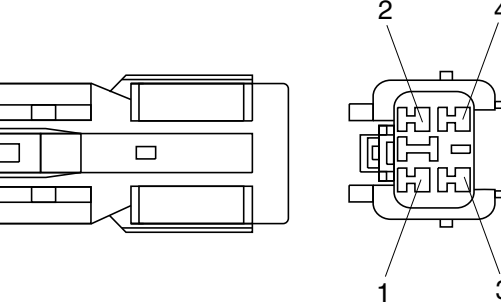
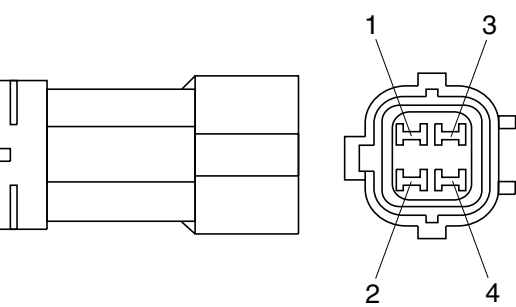
No. of pin	Receptacle connector (female)	Plug connector (male)
5	 S811-005002	 S811-105002
7	 S811-007002	 S811-107002
9	 S811-009002	 3S811-109002
11	 S811-011002	 S811-111002

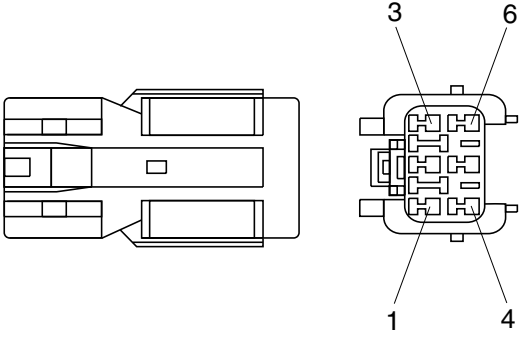
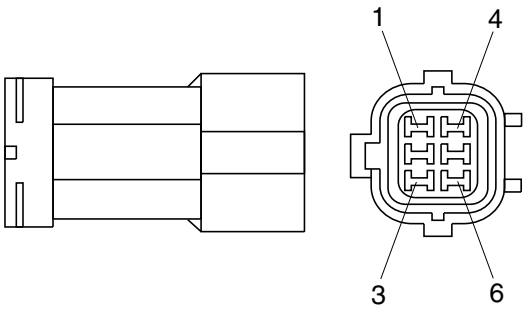
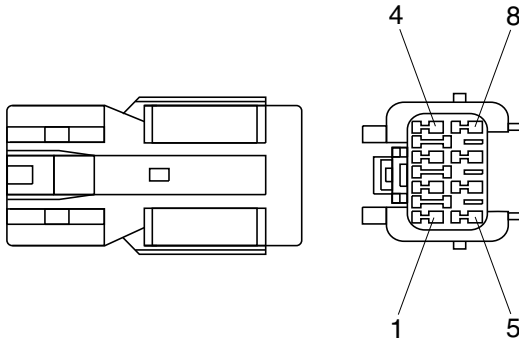
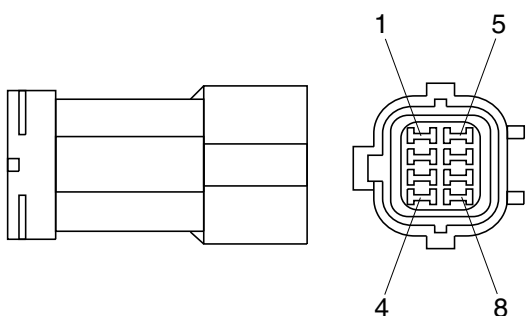
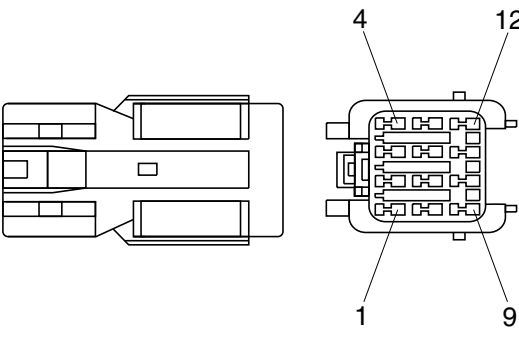
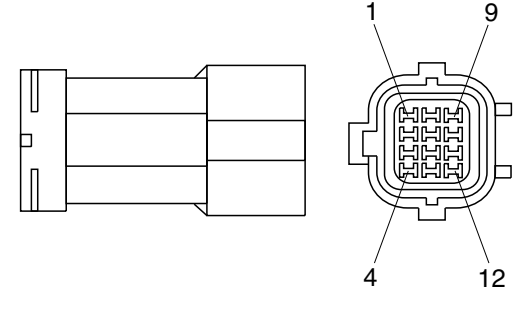
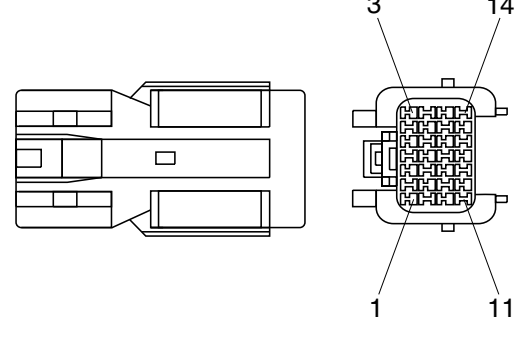
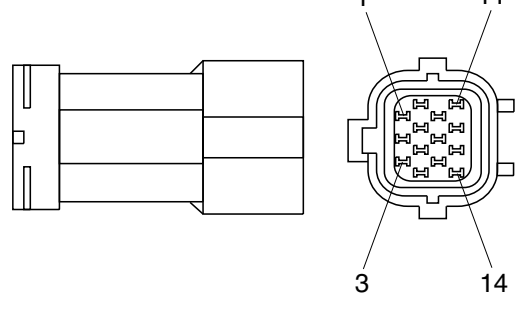
No. of pin	Receptacle connector (female)	Plug connector (male)
13	 S811-013002	 S811-113002
17	 S811-017002	 S811-117002
21	 S811-021002	 S811-121002

2) J TYPE CONNECTOR

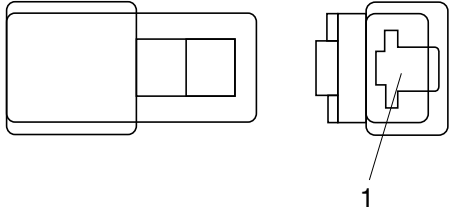
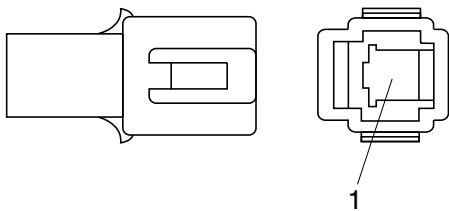
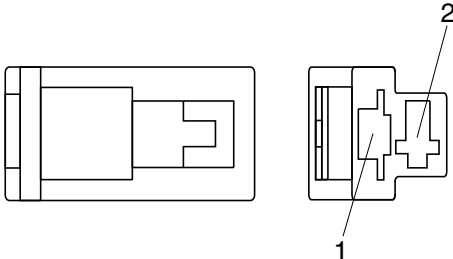
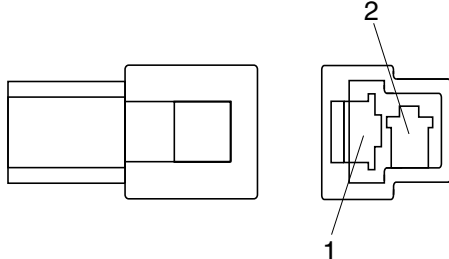
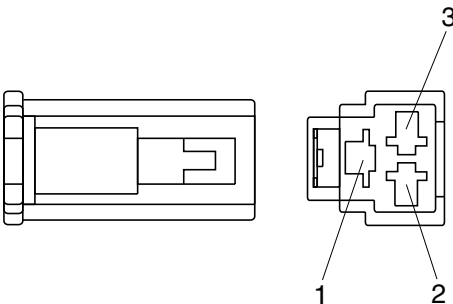
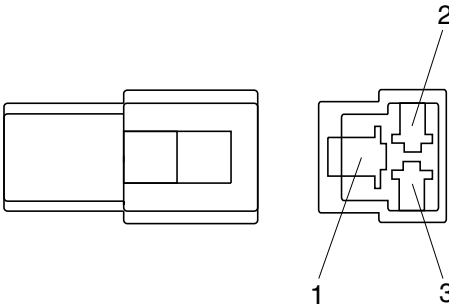
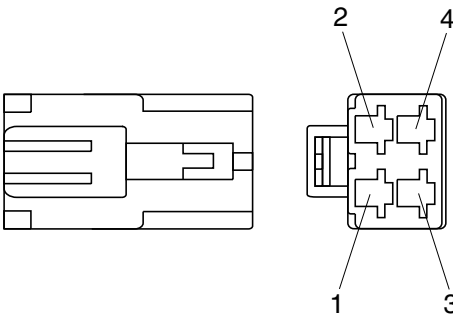
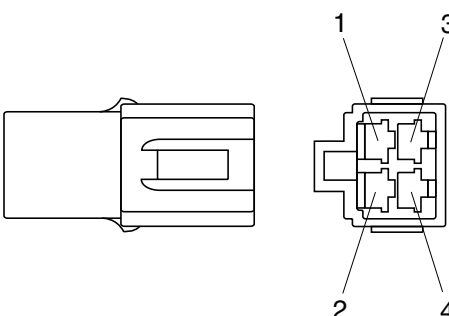
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 S816-002001	 S816-102001
3	 S816-003001	 S816-103001
4	 S816-004001	 S816-104001
8	 S816-008001	 S816-108001

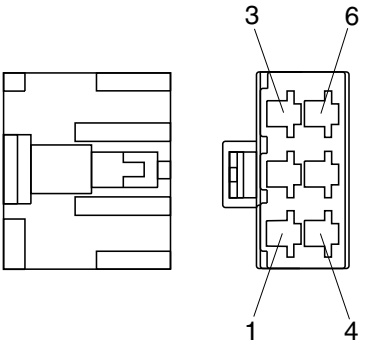
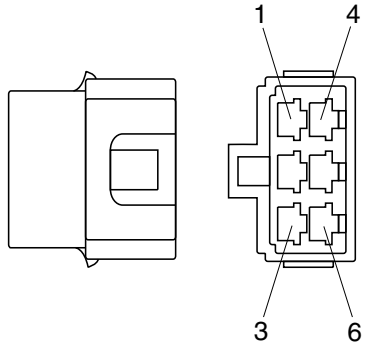
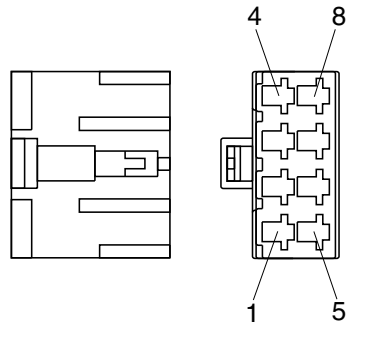
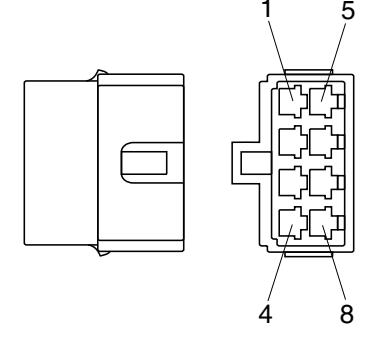
3) SWP TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 S814-001000	 S814-101000
2	 S814-002000	 S814-102000
3	 S814-003000	 S814-103000
4	 S814-004000	 S814-104000

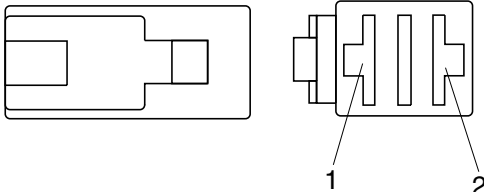
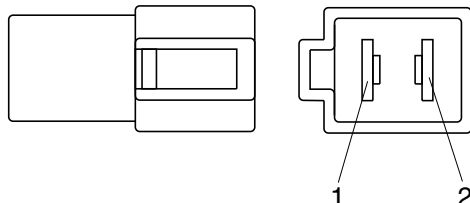
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 S814-006000	 S814-106000
8	 S814-008000	 S814-108000
12	 S814-012000	 S814-112000
14	 S814-014000	 S814-114000

4) CN TYPE CONNECTOR

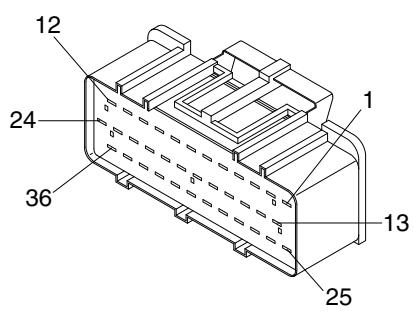
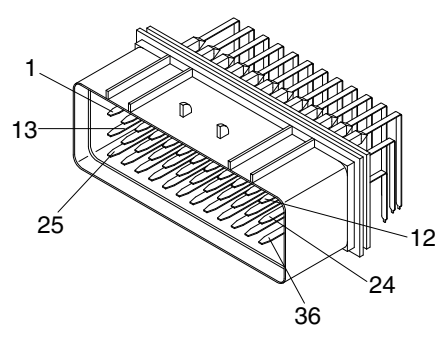
No. of pin	Receptacle connector (female)	Plug connector (male)
1	 S810-001202	 S810-101202
2	 S810-002202	 S810-102202
3	 S810-003202	 S810-103202
4	 S810-004202	 S810-104202

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 S810-006202	 S810-106202
8	 S810-008202	 S810-108202

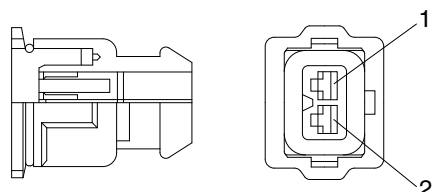
5) 375 FASTEN TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 S810-002402	 S810-102402

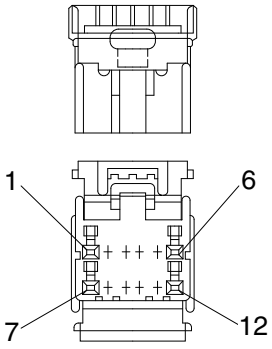
6) AMP ECONOSEAL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
36	 344111-1	 344108-1

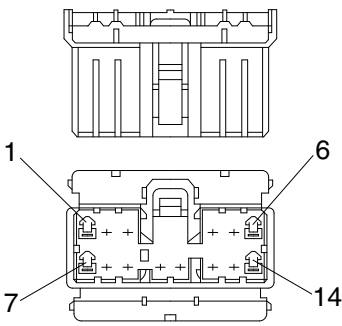
7) AMP TIMER CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 85202-1	

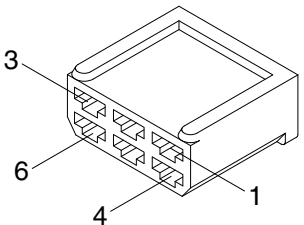
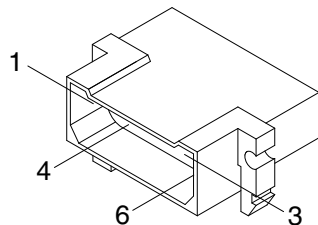
8) AMP 040 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
12	 174045-2	

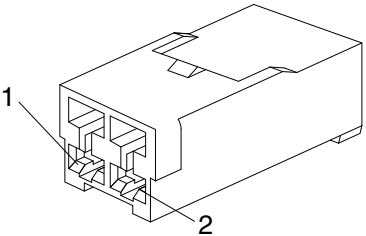
9) AMP 070 MULTILOCK CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 173852	

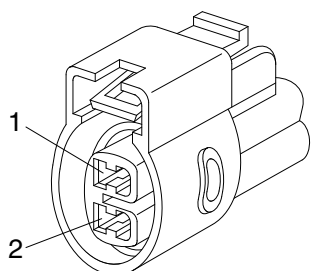
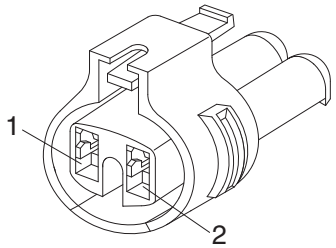
10) AMP FASTIN - FASTON CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 925276-0	 480003-9

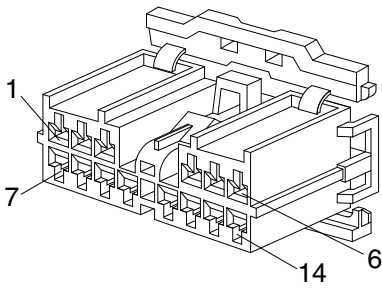
11) KET 090 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 MG610070	

12) KET 090 WP CONNECTORS

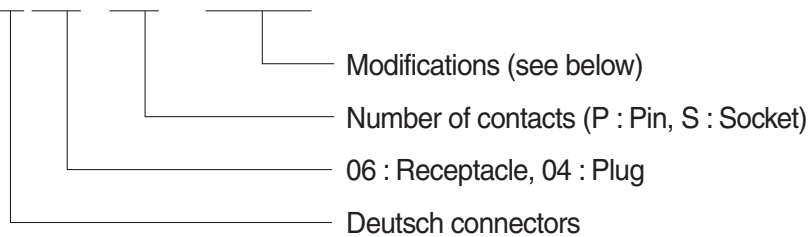
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 MG640605	
2	 MG640795	

13) KET SDL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 MG610406	

14) DEUTSCH DT CONNECTORS

DT 06 - 3S - ★★★★★



※ Modification

E003 : Standard end cap - gray

E004 : Color of connector to be black

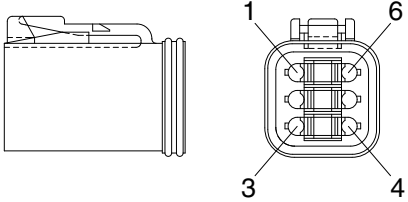
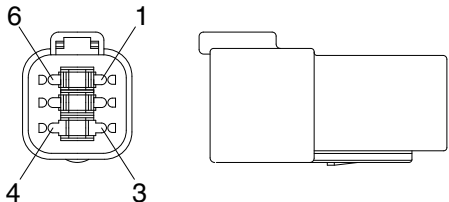
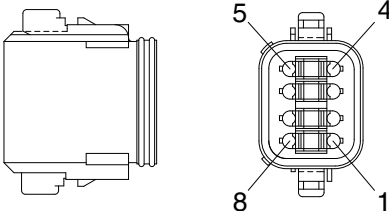
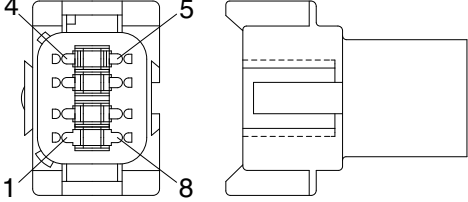
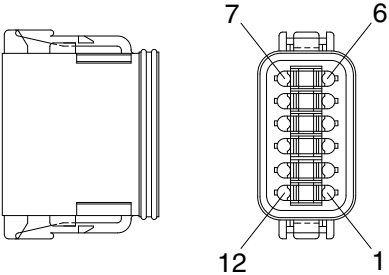
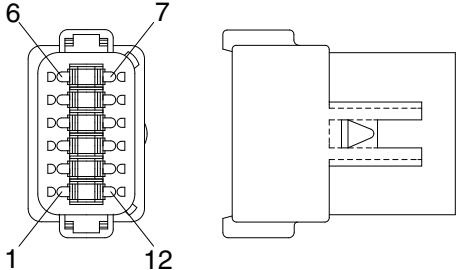
E005 : Combination - E004 & E003

EP04 : End cap

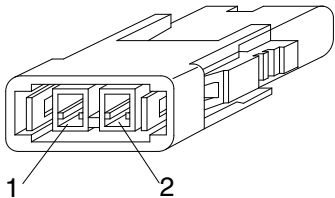
EP06 : Combination P012 & EP04

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

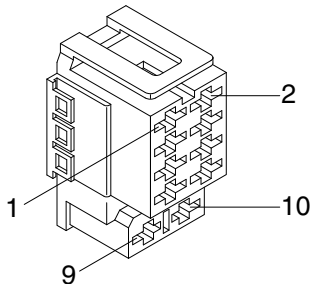
No. of pin	Receptacle connector (female)	Plug connector (male)
2	DT06-2S	DT04-2P
3	DT06-3S	DT04-3P
4	DT06-4S	DT04-4P

No. of pin	Receptacle connector (female)	Plug connector (male)
6	 DT06-6S	 DT04-6P
8	 DT06-8S	 DT04-8P
12	 DT06-12S	 DT04-12P

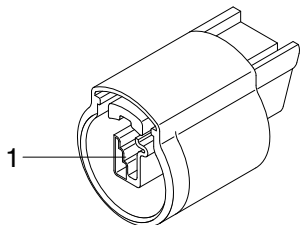
15) MOLEX 2CKTS CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 35215-0200	

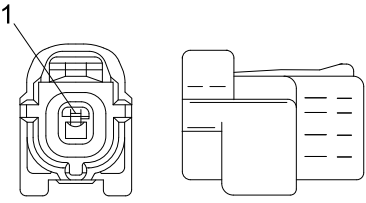
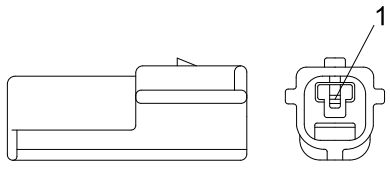
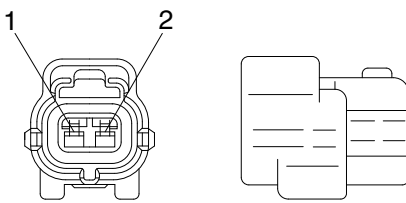
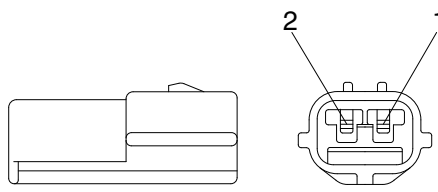
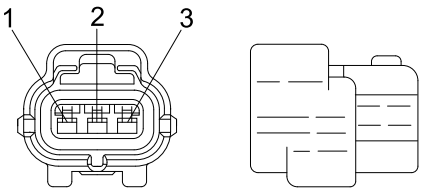
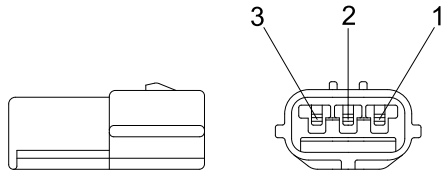
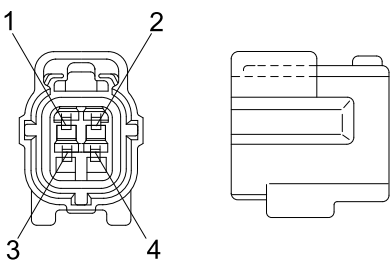
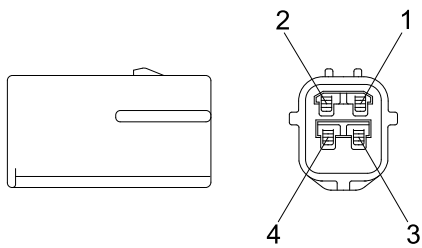
16) ITT SWF CONNECTOR

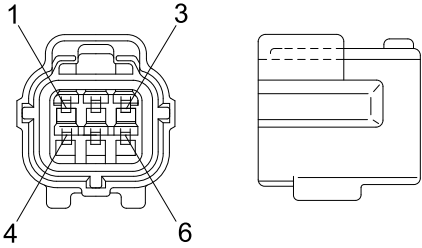
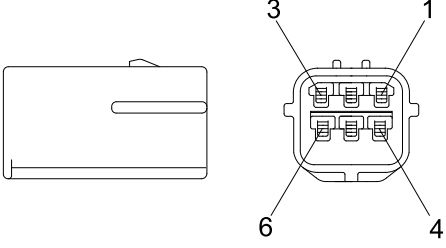
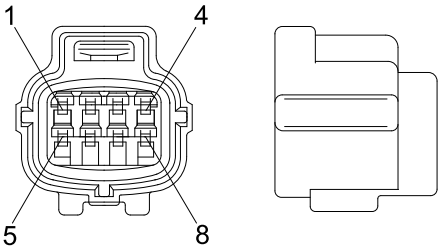
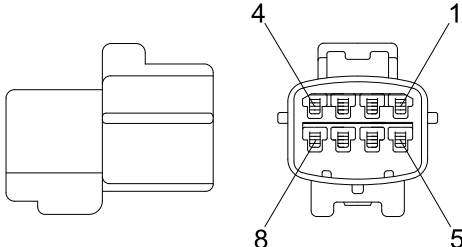
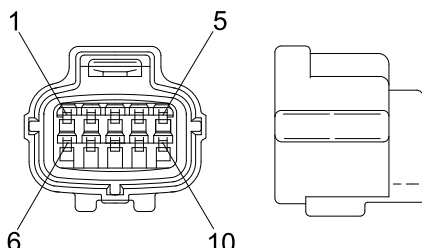
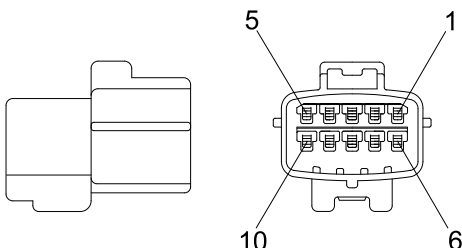
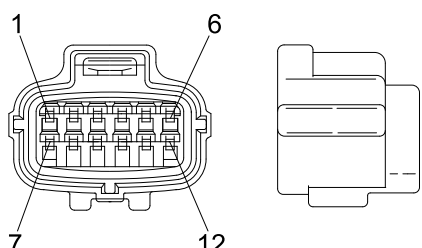
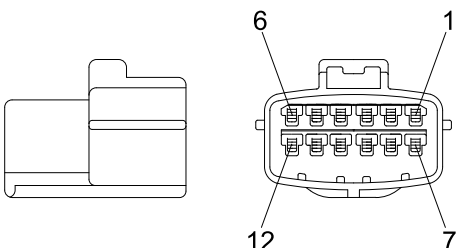
No. of pin	Receptacle connector (female)	Plug connector (male)
10	 SWF593757	

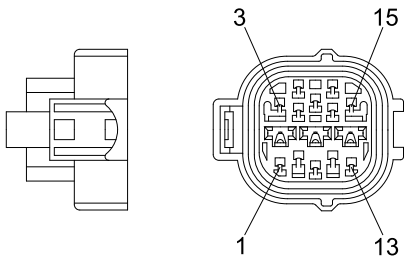
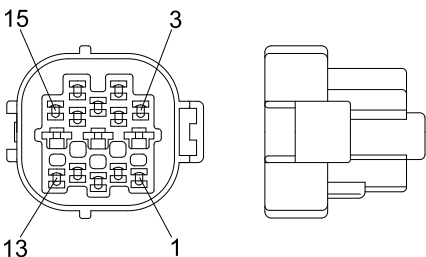
17) MWP NMWP CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 NMWP01F-B	

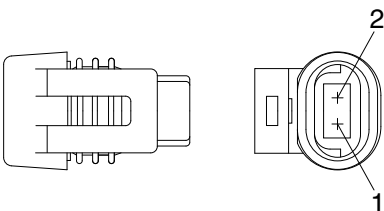
18) ECONOSEAL J TYPE CONNECTORS

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 S816-001002	 S816-101002
2	 S816-002002	 S816-102002
3	 S816-003002	 S816-103002
4	 S816-004002	 S816-104002

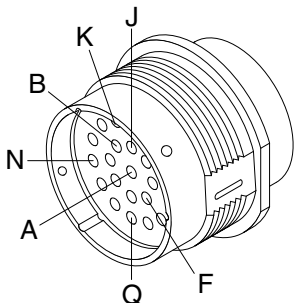
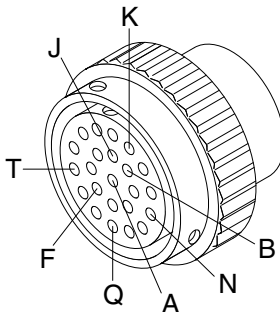
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 S816-006002	 S816-106002
8	 S816-008002	 S816-108002
10	 S816-010002	 S816-110002
12	 S816-012002	 S816-112002

No. of pin	Receptacle connector (female)	Plug connector (male)
15	 368301-1	 2-85262-1

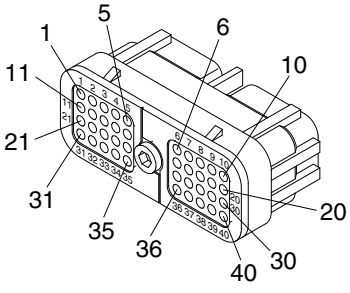
19) METRI-PACK TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
2	 12040753	

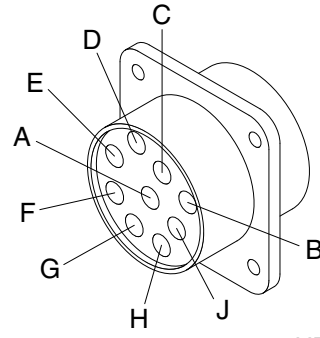
20) DEUTSCH HD30 CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
23	 HD36-24-23SN	 HD34-24-23PN

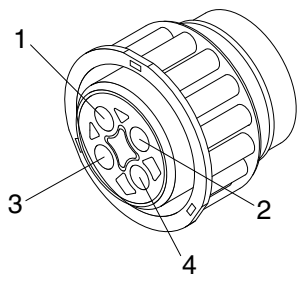
21) DEUTSCH MCU CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
40	 DRC26-40SA/B	

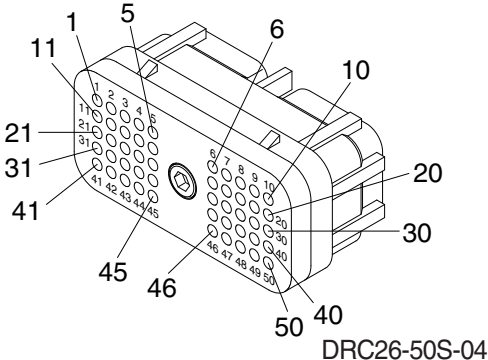
22) DEUTSCH SERVICE TOOL CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
9	 HD10-9-96P	

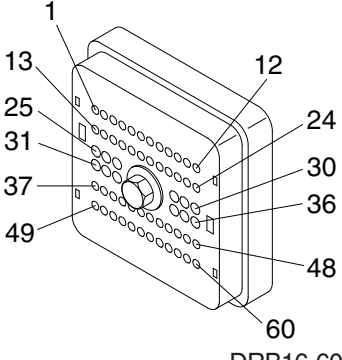
23) AMP FUEL WARMER CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
4	 2-967325-3	

24) DEUTSCH ENGINE ECM CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
50	 DRC26-50S-04	

25) DEUTSCH INTERMEDIATE CONNECTOR

No. of pin	Receptacle connector (Female)	Plug connector (Male)
60	 DRB16-60SAE-L018	