

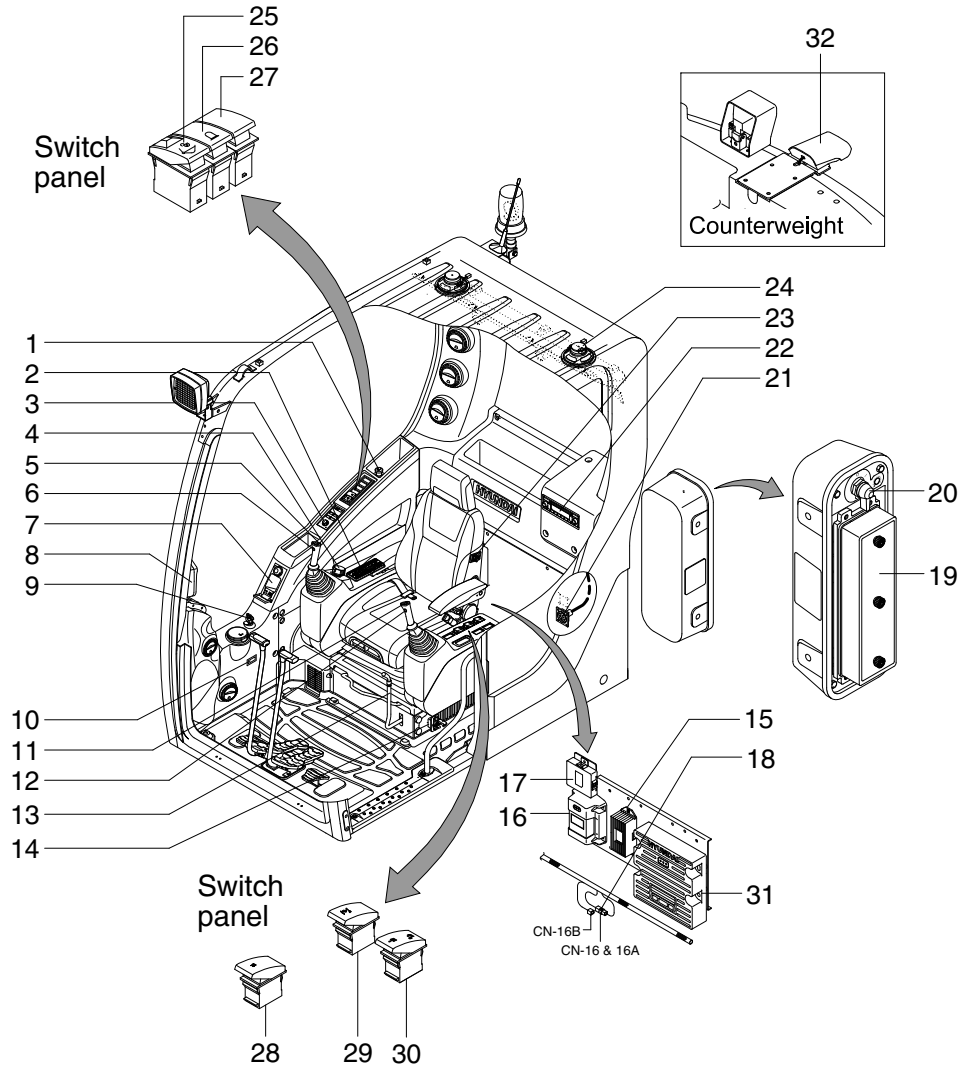
SECTION 4 ELECTRICAL SYSTEM

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SECTION 4 ELECTRICAL SYSTEM

GROUP 1 COMPONENT LOCATION

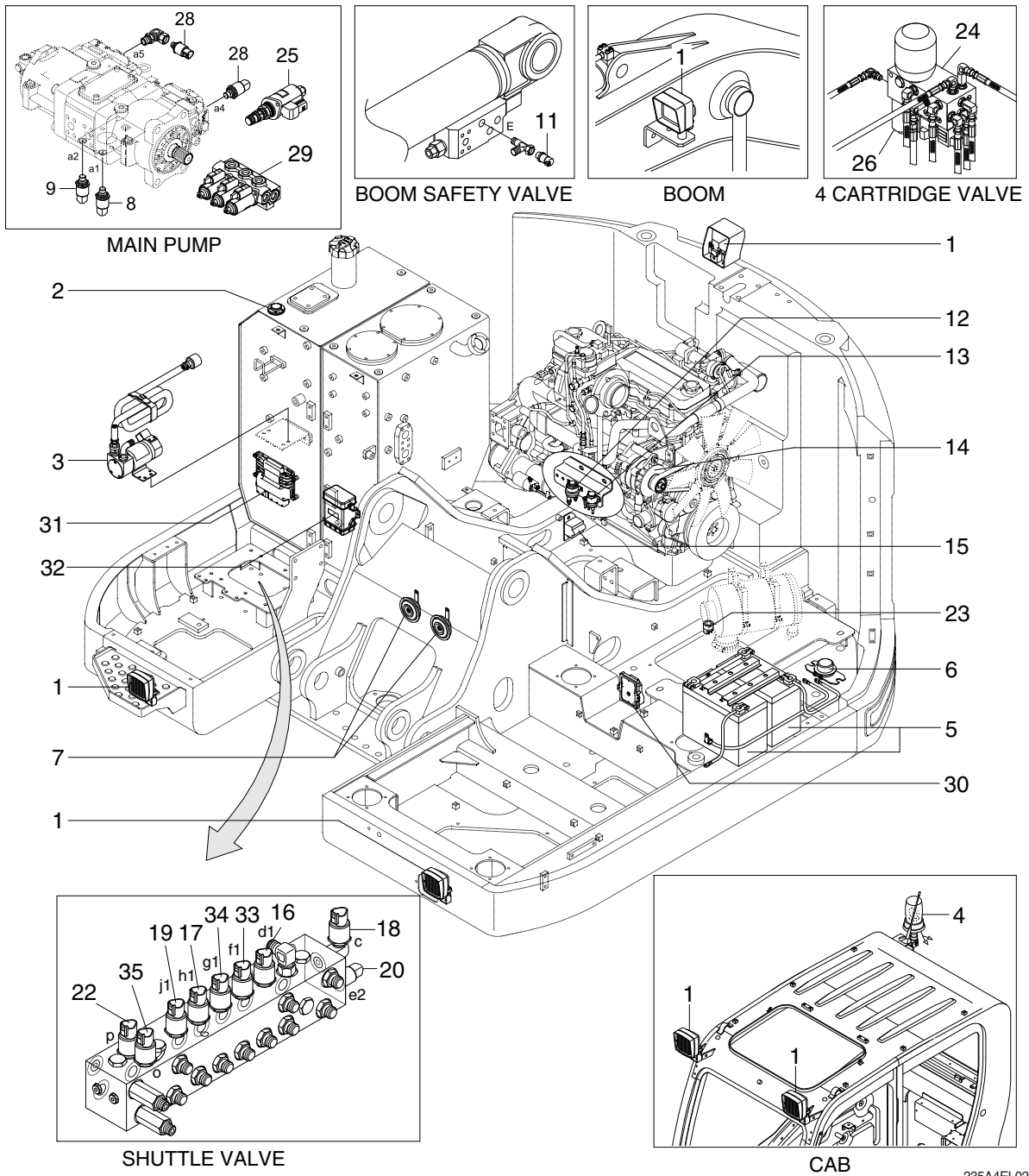
1. LOCATION 1



235A4EL01

1	Cigar lighter	12	Power max switch	23	Heated seat switch
2	Aircan 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



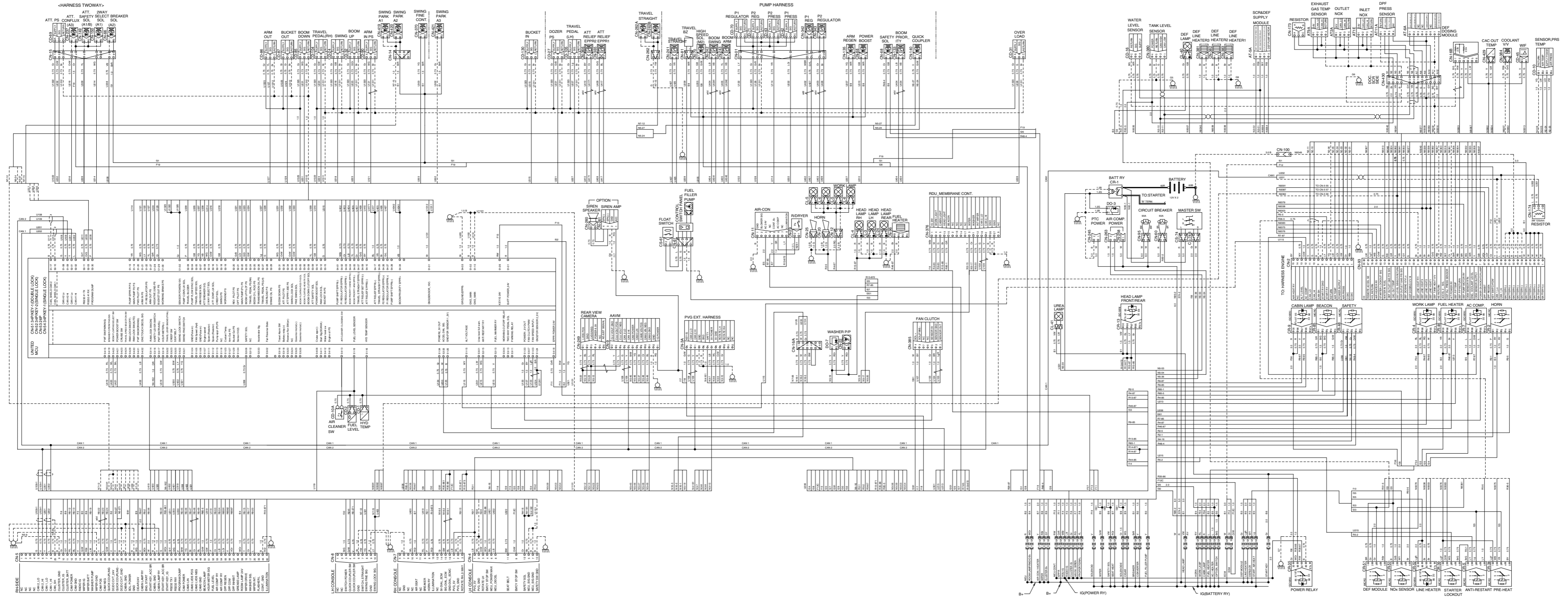
235A4EL02

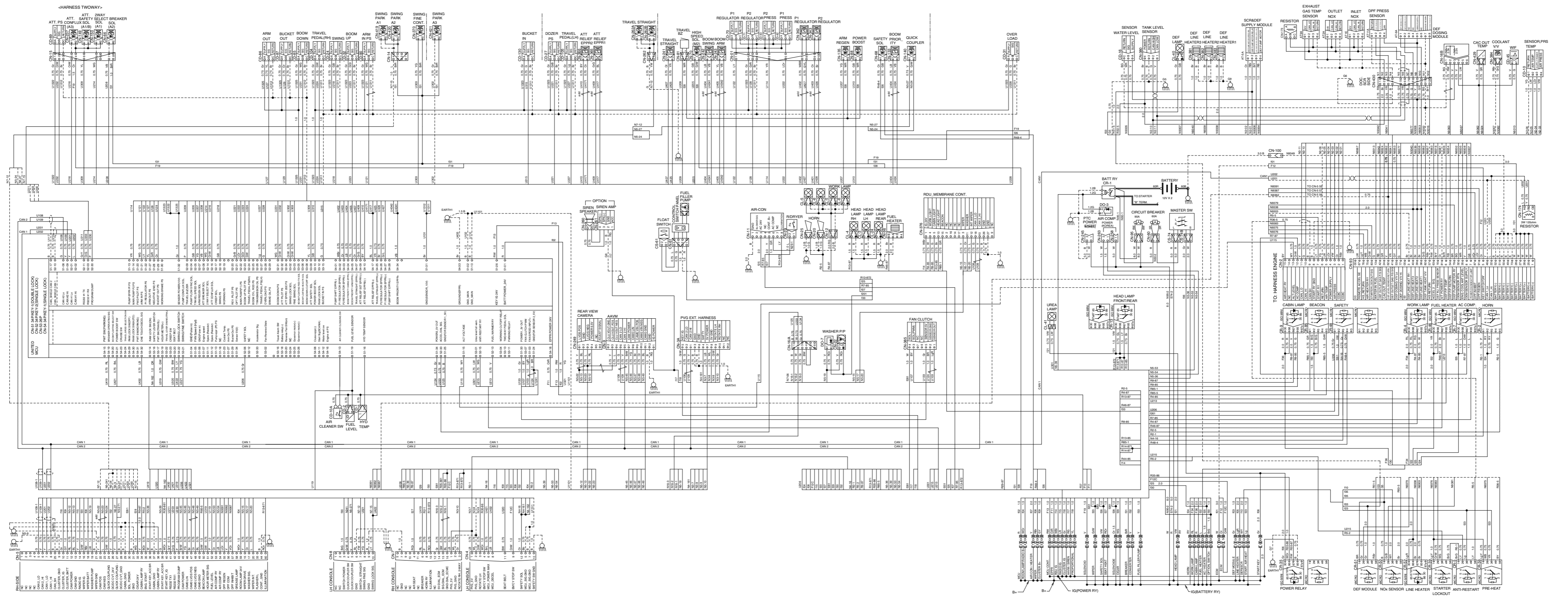
- | | | | | | |
|----|--------------------------|----|---------------------------|----|------------------------------|
| 1 | Lamp | 13 | Heater relay | 25 | Pump EPPR valve |
| 2 | Fuel sender | 14 | Alternator | 26 | Boom priority EPPR valve |
| 3 | Fuel filler pump | 15 | Travel alarm buzzer | 28 | 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 | | |

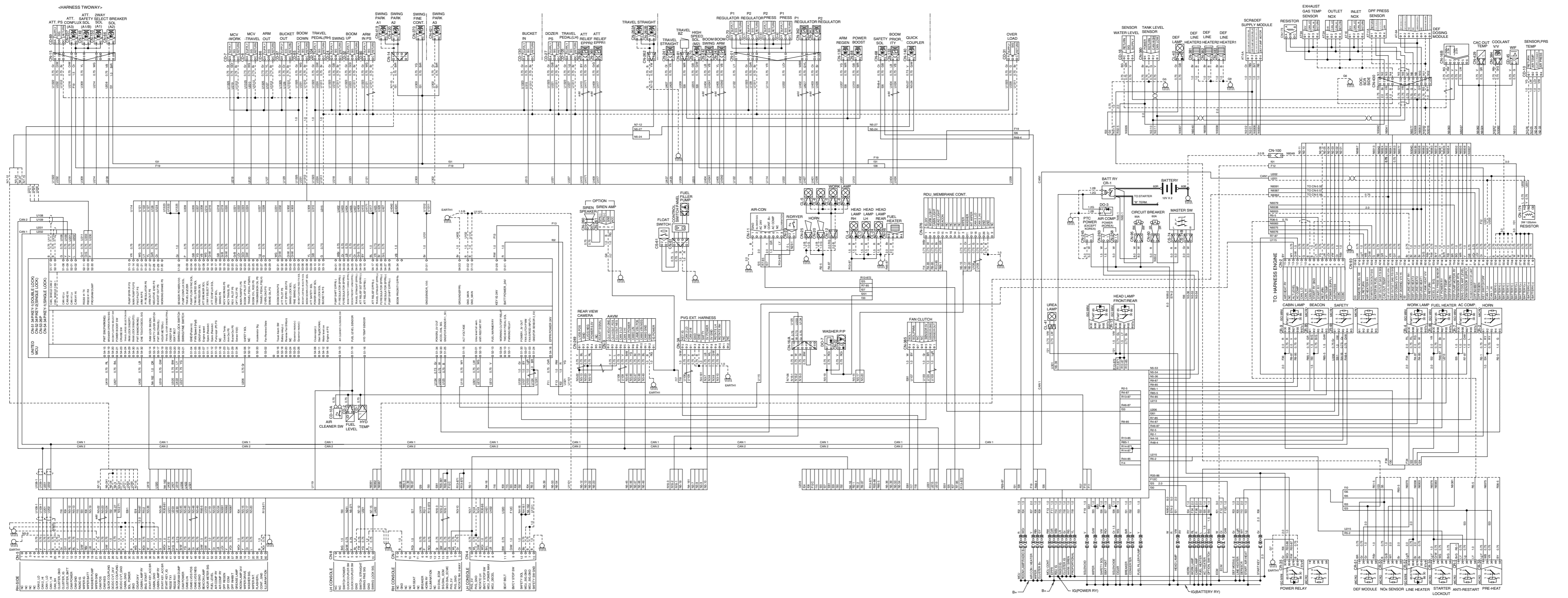
GROUP 2 ELECTRICAL CIRCUIT

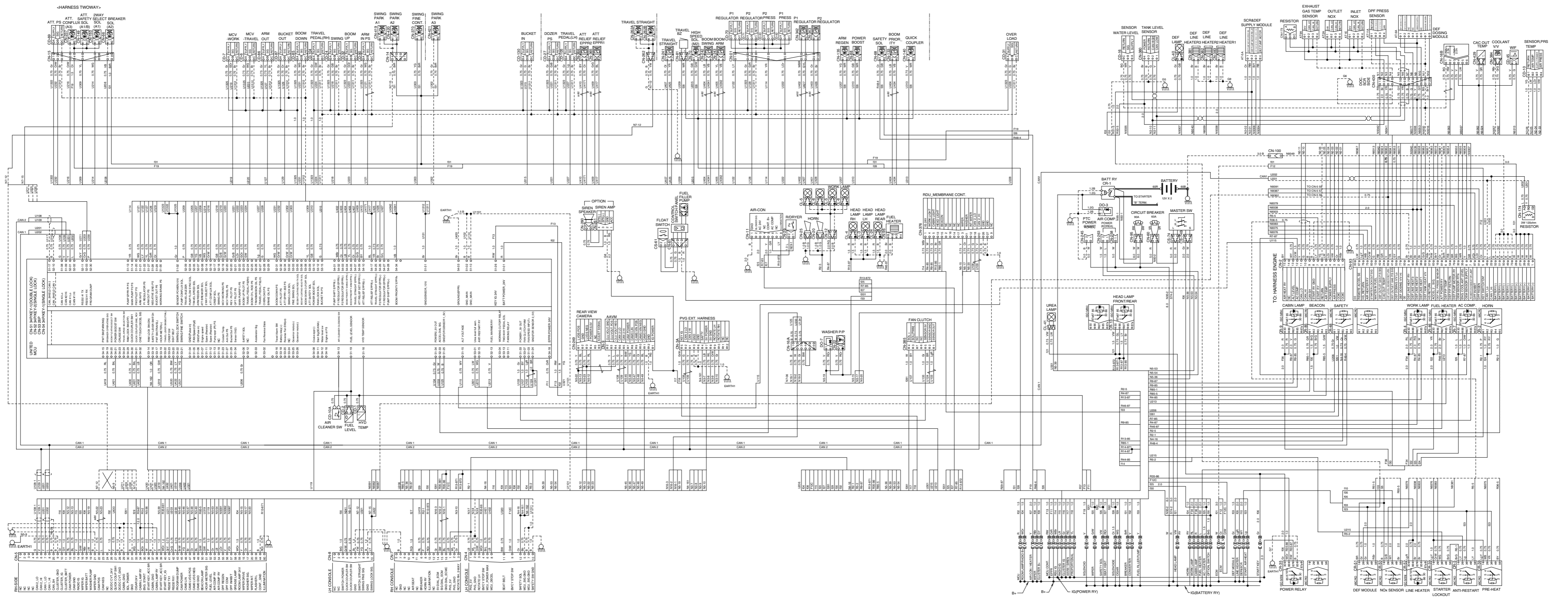
· ELECTRICAL CIRCUIT (1/3)

- MACHINE SERIAL NO. : -#0004



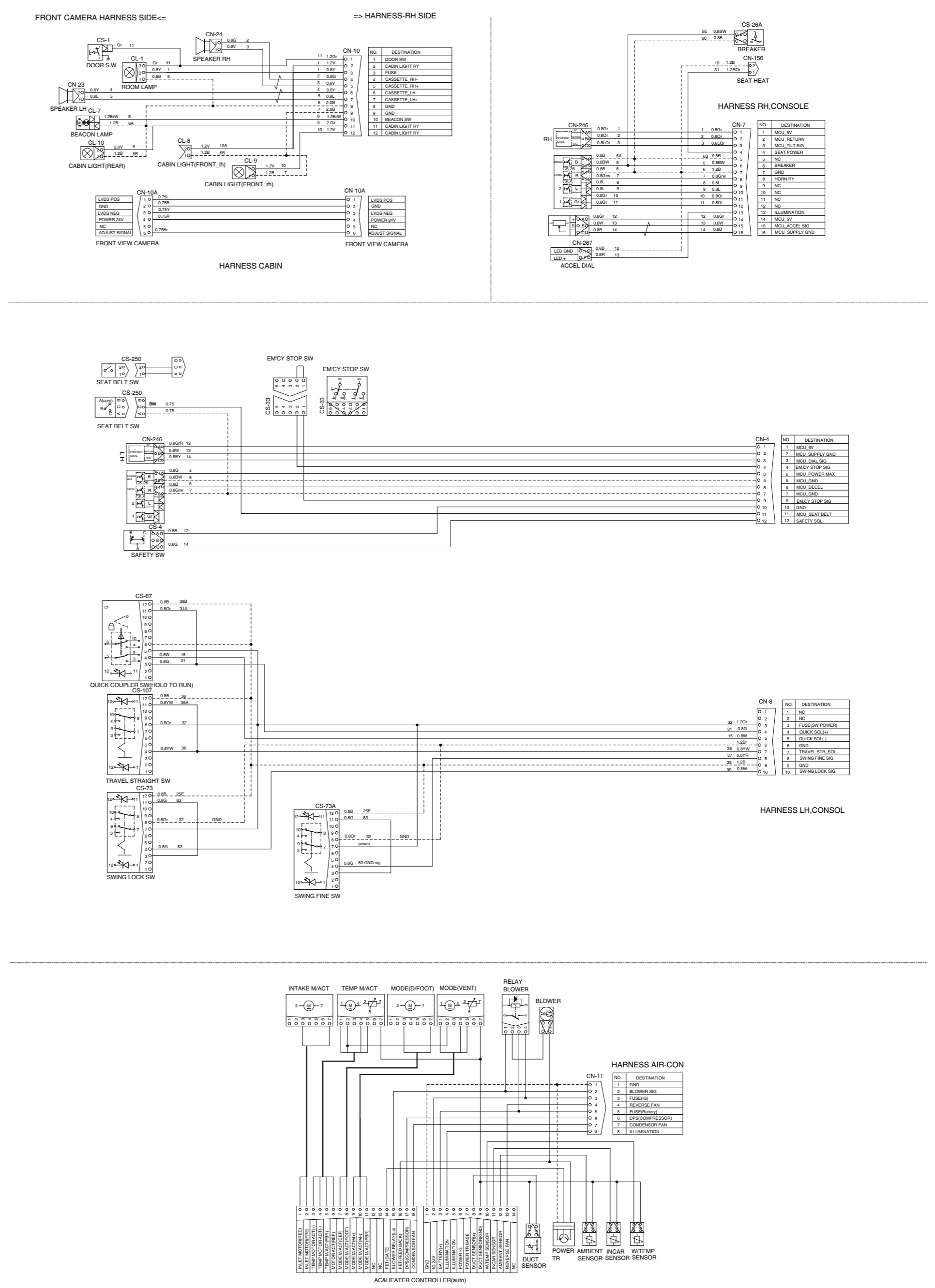
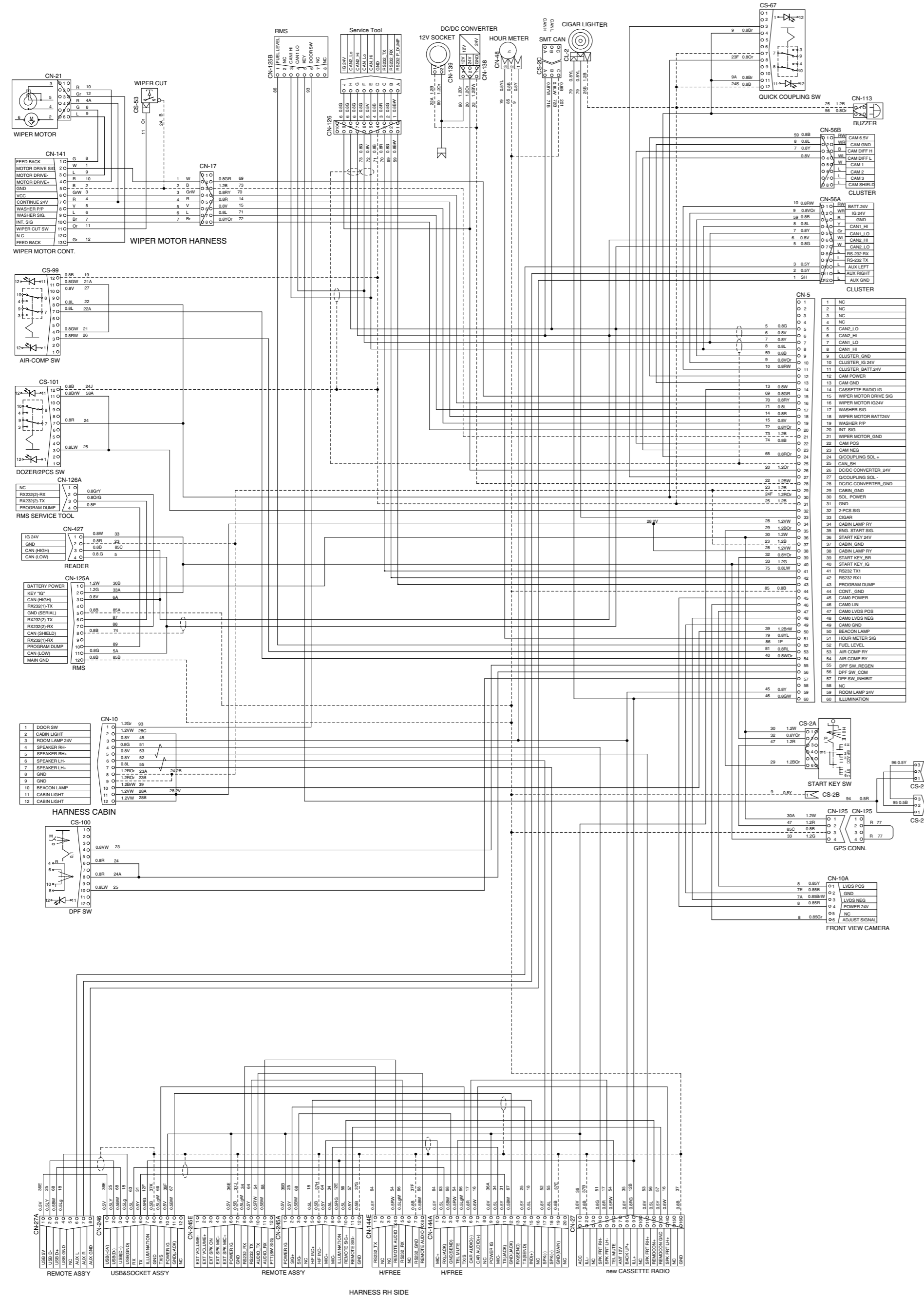


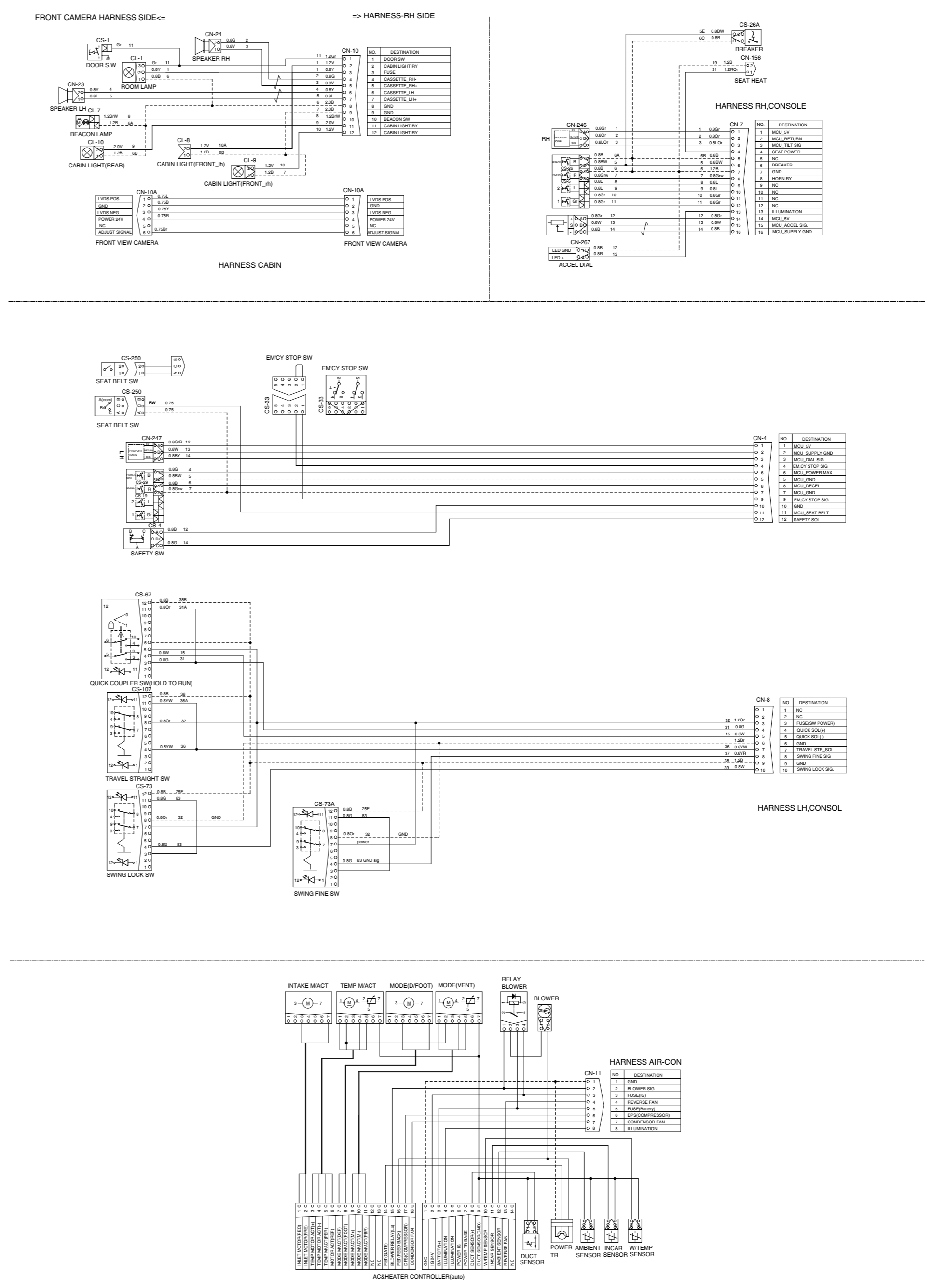
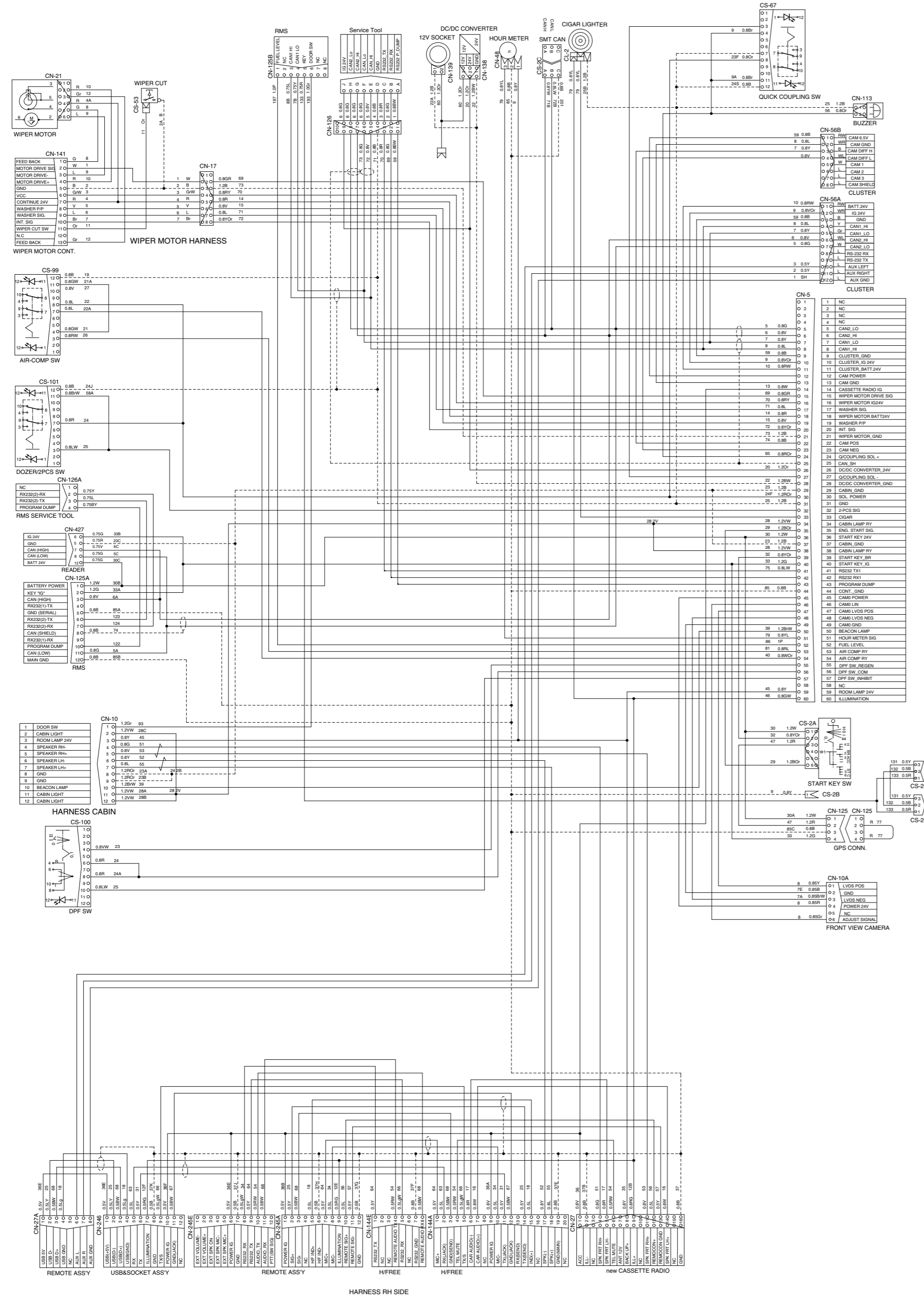


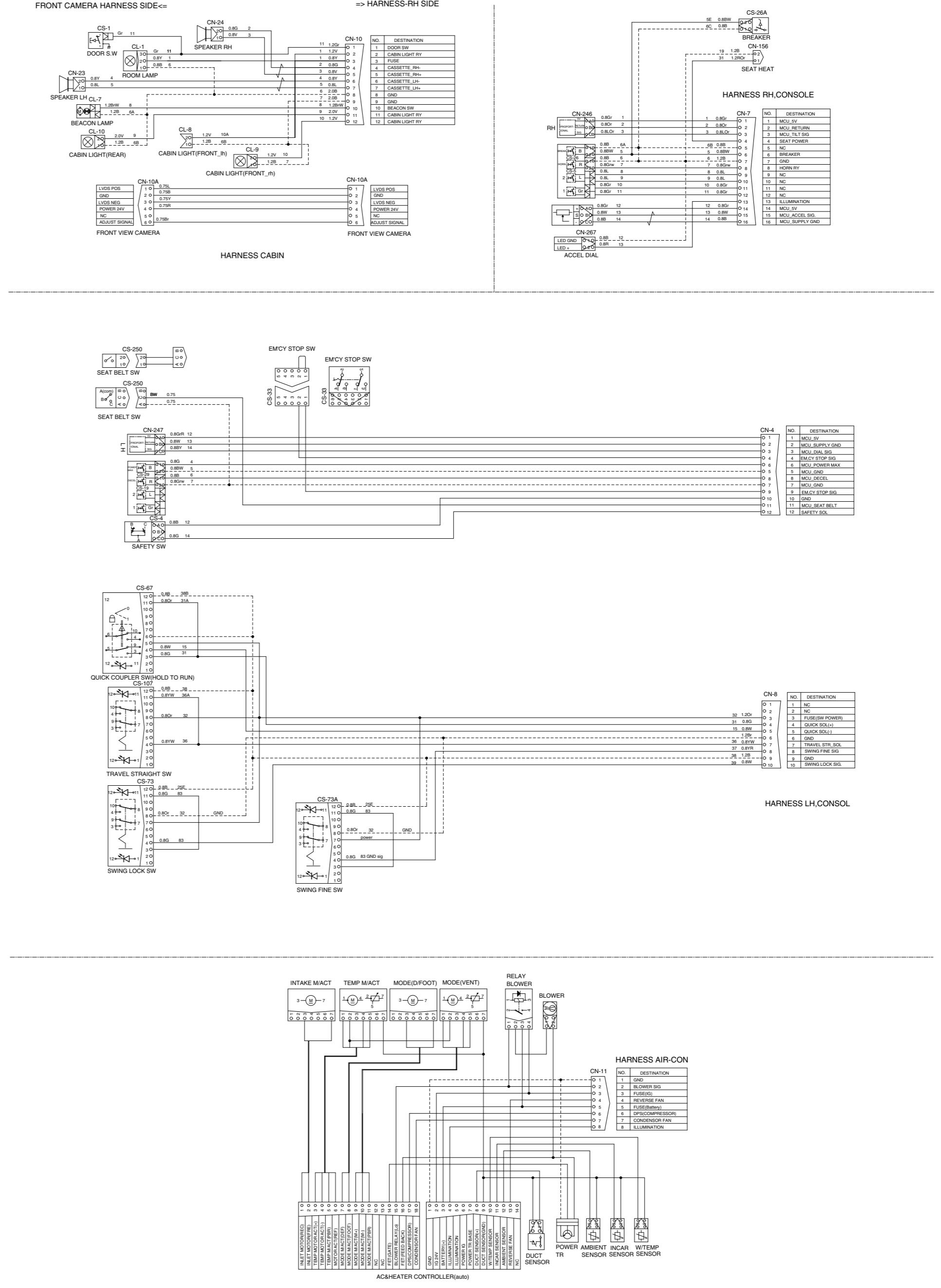
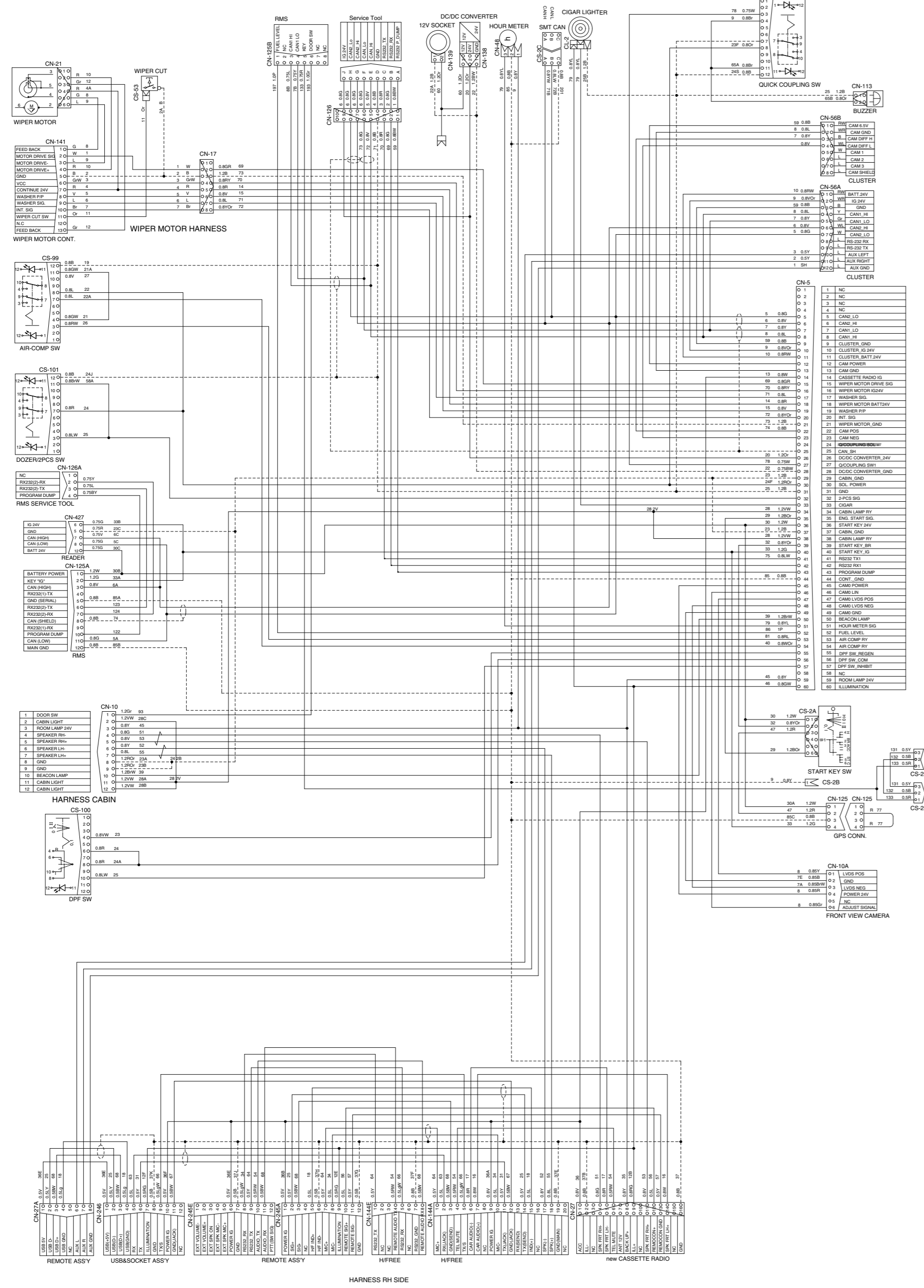


ELECTRICAL CIRCUIT (2/3)

- MACHINE SERIAL NO. : -#0004

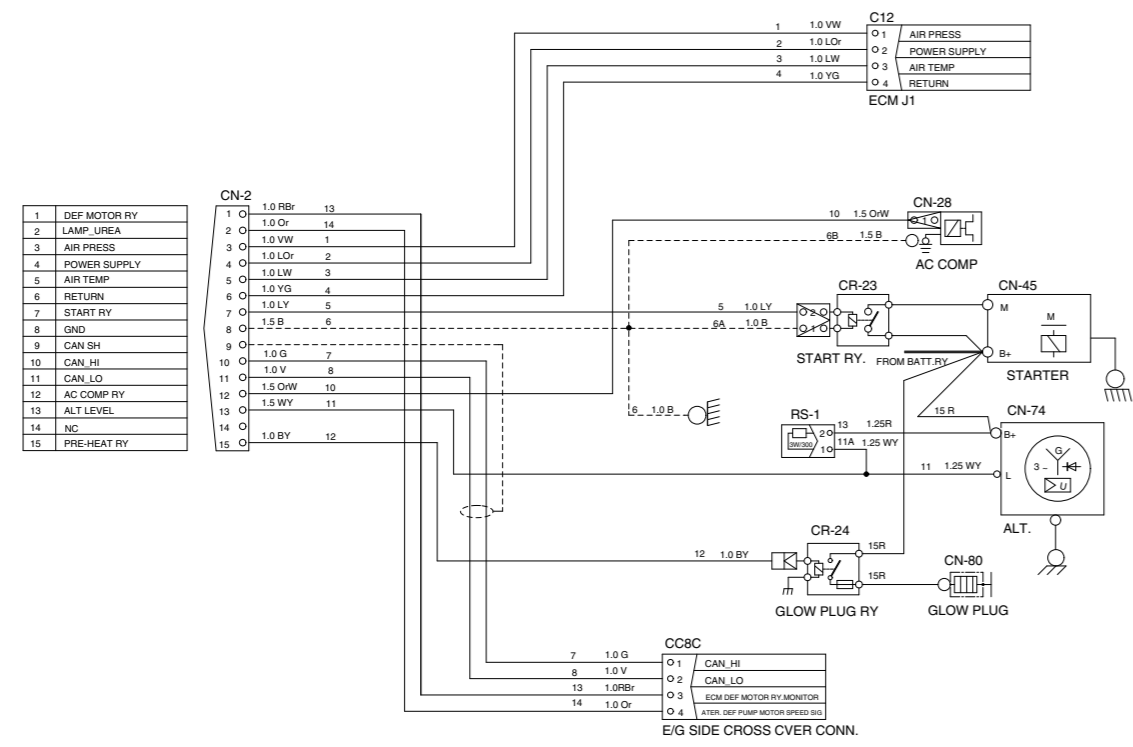




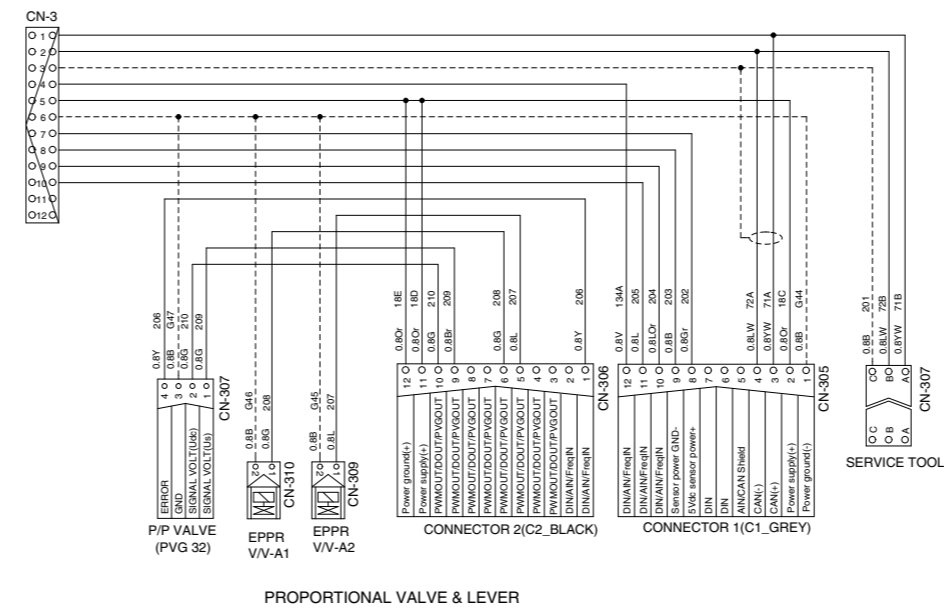


ELECTRICAL CIRCUIT (3/3)

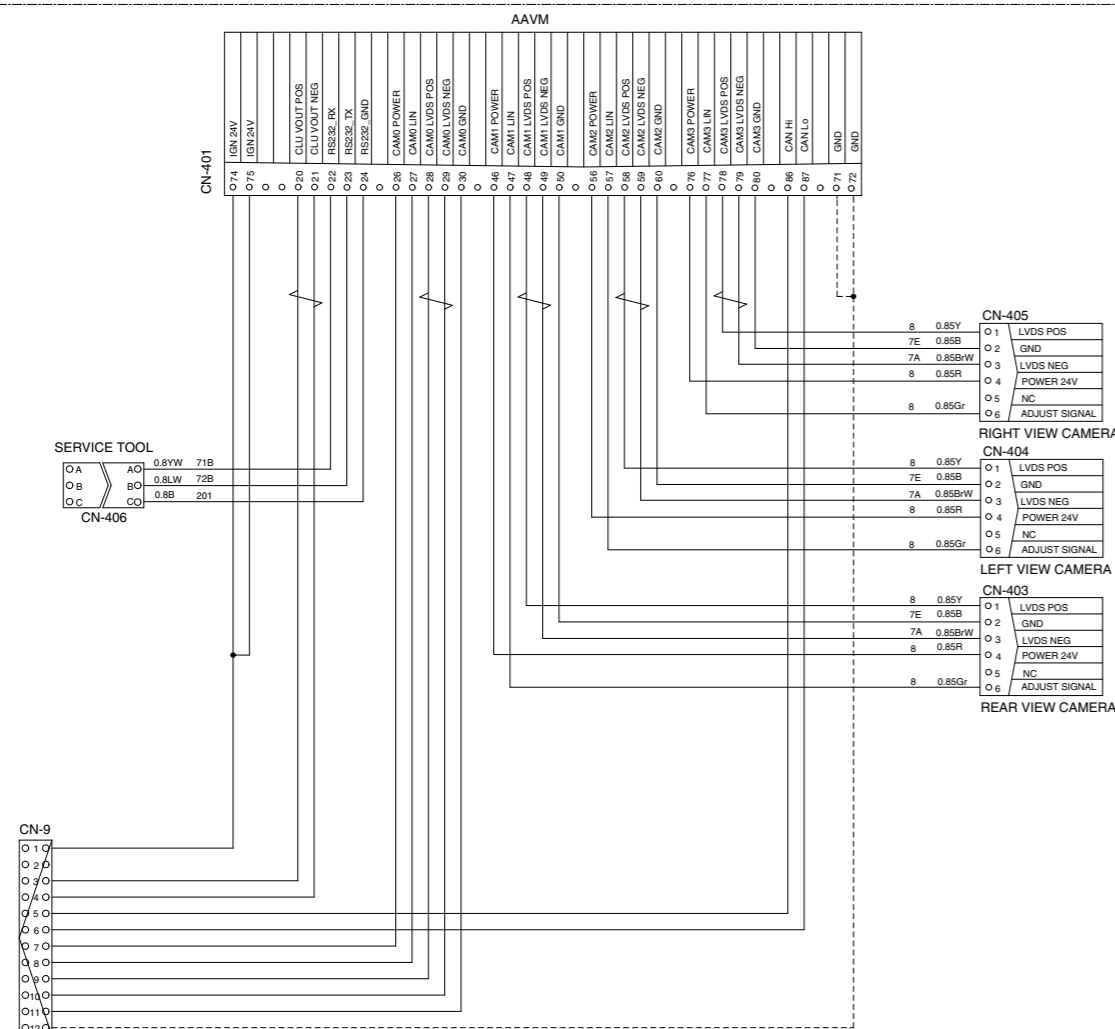
- MACHINE SERIAL NO. : #0004



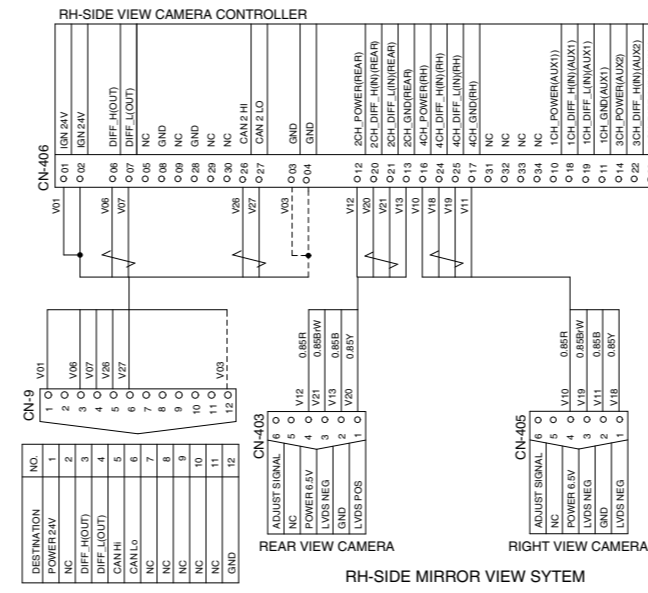
E/G HARNESS



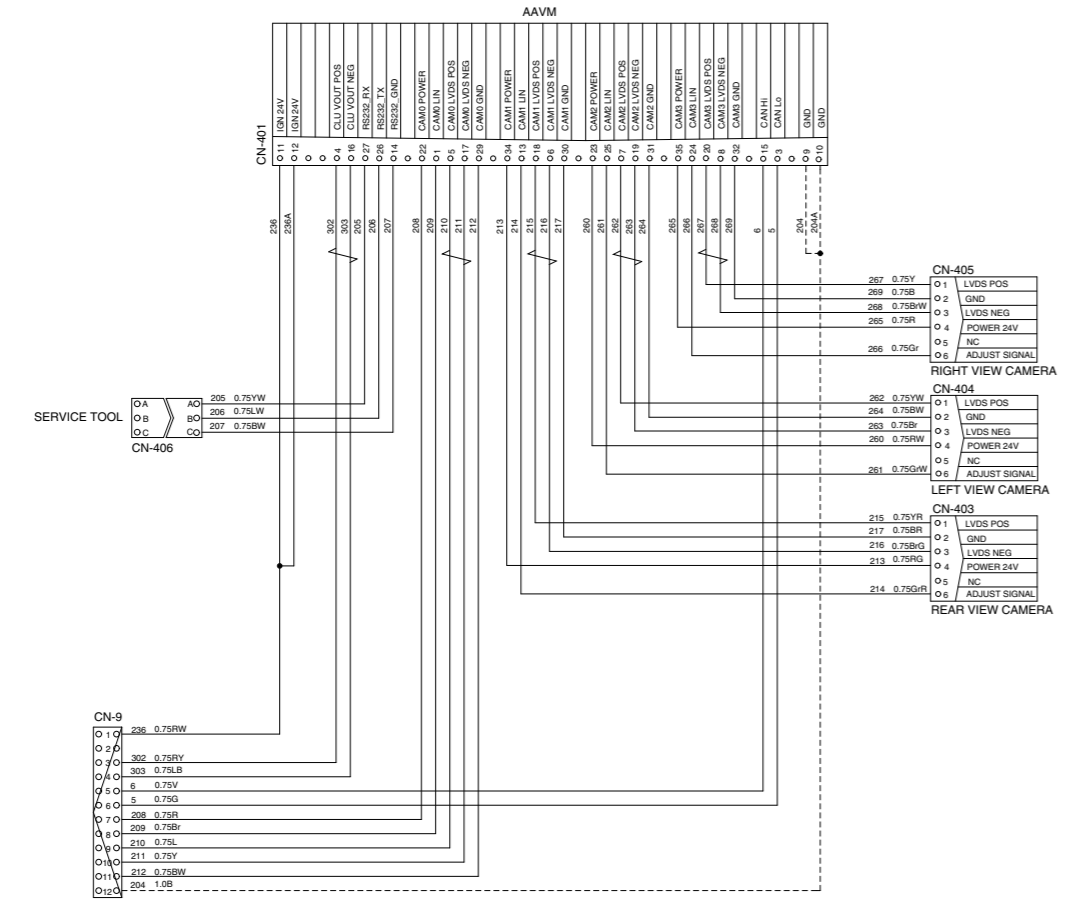
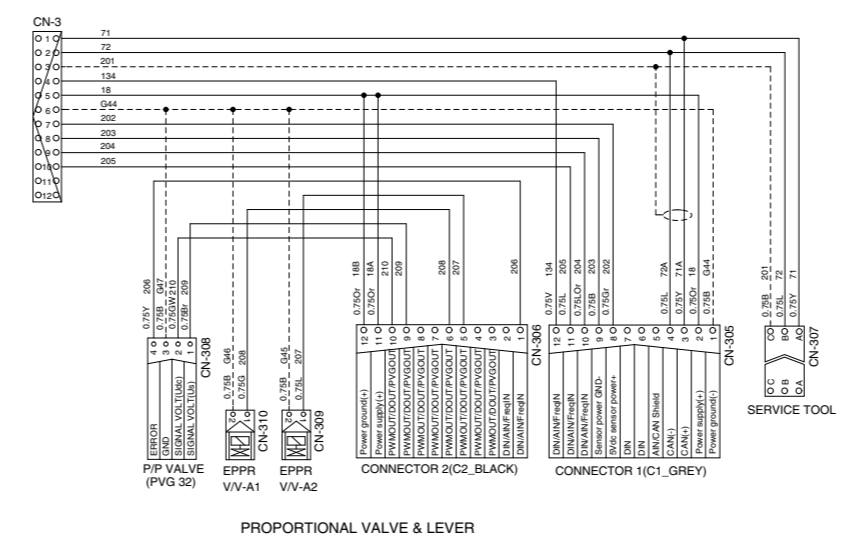
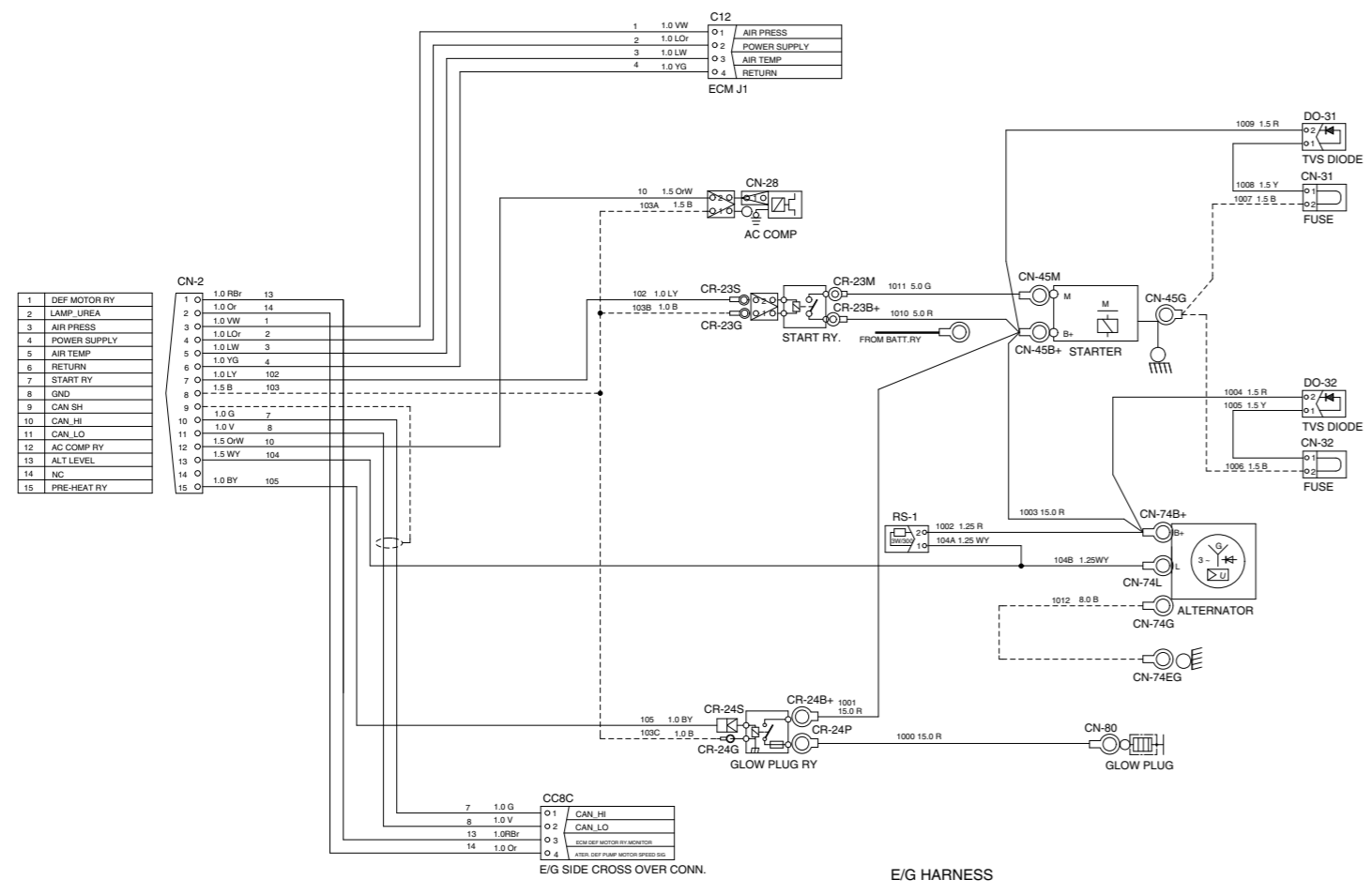
PROPORTIONAL VALVE & LEVER



SERVICE TOOL



RH-SIDE MIRROR VIEW SYSTEM



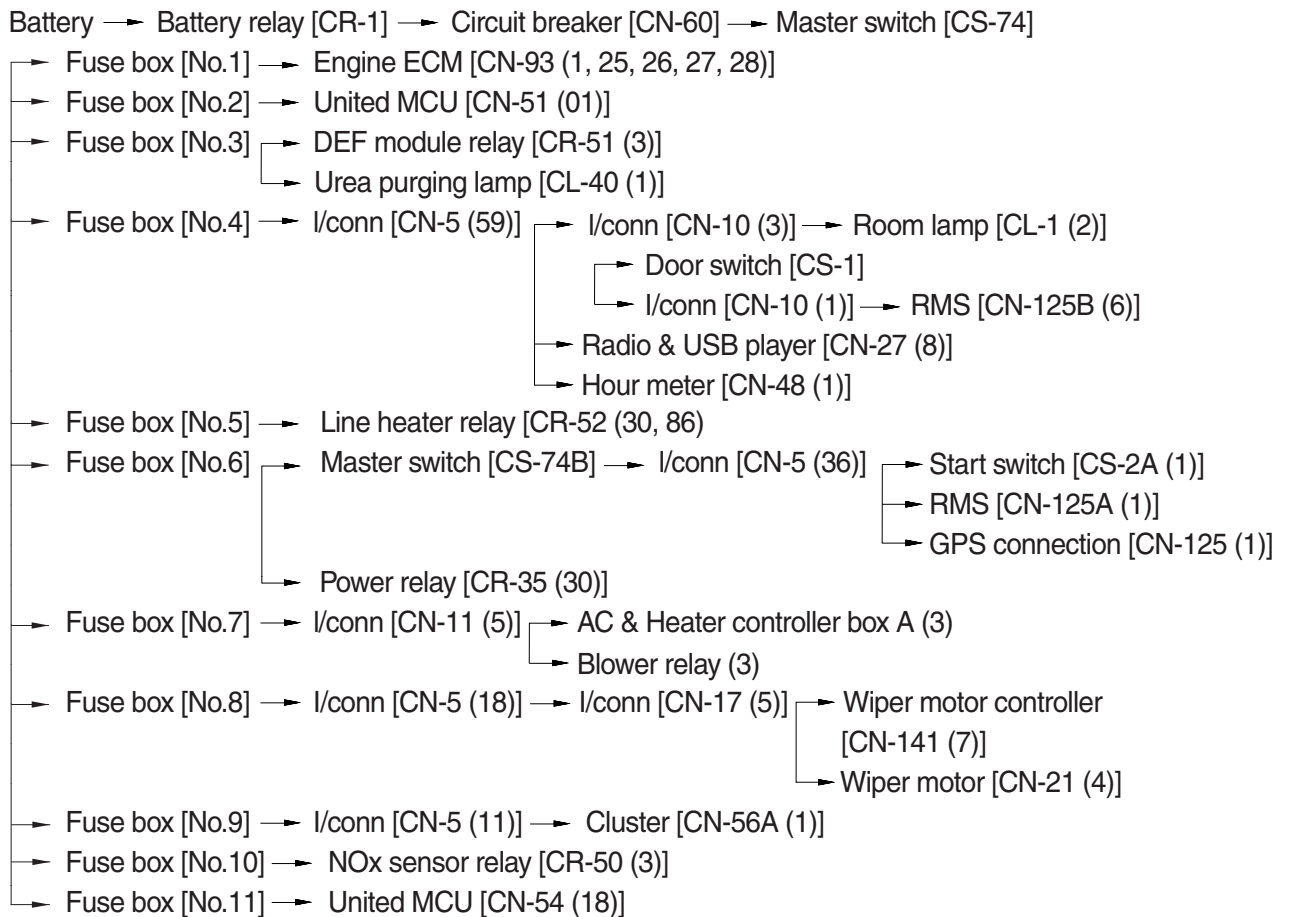
MEMORANDUM

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



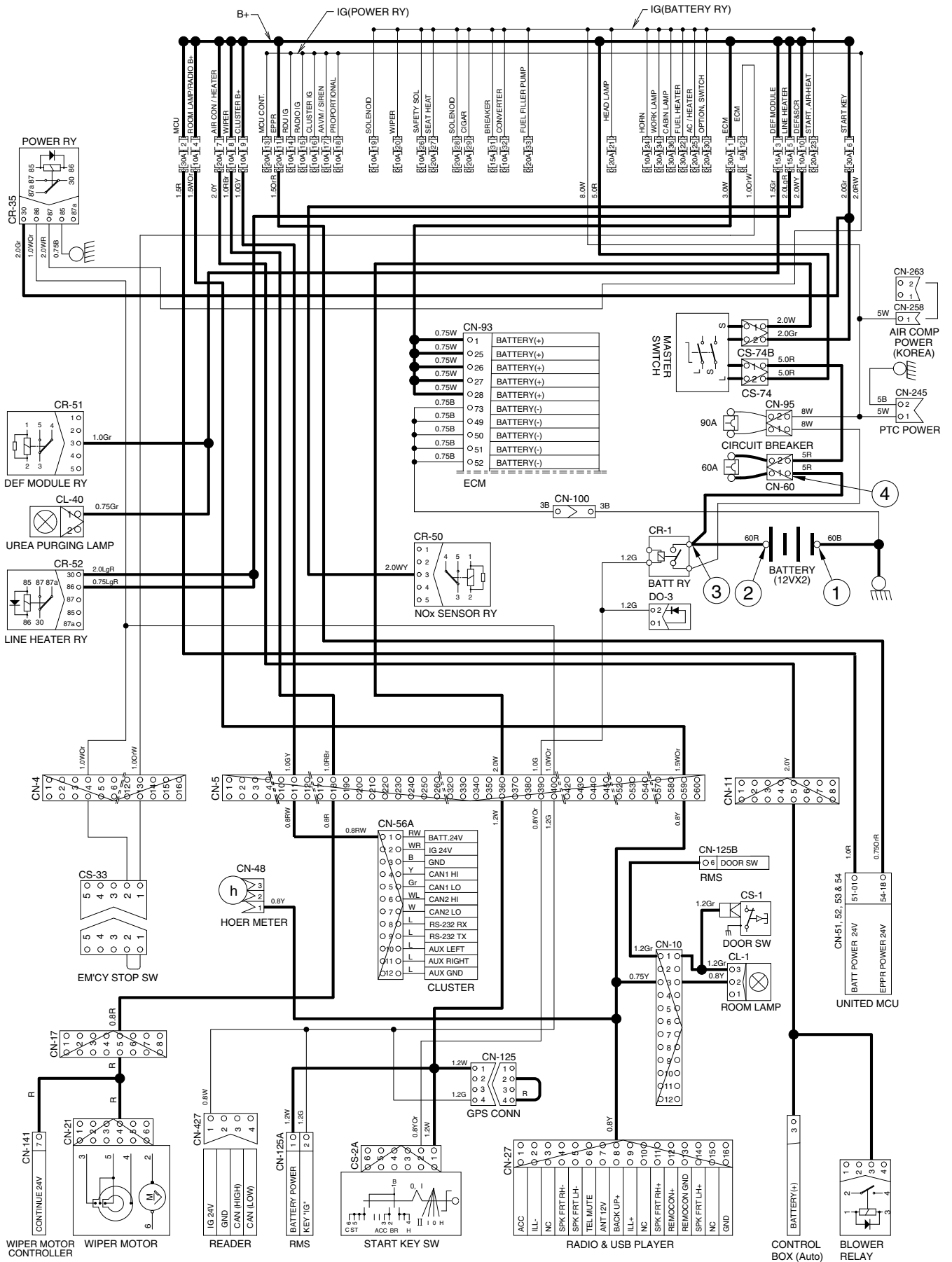
※ I/conn : Intermediate connector

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

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

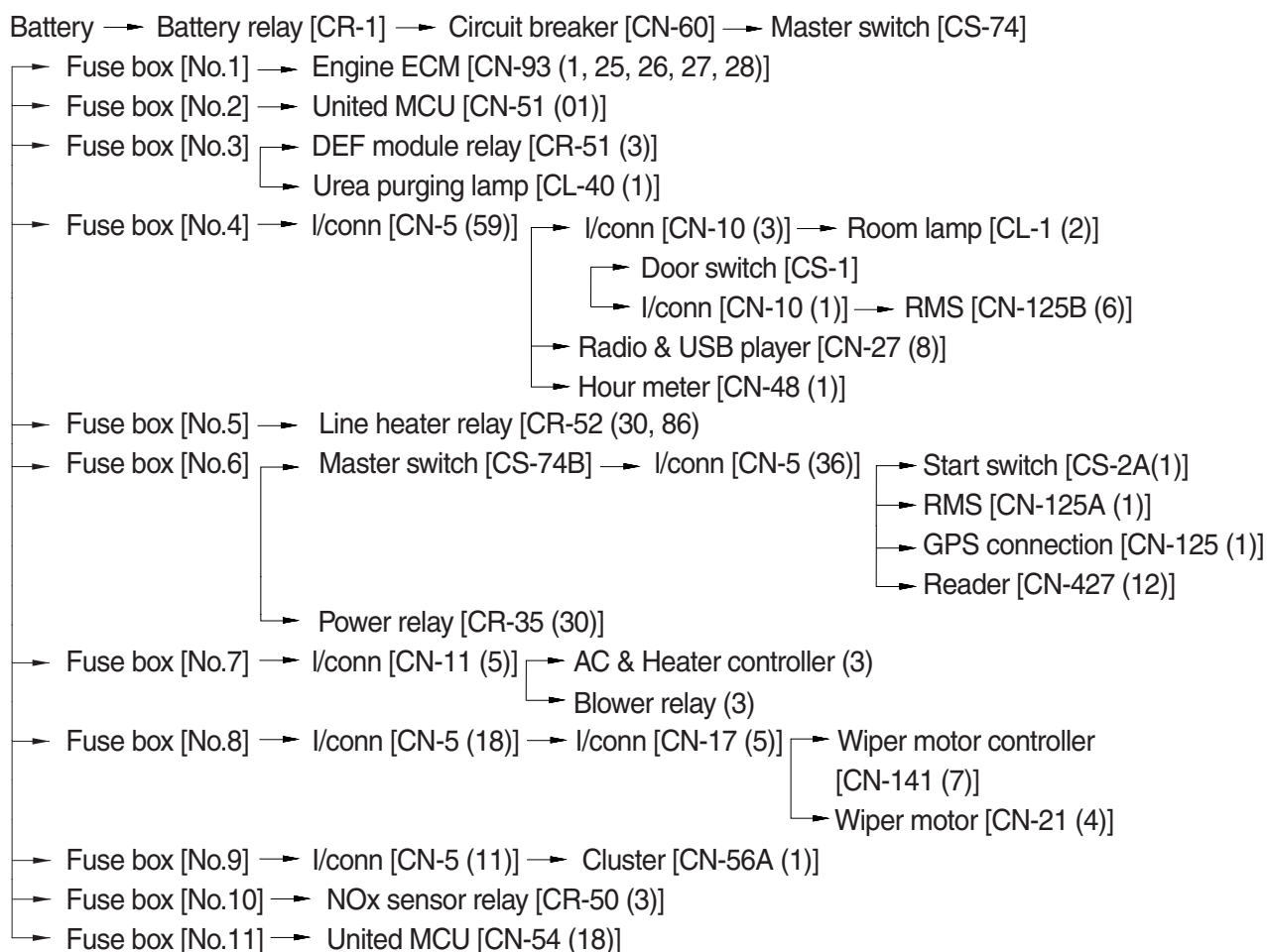


POWER CIRCUIT (MACHINE SERIAL NO. : #0038-)

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



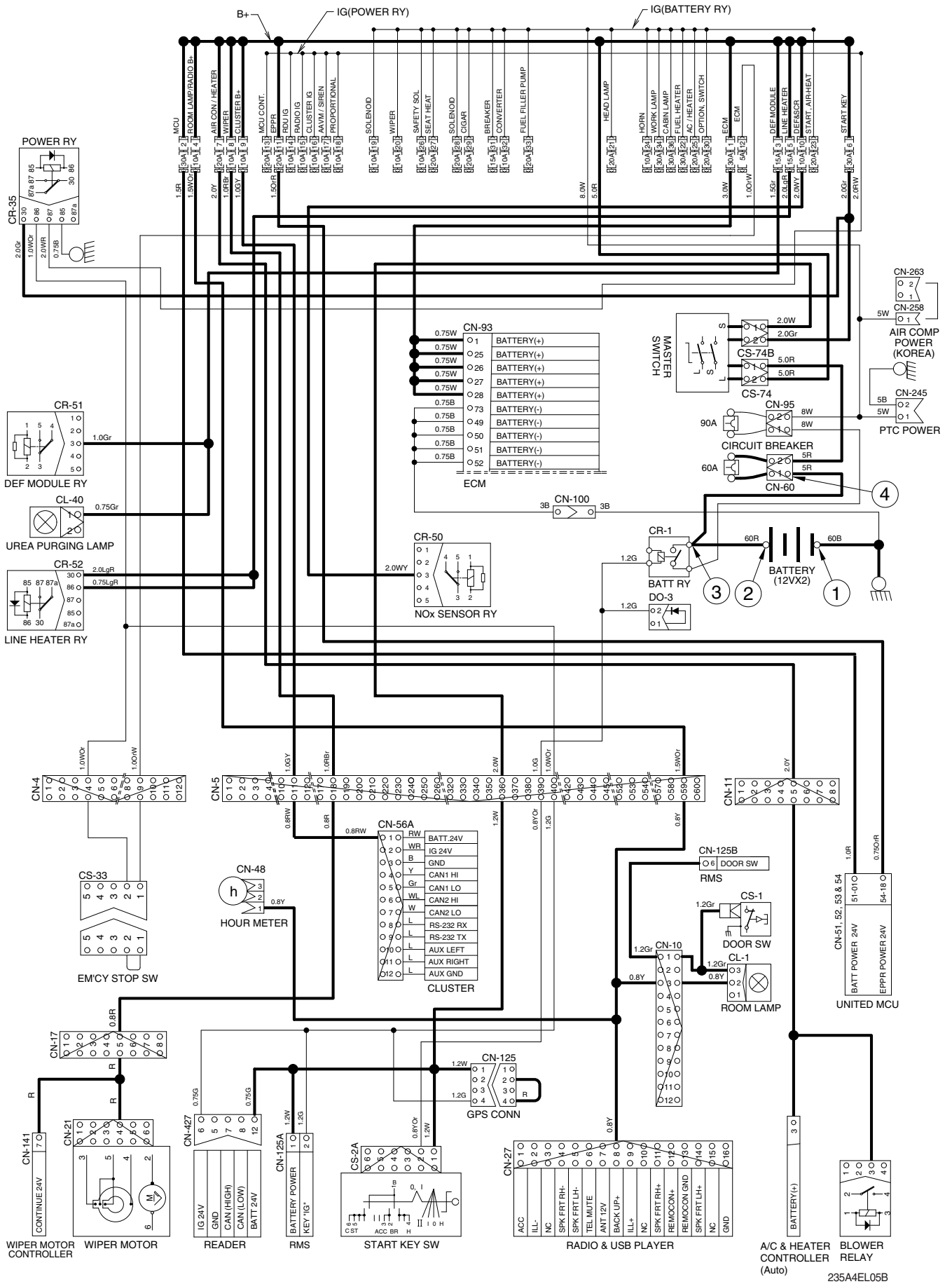
※ I/conn : Intermediate connector

2) CHECK POINT

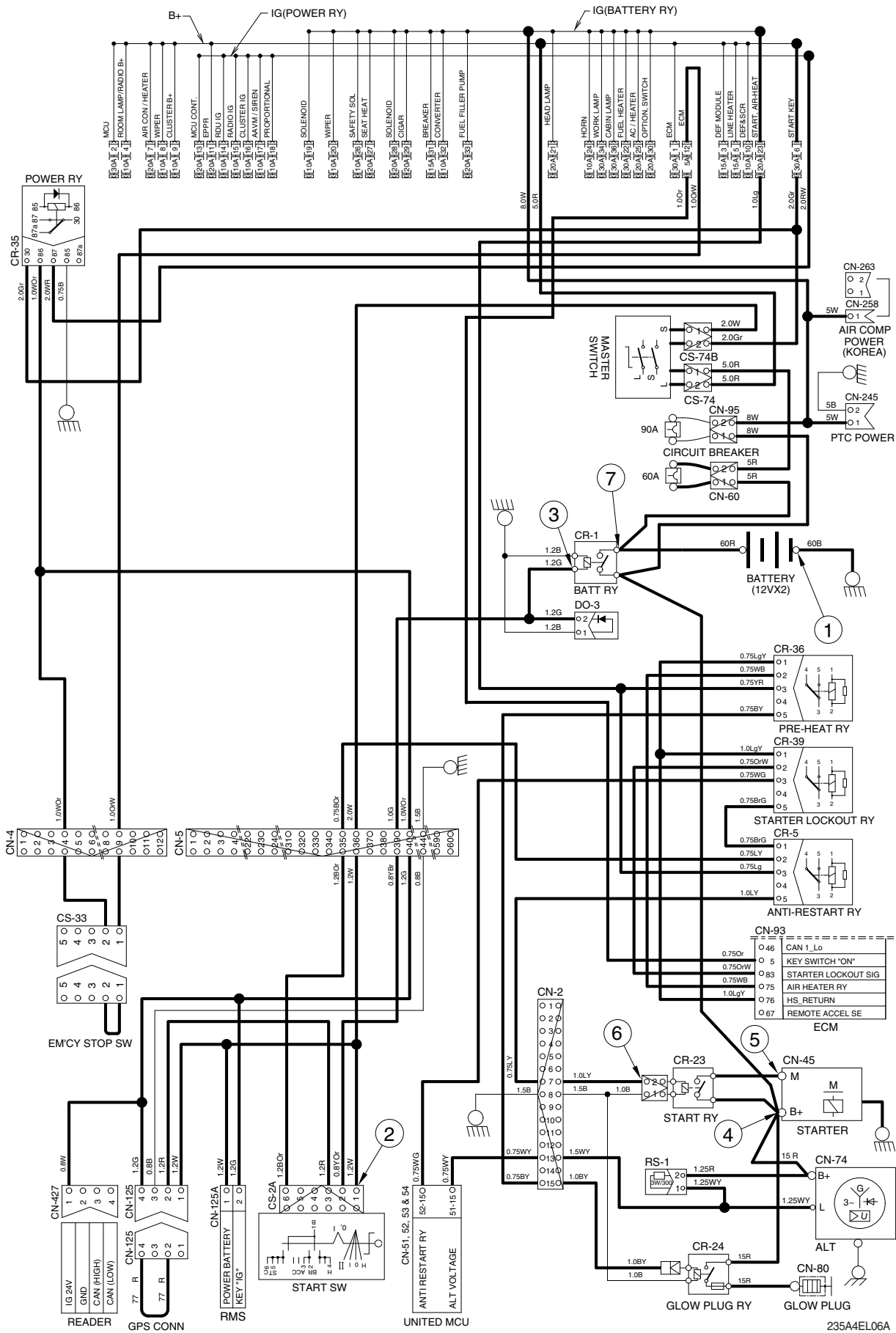
Engine	Start switch	Check point	Voltage
STOP	OFF	① - GND (battery 1EA)	10~12.5V
		② - GND (battery 2EA)	20~25V
		③ - GND (battery relay)	20~25V
		④ - GND (circuit breaker)	20~25V

※ GND : Ground

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



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



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

Start switch ON [CS-2A (2)] → I/conn [CN-5 (39)]
 → Battery relay [CR-1] → Battery relay operating (all power is supplied with the electric component)
 Start switch ON [CS-2A (3)] → GPS conn [CN-125 (2) → (4)]
 I/conn [CN-5 (40)] → Power relay [CR-35 (86) → (87)]
 → Fuse box [IG (power)]
 I/conn [CN-4 (4)]
 → Emergency engine stop sw [CS-33 (2)→(1)] → I/conn [CN-4 (9)]
 → Fuse box [No. 12] → Engine ECM [CN-93 (5)]
 Reader [CN-427 (6)]
 RMS [CN-125A (2)]

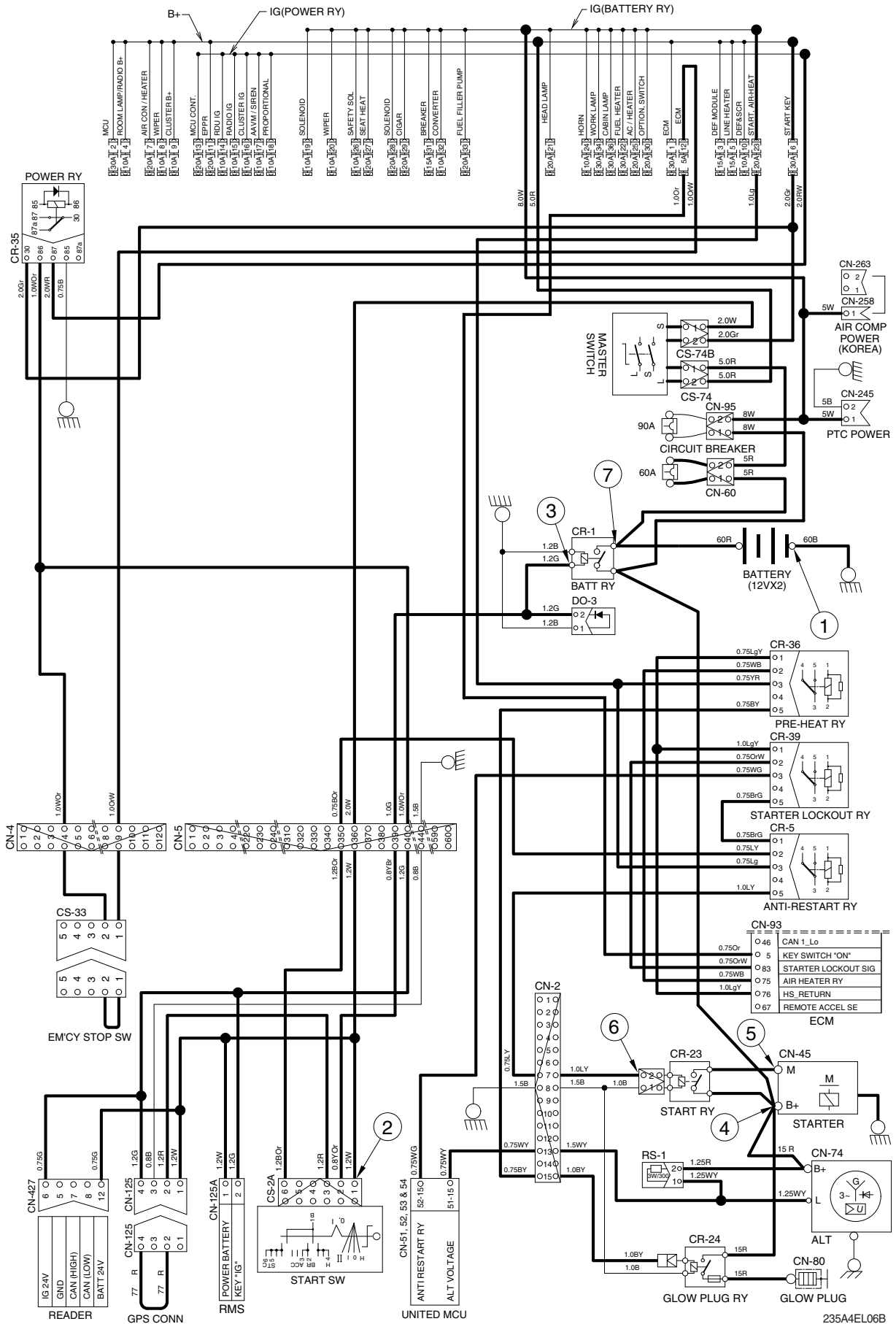
(2) When start key switch is in START position

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

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



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

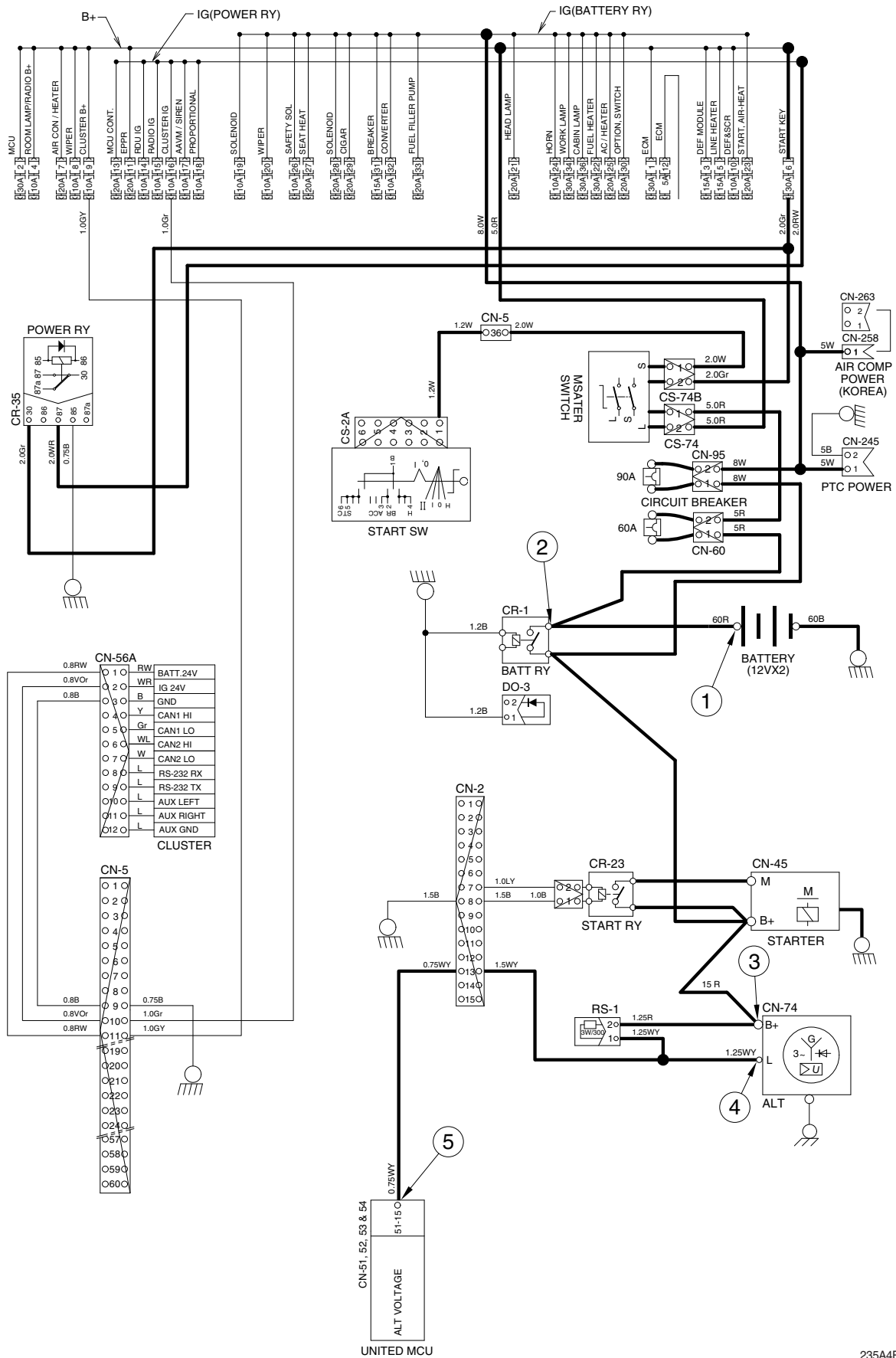
Alternator "B+" terminal → Starter [CN-45 (B+)] → Battery relay (CR-1)
 → Battery (+) terminal
 → Circuit breaker [CN-60] → Master switch [CS-74] → Fuse box [B+]
 → Circuit breaker [CN-95] → Fuse box [IG, battery] → Power relay [CR-35 (30→87)]
 → Fuse box [IG, power]
 → PTC power [CN-245 (1)]
 → Air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

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



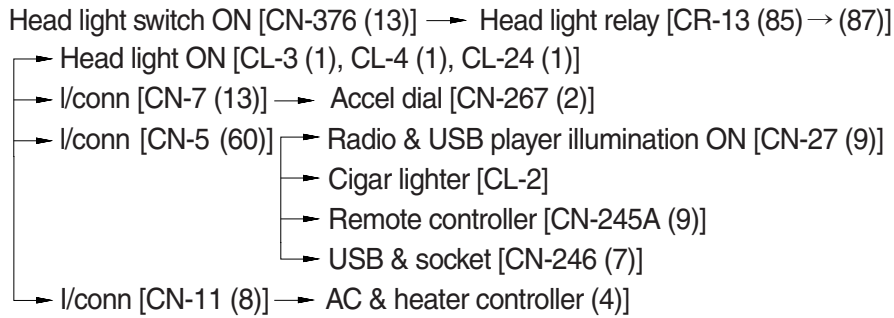
235A4EL07A

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



(2) Work light switch ON

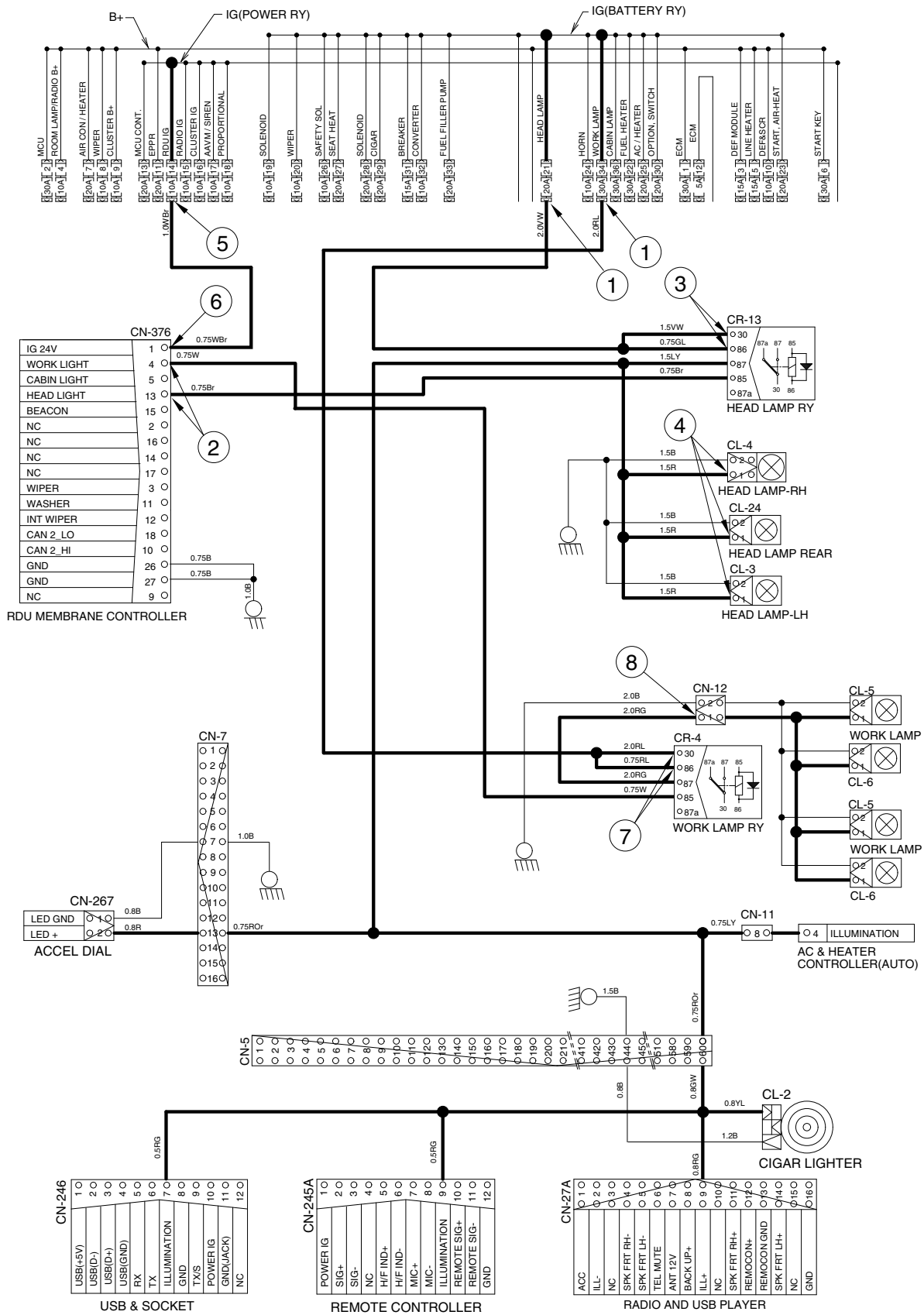
- Work light switch ON [CN-376 (4)] → Work light relay [CR-4 (85) → (87)]
- I/conn [CN-12 (1)] → Work light ON [CL-5 (1), CL-6 (1)]

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

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



235A4EL08A

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)]

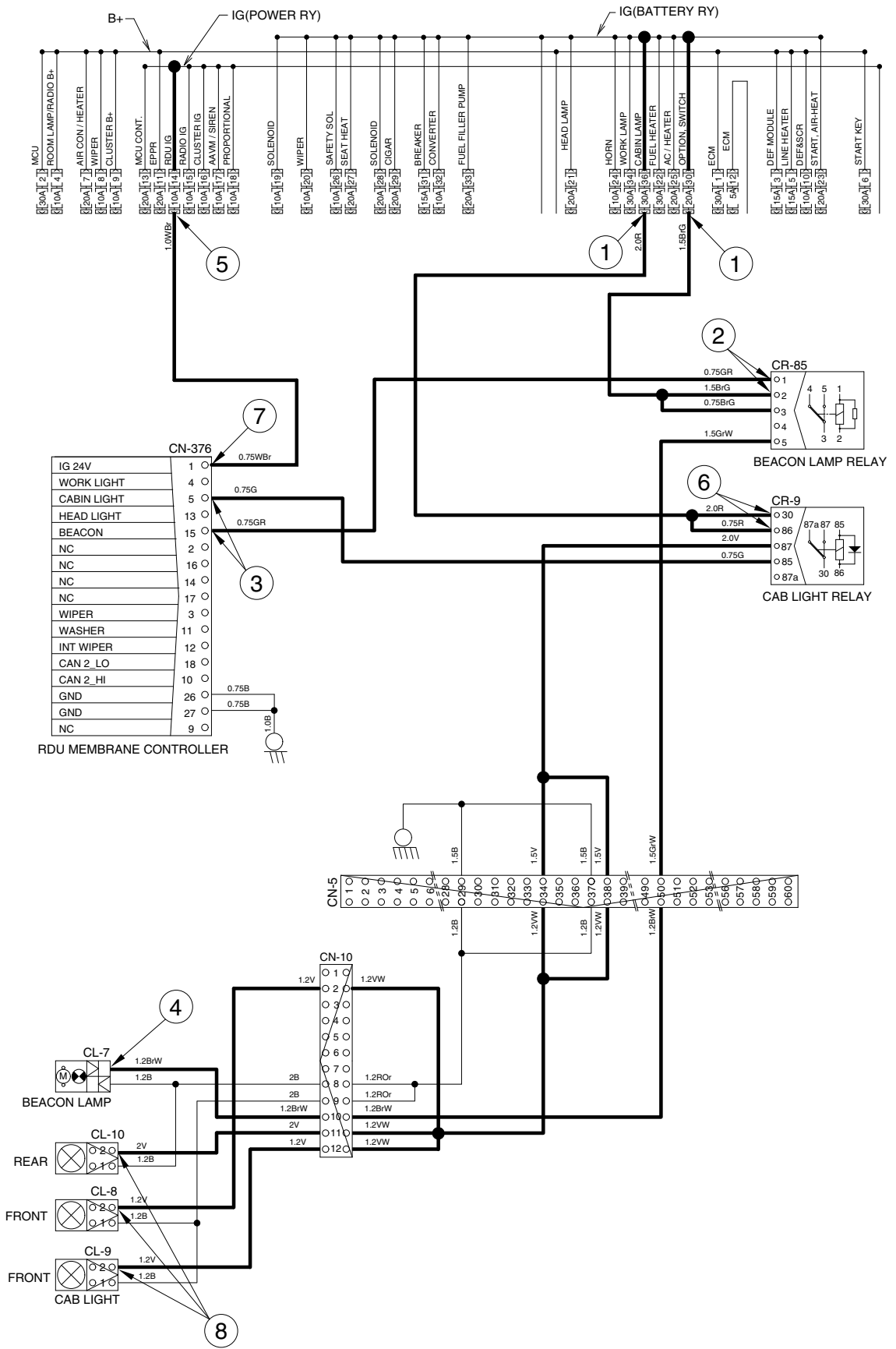
- I/conn [CN-10 (2)] → Cab light ON [CL-8 (2)]
- I/conn [CN-10 (12)] → Cab light ON [CL-9 (2)]
- I/conn [CN-10 (11)] → Cab light ON [CL-10 (2)]

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

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



235A4EL09A

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)

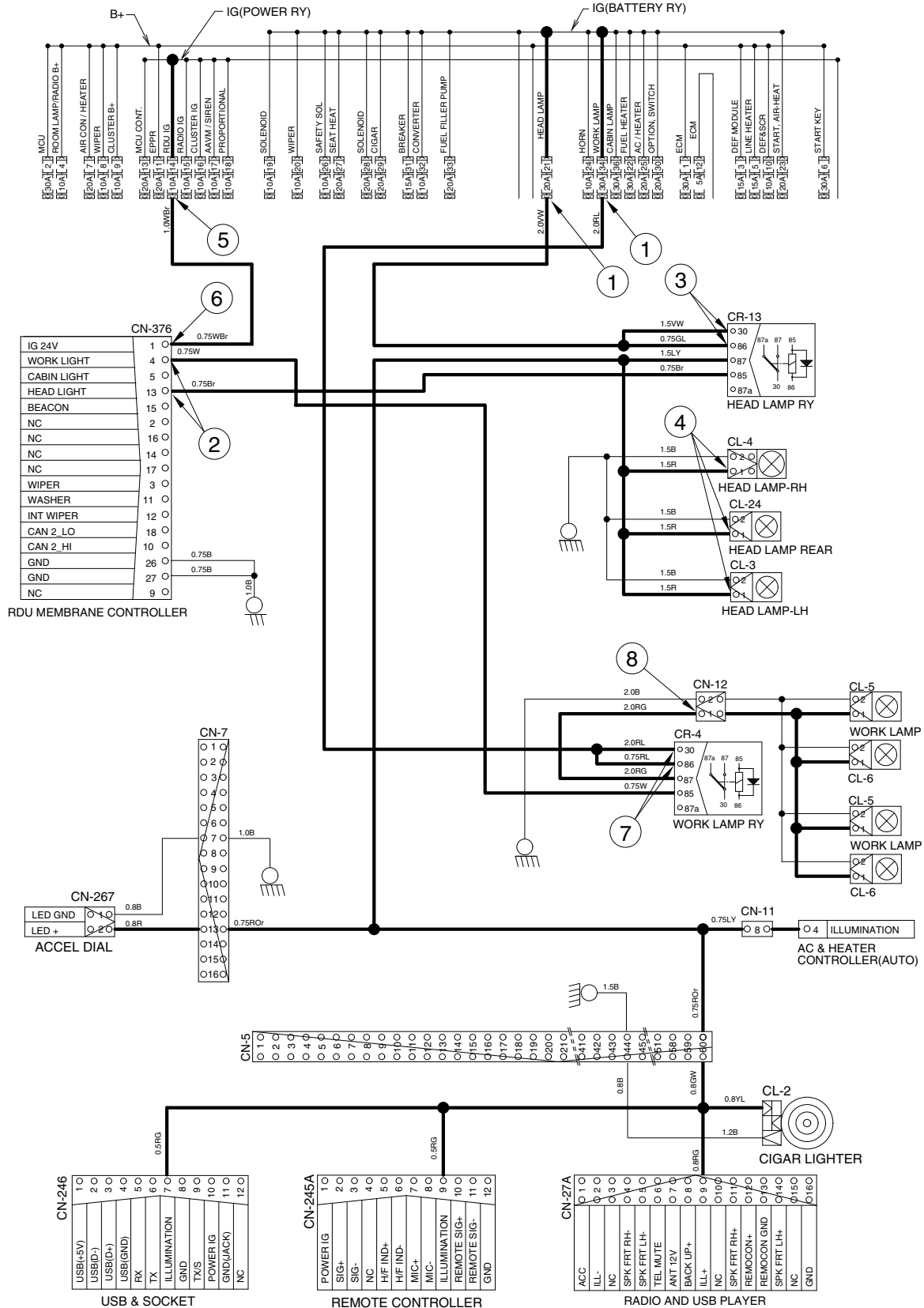
Switch OFF [CN-376 (3, 12)] → Wiper motor parking position by wiper motor controller

3) CHECK POINT

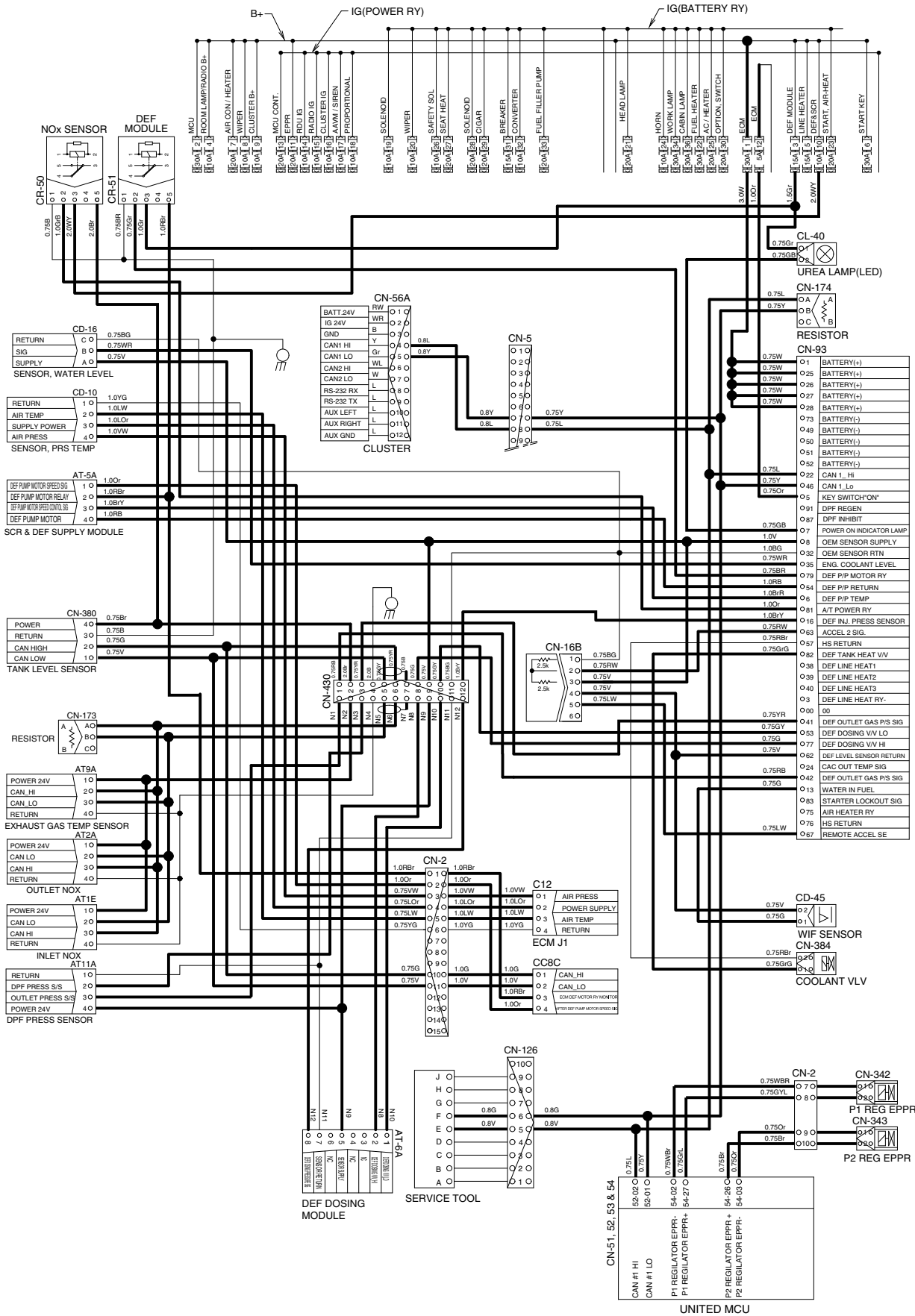
Engine	Start switch	Check point	Voltage	
STOP	ON	① - GND (fuse box)	20~25V	
		② - GND (switch power input)		
		③ - GND (wiper power input)		
		④ - GND (switch power output)	0 ~ 5V	
		⑤ - GND (wiper power switch input)		
		⑥ - GND (wiper power output)		24V
		⑦ - GND (wiper motor)		0 or 24V

※ GND : Ground

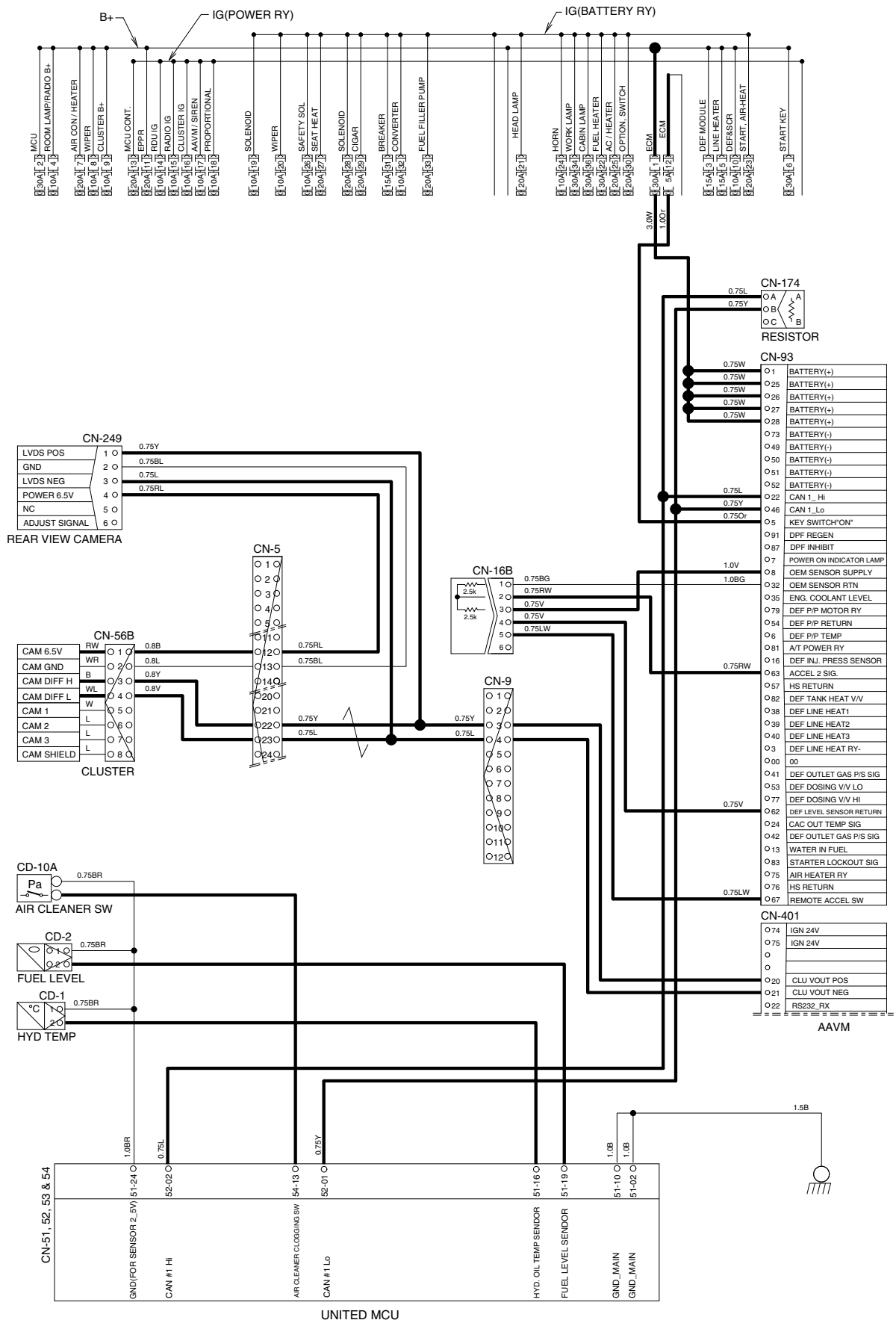
WIPER AND WASHER CIRCUIT (MACHINE SERIAL NO. : #0001-)



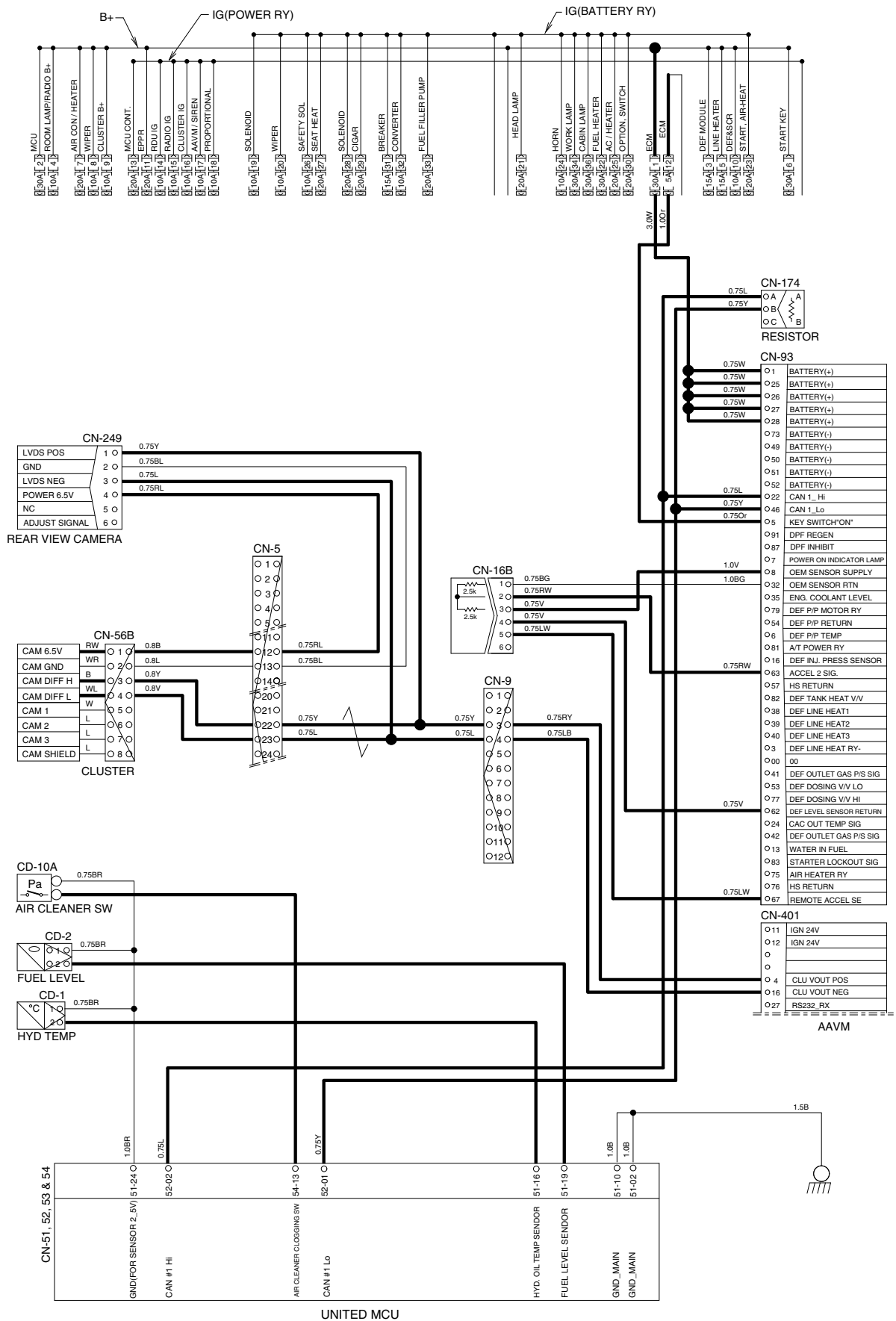
7. CONTROLLER CIRCUIT (MACHINE SERIAL NO. : #0001-)



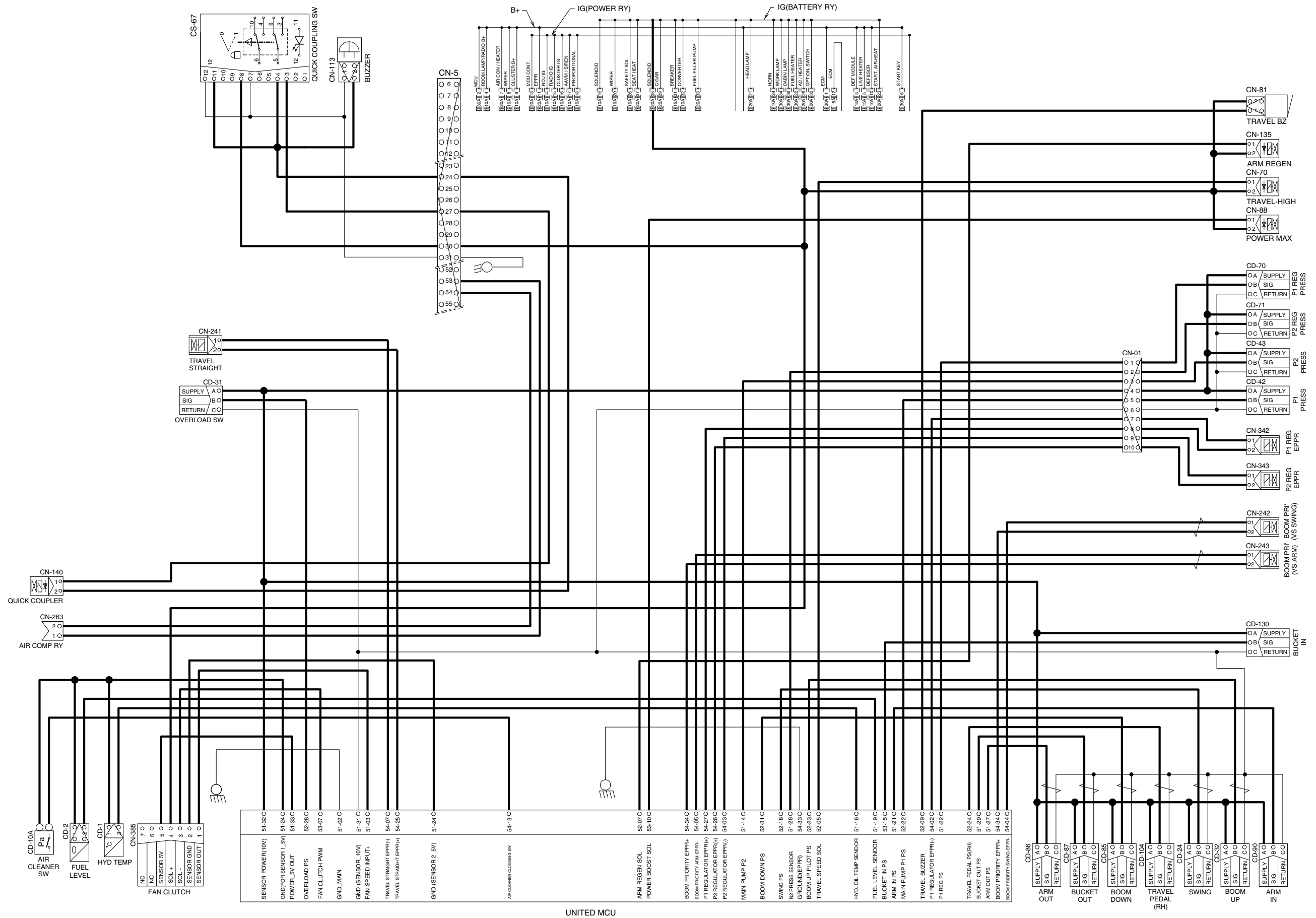
8. MONITORING CIRCUIT (MACHINE SERIAL NO. : -#0003)



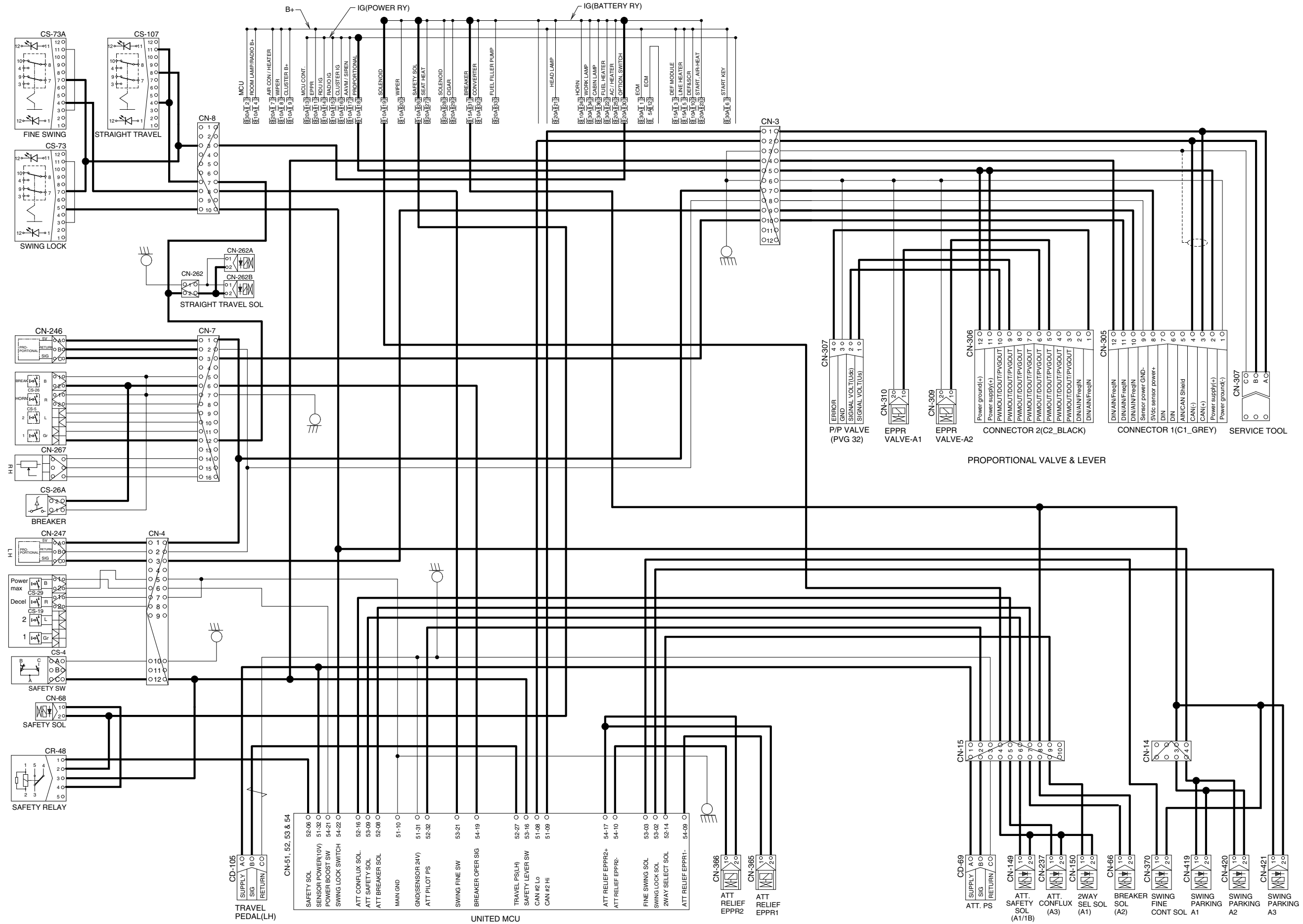
MONITORING CIRCUIT (MACHINE SERIAL NO. : #0004-)



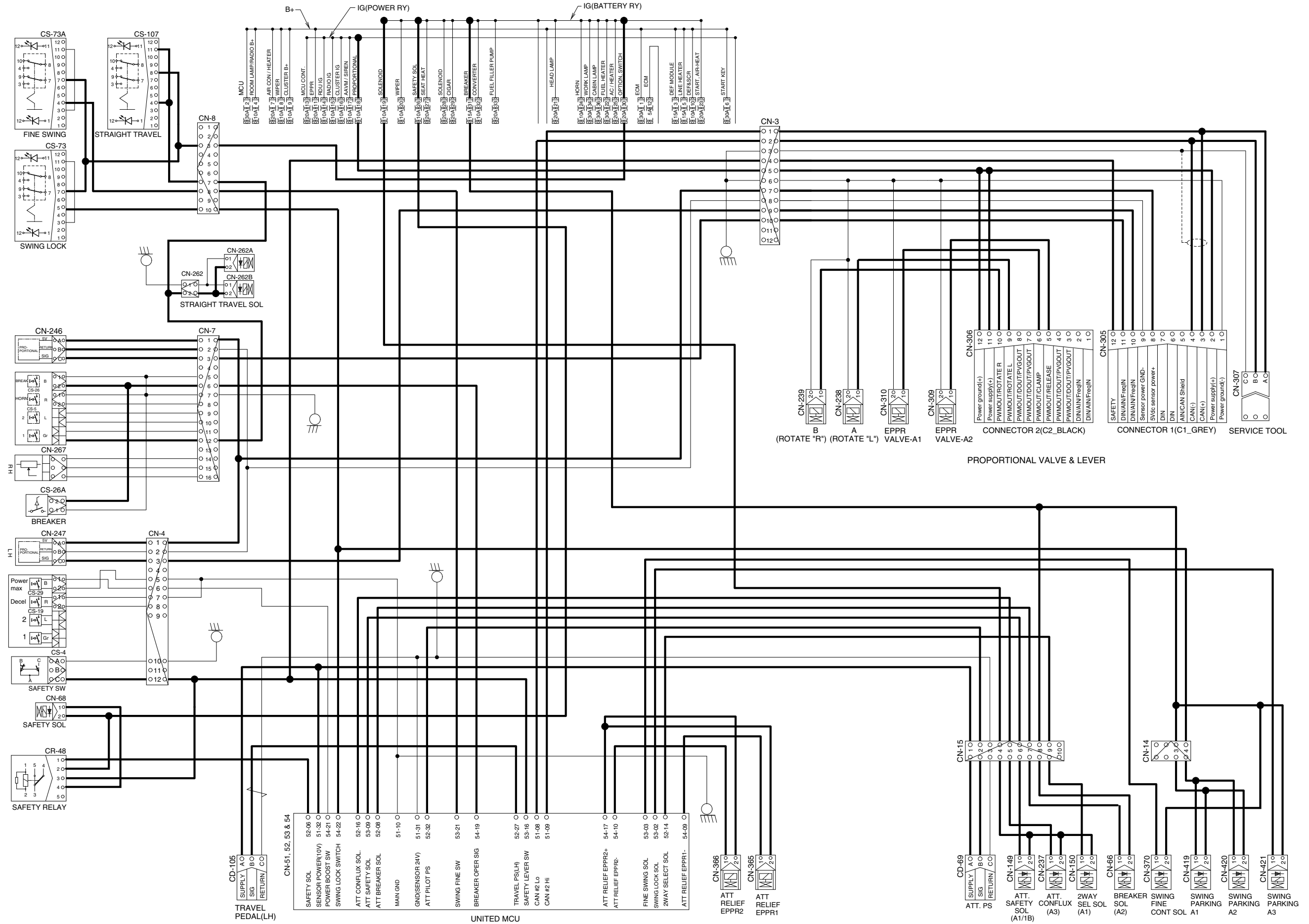
9. ELECTRIC CIRCUIT FOR HYDRAULIC (1/2, MACHINE SERIAL NO. : #0001-)



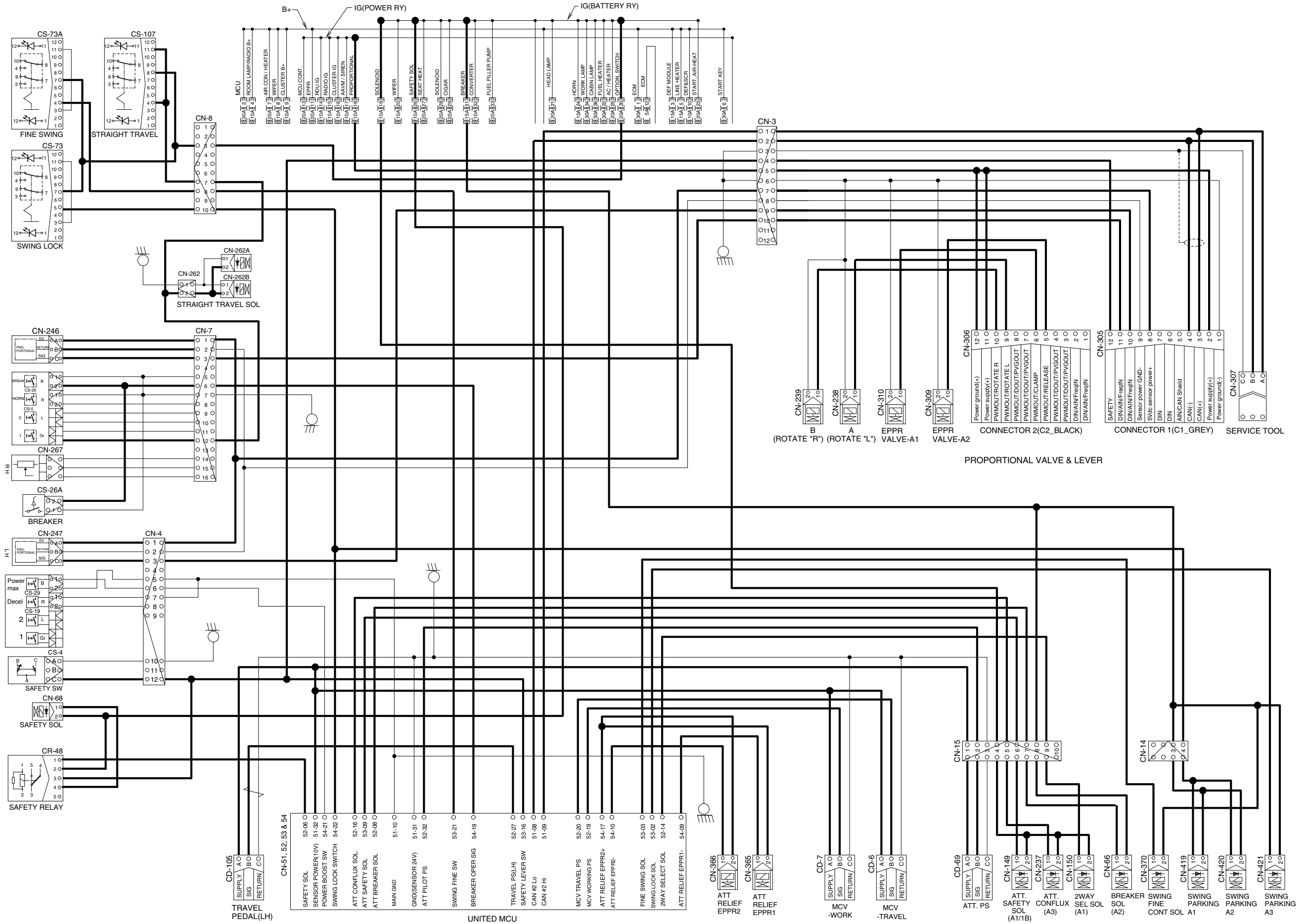
10. ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : -#0003)



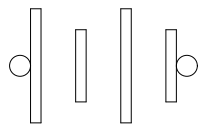
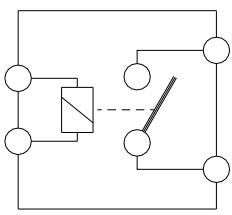
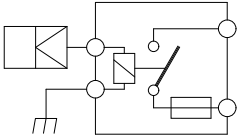
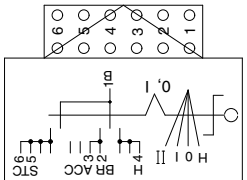
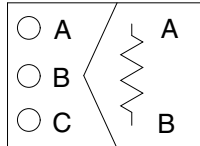
ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : #0004-#0037)

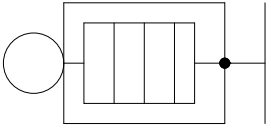
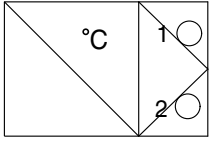
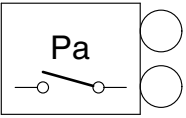
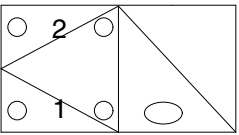
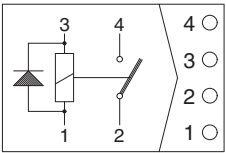
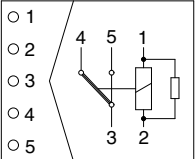


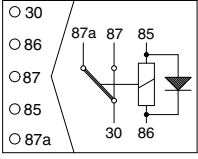
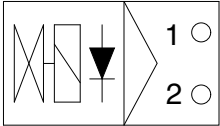
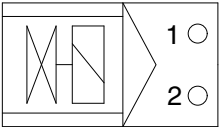
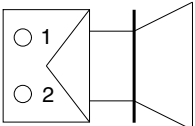
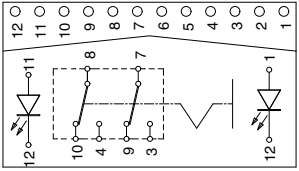
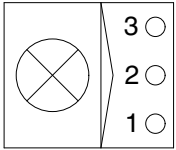
ELECTRIC CIRCUIT FOR HYDRAULIC (2/2, MACHINE SERIAL NO. : #0038-)

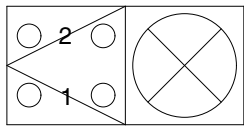
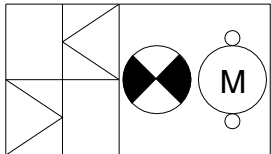
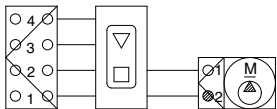
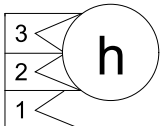
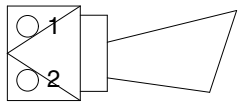
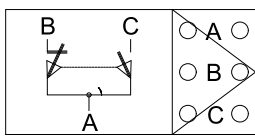


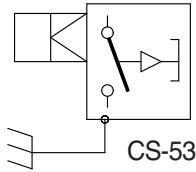
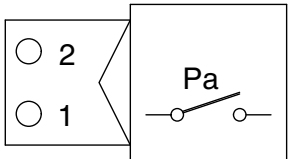
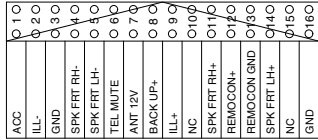
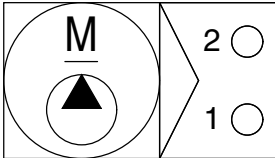
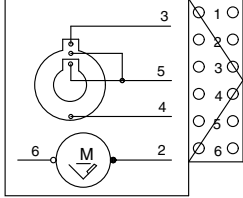
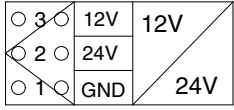
GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

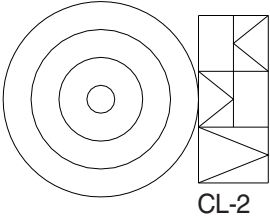
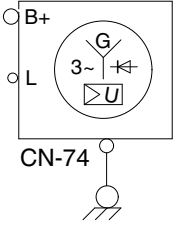

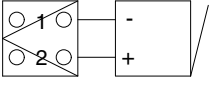
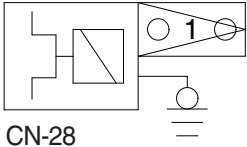
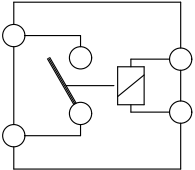
Part name	Symbol	Specifications	Check						
Battery		12V × 100Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging						
Battery relay	 <p style="text-align: center;">CR-1</p>	Rated load : 24V 100A (continuity) 1000A (30seconds)	※ Check coil resistance(M4 to M4) Normal : About 50Ω ※ Check contact Normal : ∞Ω						
Glow plug relay	 <p style="text-align: center;">CR-24</p>	24V 200A	※ Check contact Normal : 0.942Ω (for terminal 1-GND)						
Start key	 <p style="text-align: center;">CS-2A</p>	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	<table border="1" style="margin: auto;"> <tr> <td>○ A</td> <td>SUPPLY</td> </tr> <tr> <td>○ B</td> <td>SIG</td> </tr> <tr> <td>○ C</td> <td>RETURN</td> </tr> </table> <p> 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 </p>	○ A	SUPPLY	○ B	SIG	○ C	RETURN	8~30V	※ Check contact Normal : 0.1Ω
○ A	SUPPLY								
○ B	SIG								
○ C	RETURN								
Resistor	 <p style="text-align: center;">CN-173 CN-174</p>	3W 120Ω	※ Check resistance A-B : 120Ω						

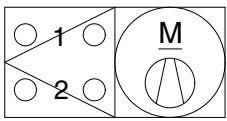
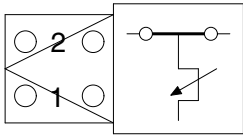
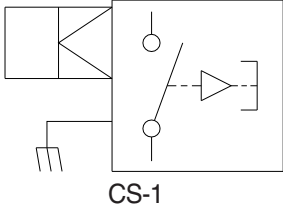
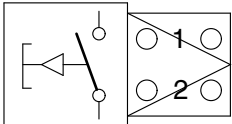
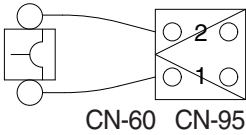
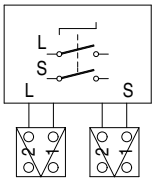
Part name	Symbol	Specifications	Check
Glow plug	 CN-80	24V 200A	※ Check resistance 0.25~0.12Ω
Temperature sensor (hydraulic)	 CD-1	-	※ Check resistance 50°C : 804Ω 80°C : 310Ω 100°C : 180Ω
Air cleaner pressure switch	 CD-10A	N.O TYPE	※ Check contact High level : ∞Ω Low level : 0Ω
Fuel level sender	 CD-2	-	※ 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)

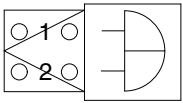
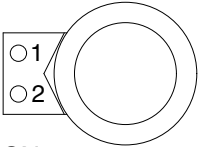
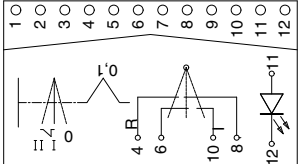
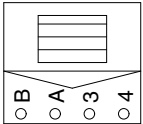
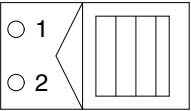
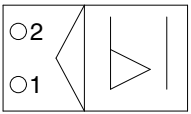
Part name	Symbol	Specifications	Check
Relay	 <p>CR-4 CR-7 CR-9 CR-13 CR-35 CR-46 CR-52</p>	24V 16A	※ Check resistance Normal : About 160 Ω (for terminal 85-86) 0 Ω (for terminal 30-87a) ∞ Ω (for terminal 30-87)
Solenoid valve	 <p>CN-66 CN-68 CN-70 CN-88 CN-133 CN-135 CN-140 CN-149 CN-150 CN-237 CN-262A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

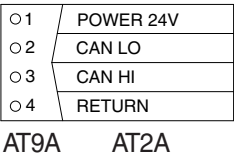
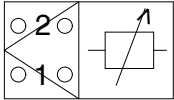
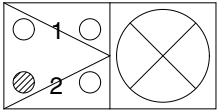
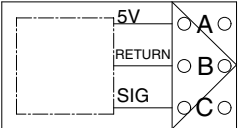
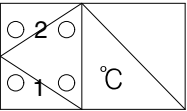
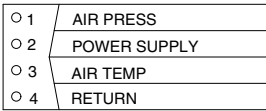
Part name	Symbol	Specifications	Check
Head lamp, Work lamp, Cab lamp	 CL-3 CL-4 CL-5 CL-6 CL-8 CL-9 CL-10 CL-24	24V 65W (H3 Type)	※ Check disconnection Normal : 1.2Ω
Beacon lamp	 CL-7	21V 70W (H1 Type)	※ Check disconnection Normal : A few Ω
Fuel filler pump	 CN-61	24V 10A 35 l /min	※ Check resistance 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)

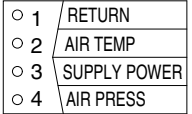
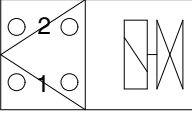
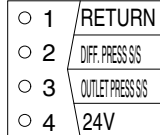
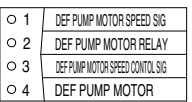
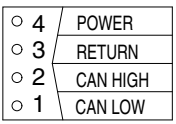
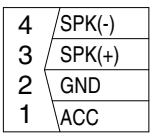
Part name	Symbol	Specifications	Check
Wiper cut switch	 <p>CS-53</p>	24V (N.O TYPE)	※ Check contact Normal : 0Ω (one pin to ground)
Receiver dryer	 <p>CN-29</p>	24V 2.5A	※ Check contact Normal : ∞Ω
Radio & USB player	 <p>CN-27</p>	24V 2A	※ Check voltage 20~25V (for terminal 1-3, 3-8)
Washer pump	 <p>CN-22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

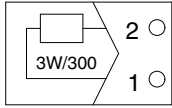
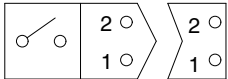
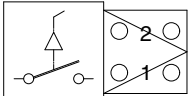
Part name	Symbol	Specifications	Check
Cigar lighter	 <p>CL-2</p>	24V 5A 1.4W	※ Check coil resistance Normal : About 1MΩ ※ Check contact Normal : ∞Ω Operating time : 5~15sec
Alternator	 <p>CN-74</p>	24V 95A	※ Check contact Normal : 0Ω (for terminal B ⁺ -L) Normal : 24~27.5V
Starter	 <p>CN-45</p>	24V 4.8kW	※ Check contact Normal : 0.1Ω
Travel alarm	 <p>CN-81</p>	24V 0.5A	※ Check contact Normal : 5.2Ω
Air conditioner compressor	 <p>CN-28</p>	24V 79W	※ Check contact Normal : 13.4Ω
Start relay	 <p>CR-23</p>	24V 300A	※ Check contact Normal : 0.94Ω (for terminal 1-2)

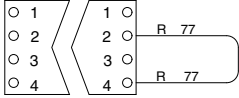
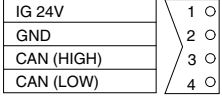
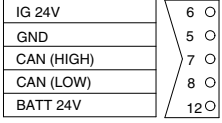
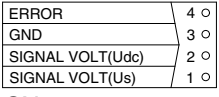
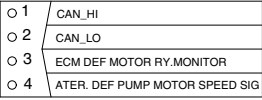
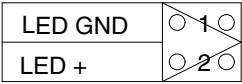
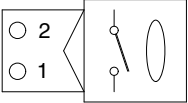
Part name	Symbol	Specifications	Check
Blower motor		24V 9.5A	※ Check resistance Normal : 2.5Ω (for terminal 1-2)
Thermistor (switch)		1°C OFF 4°C ON	※ Check resistance Normal : 0Ω (for terminal 1-2), the atmosphere temp : Over 4°C
Door switch		24V 2W	※ Check resistance Normal : About 5MΩ
Switch (power max, one touch decel, horn, breaker)	 CS-5 CS-19 CS-26 CS-29	24V 6A	※ Check resistance Normal : ∞Ω
Circuit breaker	 CN-60 CN-95	CN-60 : 60A CN-95 : 90A	※ Check disconnection Normal : 0Ω (connect ring terminal and check resist between terminal 1 and 2)
Master switch	 CN-74 CN-74B	6-36V	※ Check disconnection Normal : 0.1Ω

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

Part name	Symbol	Specifications	Check
NOx sensor		-	-
Temperature sensor (A/C)		-	-
DEF/AdBlue® lamp (LED)	 <p data-bbox="497 1010 568 1037">CL-40</p>	-	-
Proportional valve sensor	 <p data-bbox="480 1308 687 1335">CN-246 CN-247</p>	-	-
CAC out temp sensor	 <p data-bbox="464 1615 553 1641">CS-429</p>	-	-
Sensor	 <p data-bbox="485 1883 539 1910">C12</p>	-	-

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

Part name	Symbol	Specifications	Check														
Resistor	 <p>RS-1</p>	3W 300Ω	※ Check resistance Normal : 300Ω														
Camera (front, rear, side)	<table border="1" data-bbox="491 595 651 723"> <tr><td>○ 1</td><td>LVDS POS</td></tr> <tr><td>○ 2</td><td>GND</td></tr> <tr><td>○ 3</td><td>LVDS NEG</td></tr> <tr><td>○ 4</td><td>POWER 6.5V</td></tr> <tr><td>○ 5</td><td>NC</td></tr> <tr><td>○ 6</td><td>ADJUST SIGNAL</td></tr> </table> <p>CN-10A CN-249 CN-403 CN-404 CN-405</p>	○ 1	LVDS POS	○ 2	GND	○ 3	LVDS NEG	○ 4	POWER 6.5V	○ 5	NC	○ 6	ADJUST SIGNAL	-			
○ 1	LVDS POS																
○ 2	GND																
○ 3	LVDS NEG																
○ 4	POWER 6.5V																
○ 5	NC																
○ 6	ADJUST SIGNAL																
Fan clutch	<table border="1" data-bbox="515 864 659 1014"> <tr><td>○ 4</td><td>SOL +</td></tr> <tr><td>○ 3</td><td>SOL(PWM) -</td></tr> <tr><td>○ 7</td><td>NC</td></tr> <tr><td>○ 6</td><td>NC</td></tr> <tr><td>○ 5</td><td>SENSOR 5V</td></tr> <tr><td>○ 2</td><td>SENSOR GND</td></tr> <tr><td>○ 1</td><td>SENSOR OUT</td></tr> </table> <p>CN-385</p>	○ 4	SOL +	○ 3	SOL(PWM) -	○ 7	NC	○ 6	NC	○ 5	SENSOR 5V	○ 2	SENSOR GND	○ 1	SENSOR OUT	-	
○ 4	SOL +																
○ 3	SOL(PWM) -																
○ 7	NC																
○ 6	NC																
○ 5	SENSOR 5V																
○ 2	SENSOR GND																
○ 1	SENSOR OUT																
Seat belt sw	 <p>CS-250</p>	-															
RMS service tool	<table border="1" data-bbox="472 1485 691 1585"> <tr><td>NC</td><td>1 ○</td></tr> <tr><td>RX232(2)-RX</td><td>2 ○</td></tr> <tr><td>RX232(2)-TX</td><td>3 ○</td></tr> <tr><td>PROGRAM DUMP</td><td>4 ○</td></tr> </table> <p>CN-126A</p>	NC	1 ○	RX232(2)-RX	2 ○	RX232(2)-TX	3 ○	PROGRAM DUMP	4 ○	-							
NC	1 ○																
RX232(2)-RX	2 ○																
RX232(2)-TX	3 ○																
PROGRAM DUMP	4 ○																
Breaker switch	 <p>CS-26A</p>	-															

Part name	Symbol	Specifications	Check
GPS connector	 <p>CN-125</p>	-	
Reader	<p>-#0073</p>  <p>#0074-</p>  <p>CN-427</p>	-	
Proportional valve	 <p>CN-307</p>	-	
Engine side cross over connector	 <p>CC8C</p>	-	
Accel dial	 <p>CN-267</p>	-	
Float switch	 <p>CS-61</p>	-	

GROUP 4 CONNECTORS

1. CONNECTOR DESTINATION

Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-1	TYCO	10	l/conn (Frame harness-Pump PS harness)	174655-2	S816-110002
CN-2	TYCO	15	l/conn (Frame harness-Engine harness)	2-85262-1	368301-1
CN-3	TYCO	12	l/conn (Frame harness-Pro vlv harness)	174661-2	368537-1
CN-4	TYCO	12	l/conn (Console harness LH-Frame harness)	174661-2	368050-1
CN-5	DEUTSCH	60	l/conn (Side harness RH-Frame harness)	DRB16-60SAE-L018	DRB14-60PAE-L018
CN-7	AMP	16	l/conn (Console harness RH-Frame harness)	368047-1	368050-1
CN-8	AMP	10	l/conn (Console harness RH-Frame harness)	S816-010002	174655-2
CN-9	DEUTSCH	12	l/conn (Frame harness- AAVM harness)	DT06-12SA	DT04-12PA
CN-10	TYCO	12	l/conn (Cab harness-Side harness RH)	368542-1	368507-1
CN-10A	DEUTSCH	6	Front camera	DT06-6S	DT04-6P
CN-11	DEUTSCH	8	l/conn (Frame harness-Aircon harness)	DT06-8S-EP06	-
CN-12	DEUTSCH	2	l/conn (Frame harness-Boom wire harness)	DT06-2S-EP06	DT04-2P-E005
CN-14	AMP	4	l/conn (Frame harness-S/f & parking harness)	174257-2	174259-2
CN-15	AMP	10	l/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	l/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 confluc (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	l/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	-

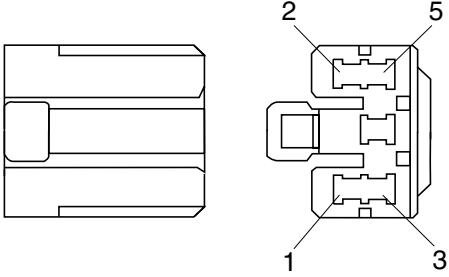
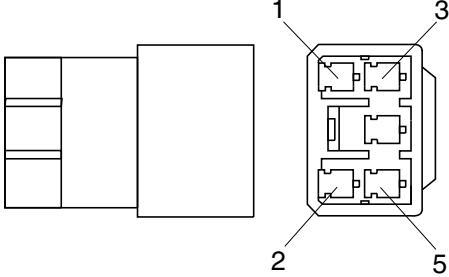
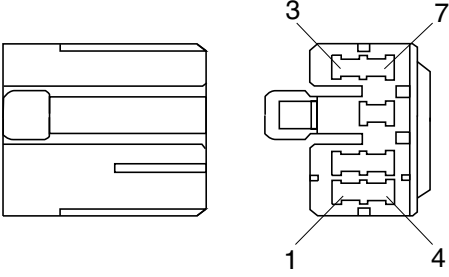
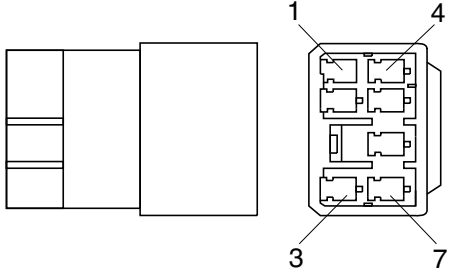
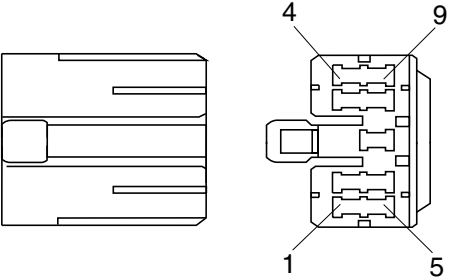
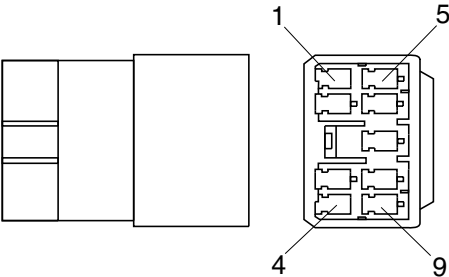
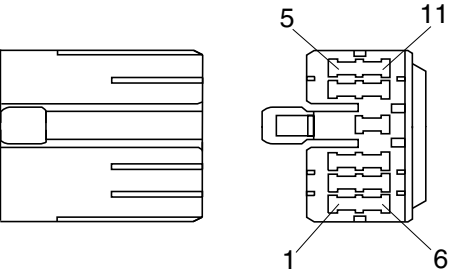
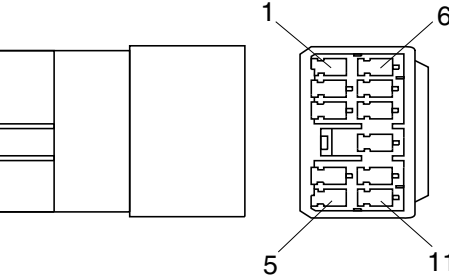
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CN-421	DEUTSCH	2	Swing parking-A3	DT06-2S-EP06	-
CN-427	MOLEX	4	Reader-RMS	039012040	026013096
		12		5557-12R	5559-12P
CN-429	-	1	CAC out temp sensor	S822-11400	-
CN-430	TYCO	12	l/conn (Frame harness - DEF harness)	174661-2	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

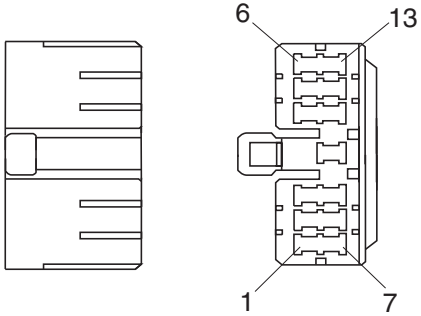
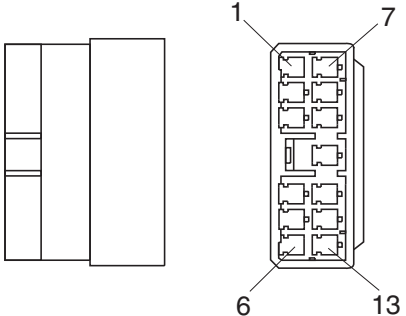
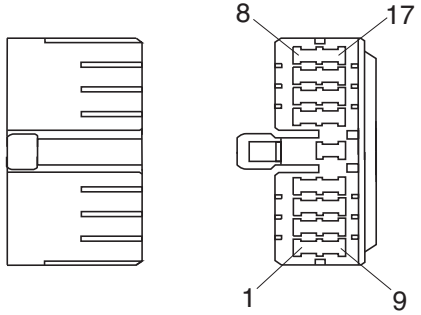
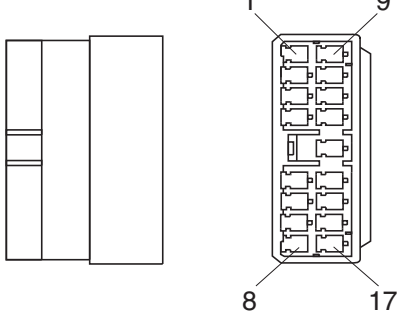
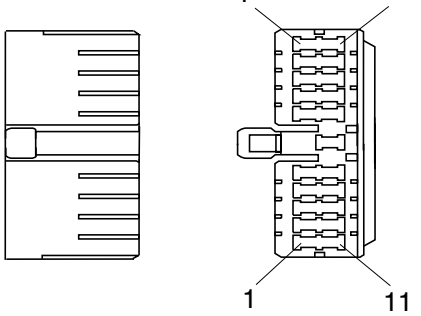
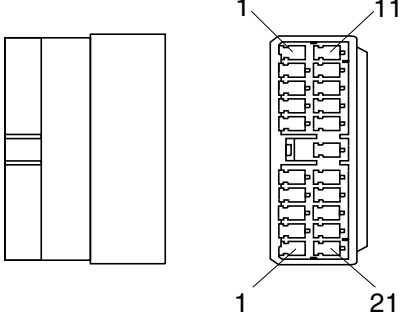
Connector number	Type	No. of pin	Destination	Connector part No.	
				Female	Male
CS-4	AMP	3	Safety switch	S816-003002	-
CS-5	DEUTSCH	2	Horn switch	-	DT04-2P-E005
CS-19	DEUTSCH	2	One touch decel switch	-	DT04-2P
CS-26	DEUTSCH	2	Breaker switch	DT06-2S-EP06	-
CS-26A	AMP	2	Breaker pedal switch	S816-002002	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, sendor					
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	-

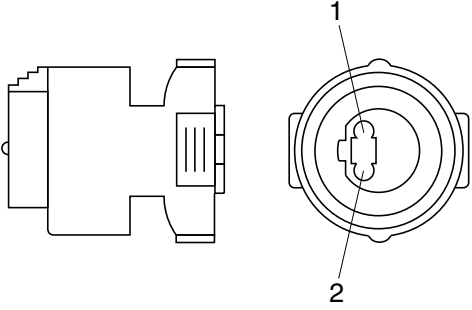
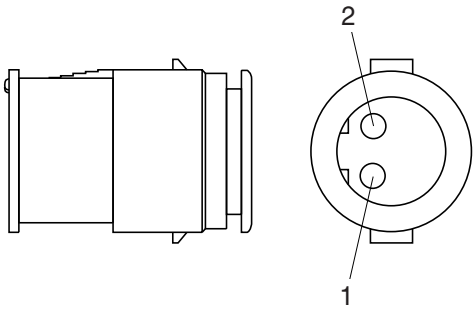
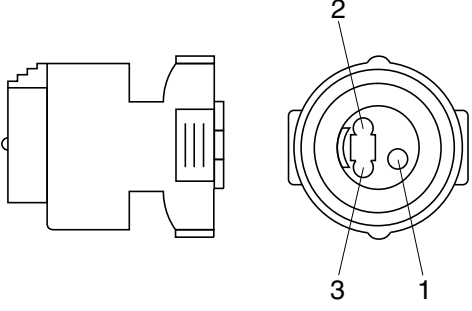
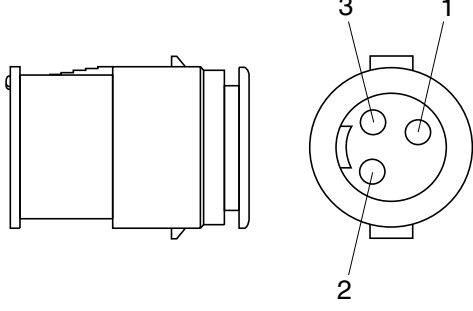
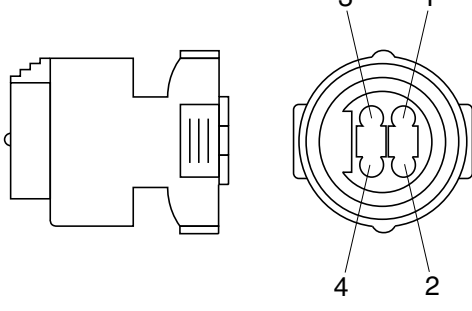
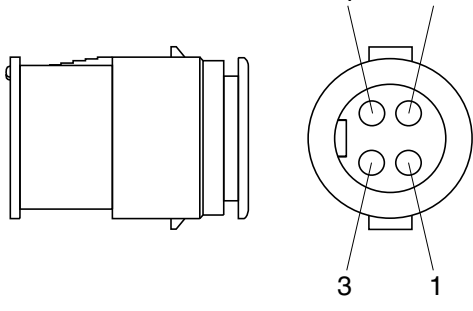
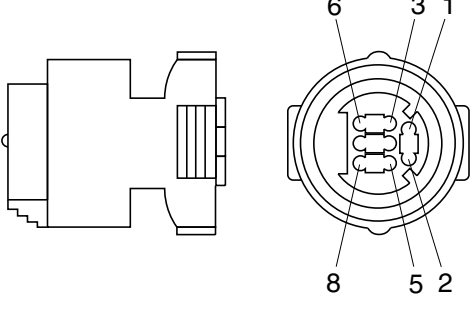
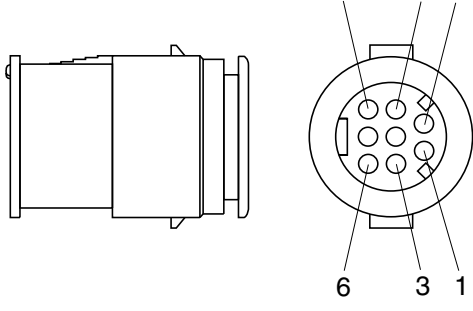
2. CONNECTION TABLE FOR CONNECTORS

1) PA TYPE CONNECTOR

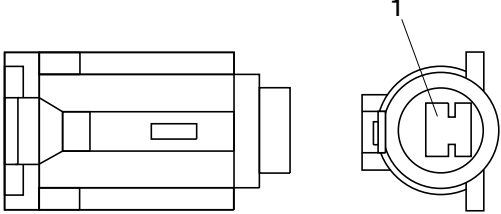
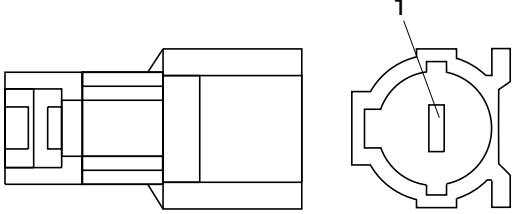
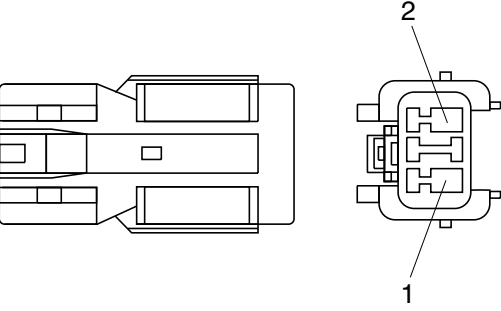
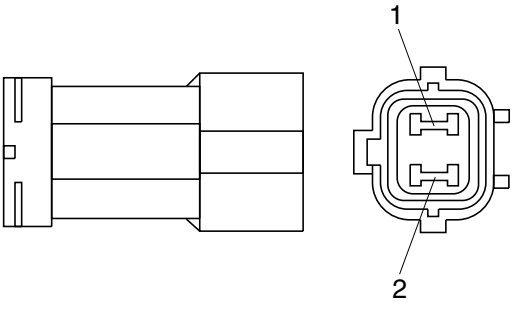
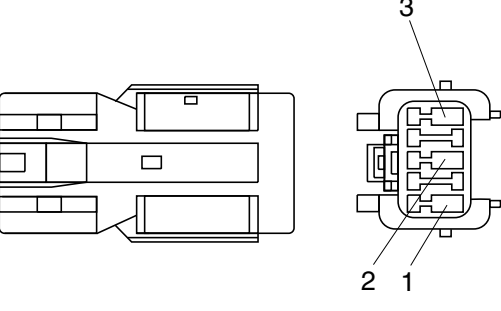
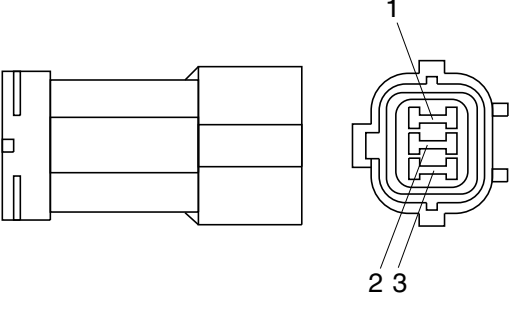
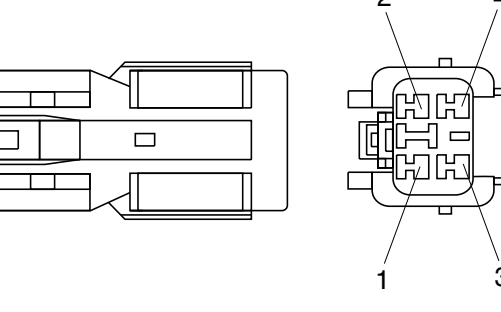
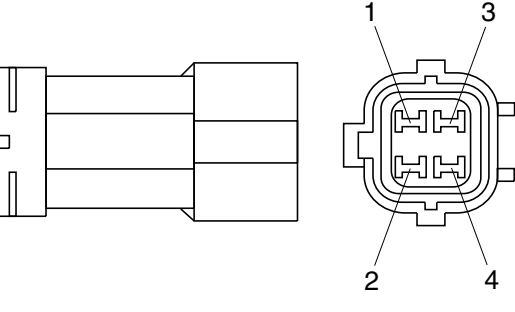
No. of pin	Receptacle connector (female)	Plug connector (male)
5	 <p style="text-align: center;">S811-005002</p>	 <p style="text-align: center;">S811-105002</p>
7	 <p style="text-align: center;">S811-007002</p>	 <p style="text-align: center;">S811-107002</p>
9	 <p style="text-align: center;">S811-009002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

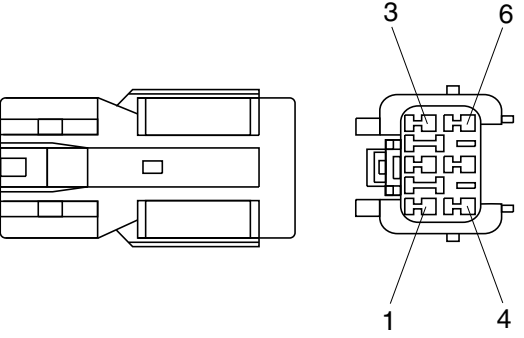
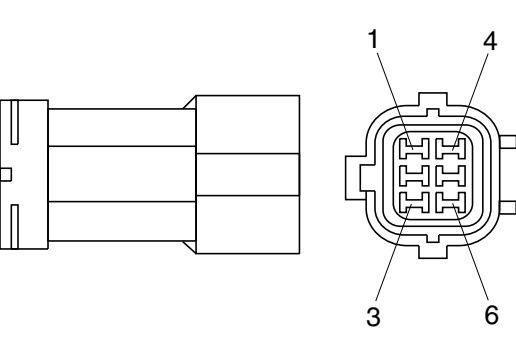
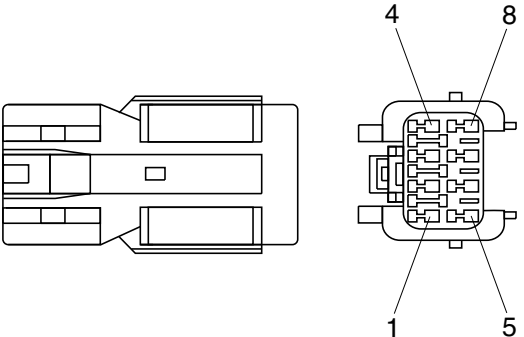
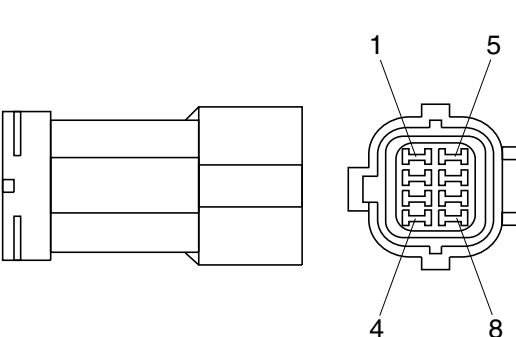
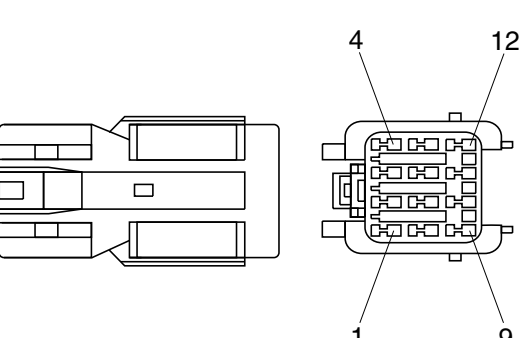
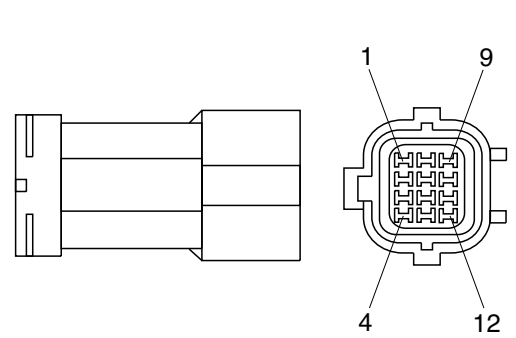
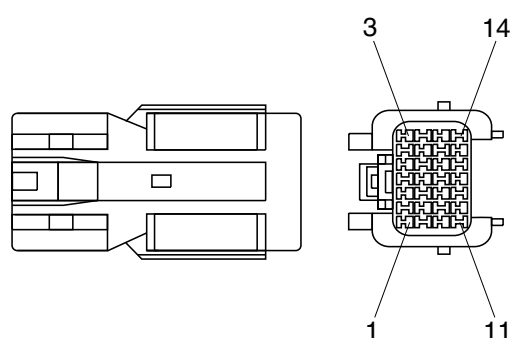
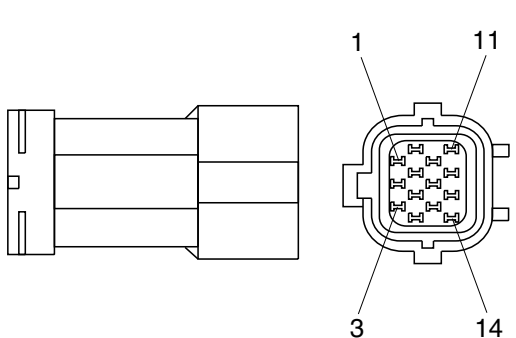
No. of pin	Receptacle connector (female)	Plug connector (male)
13	 <p data-bbox="689 633 837 667">S811-013002</p>	 <p data-bbox="1241 633 1390 667">S811-113002</p>
17	 <p data-bbox="689 1041 837 1075">S811-017002</p>	 <p data-bbox="1241 1041 1390 1075">S811-117002</p>
21	 <p data-bbox="689 1449 837 1482">S811-021002</p>	 <p data-bbox="1241 1449 1390 1482">S811-121002</p>

2) J TYPE CONNECTOR

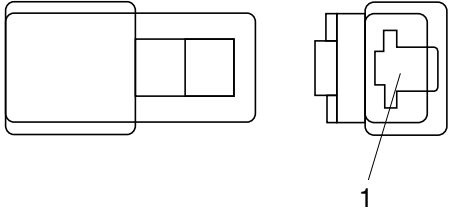
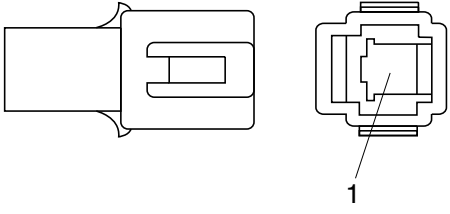
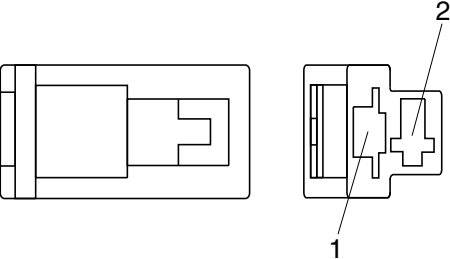
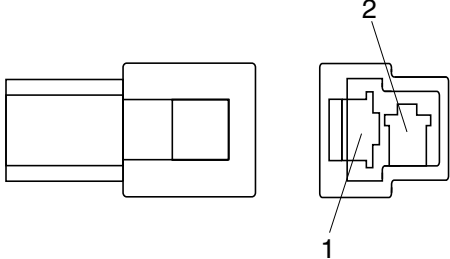
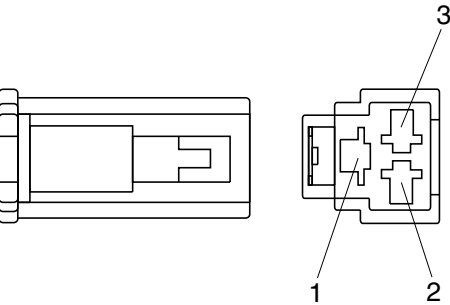
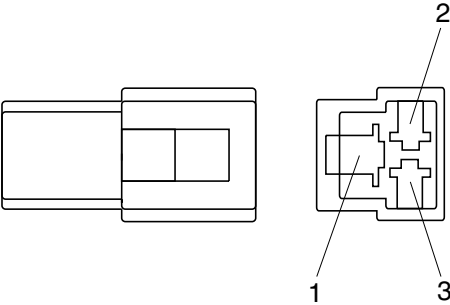
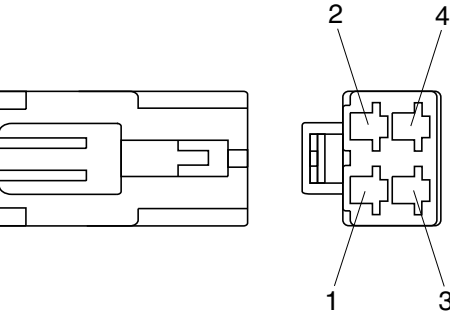
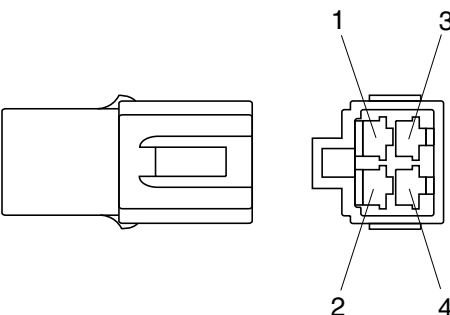
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p data-bbox="687 680 831 712">S816-002001</p>	 <p data-bbox="1240 680 1383 712">S816-102001</p>
3	 <p data-bbox="687 1090 831 1122">S816-003001</p>	 <p data-bbox="1240 1090 1383 1122">S816-103001</p>
4	 <p data-bbox="687 1500 831 1532">S816-004001</p>	 <p data-bbox="1240 1500 1383 1532">S816-104001</p>
8	 <p data-bbox="687 1910 831 1942">S816-008001</p>	 <p data-bbox="1240 1910 1383 1942">S816-108001</p>

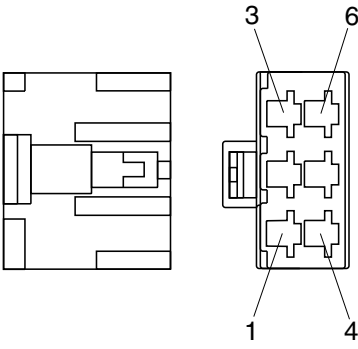
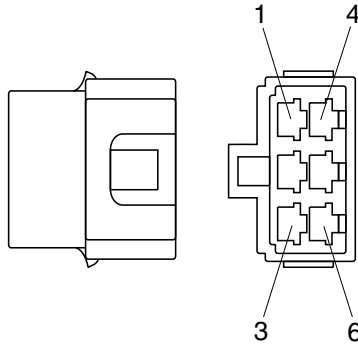
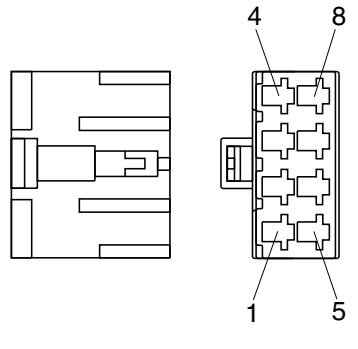
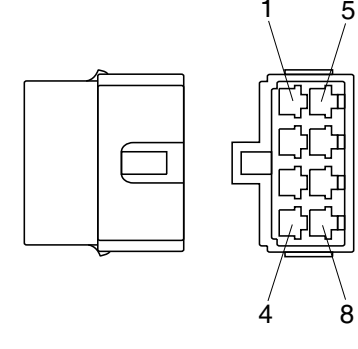
3) SWP TYPE CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p data-bbox="687 680 836 712">S814-001000</p>	 <p data-bbox="1241 680 1390 712">S814-101000</p>
2	 <p data-bbox="687 1088 836 1120">S814-002000</p>	 <p data-bbox="1241 1088 1390 1120">S814-102000</p>
3	 <p data-bbox="687 1498 836 1529">S814-003000</p>	 <p data-bbox="1241 1498 1390 1529">S814-103000</p>
4	 <p data-bbox="687 1908 836 1939">S814-004000</p>	 <p data-bbox="1241 1908 1390 1939">S814-104000</p>

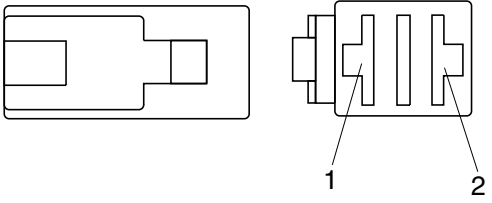
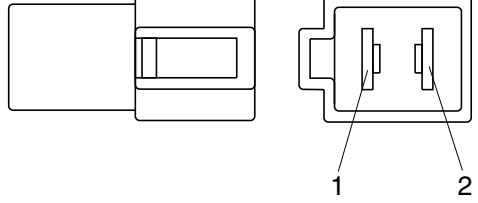
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S814-006000</p>	 <p data-bbox="1244 638 1396 672">S814-106000</p>
8	 <p data-bbox="686 1041 837 1075">S814-008000</p>	 <p data-bbox="1244 1041 1396 1075">S814-108000</p>
12	 <p data-bbox="686 1444 837 1478">S814-012000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

4) CN TYPE CONNECTOR

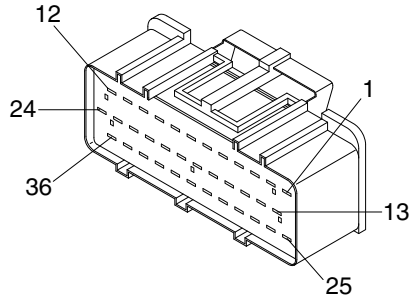
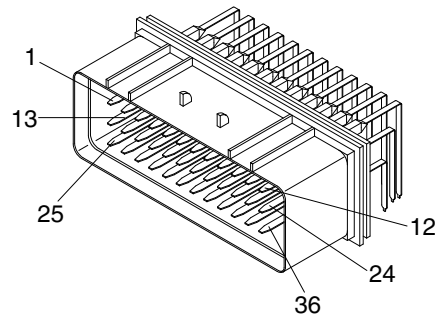
No. of pin	Receptacle connector (female)	Plug connector (male)
1	 <p style="text-align: center;">S810-001202</p>	 <p style="text-align: center;">S810-101202</p>
2	 <p style="text-align: center;">S810-002202</p>	 <p style="text-align: center;">S810-102202</p>
3	 <p style="text-align: center;">S810-003202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

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

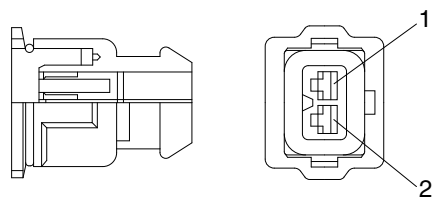
5) 375 FASTEN TYPE CONNECTOR

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

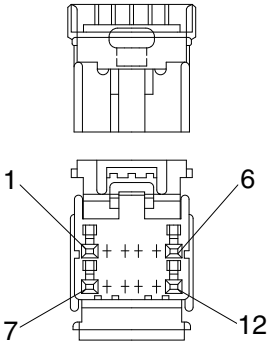
6) AMP ECONOSEAL CONNECTOR

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

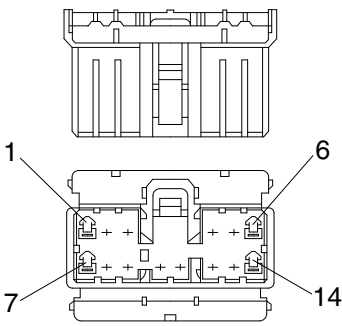
7) AMP TIMER CONNECTOR

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

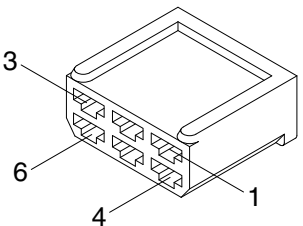
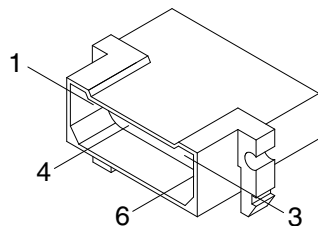
8) AMP 040 MULTILOCK CONNECTOR

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

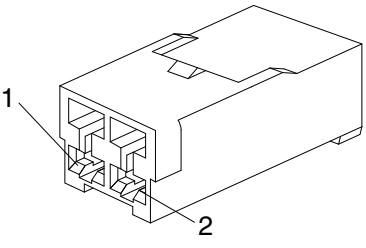
9) AMP 070 MULTILOCK CONNECTOR

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

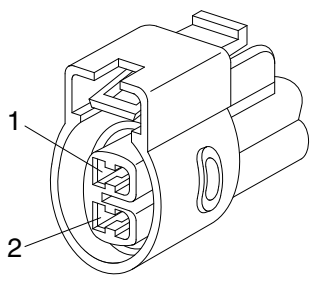
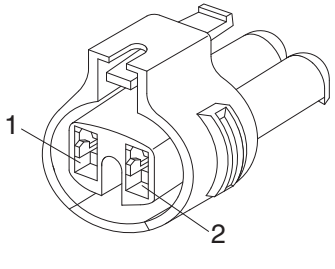
10) AMP FASTIN - FASTON CONNECTOR

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

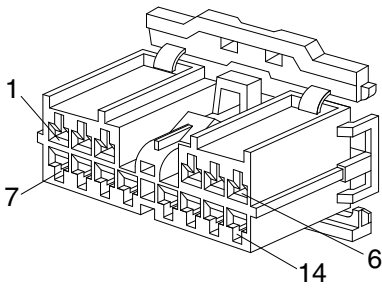
11) KET 090 CONNECTOR

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

12) KET 090 WP CONNECTORS

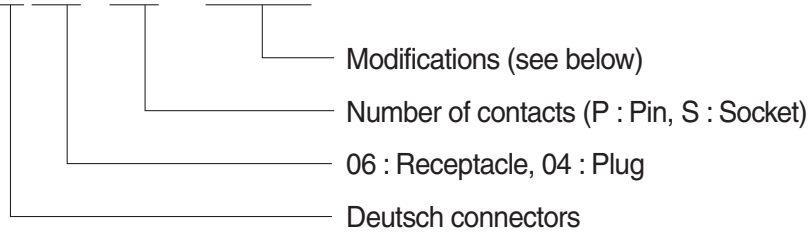
No. of pin	Receptacle connector (female)	Plug connector (male)
2	 <p style="text-align: right;">MG640605</p>	
2	 <p style="text-align: right;">MG640795</p>	

13) KET SDL CONNECTOR

No. of pin	Receptacle connector (female)	Plug connector (male)
14	 <p data-bbox="710 683 837 705">MG610406</p>	

14) DEUTSCH DT CONNECTORS

DT 06 - 3S - ★★☆☆



※ Modification

E003 : Standard end cap - gray

E004 : Color of connector to be black

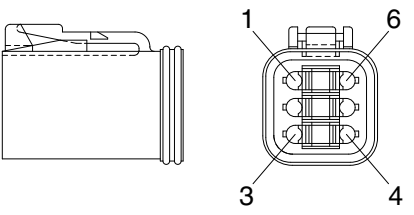
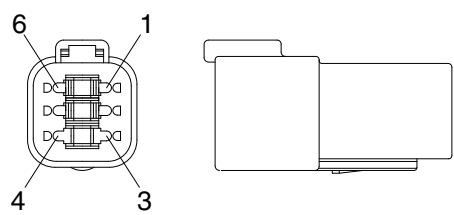
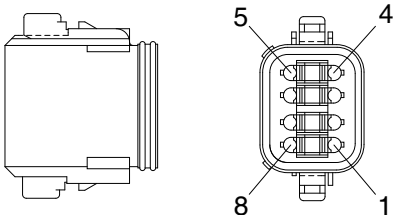
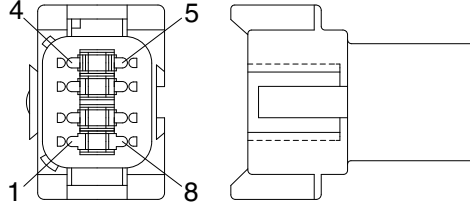
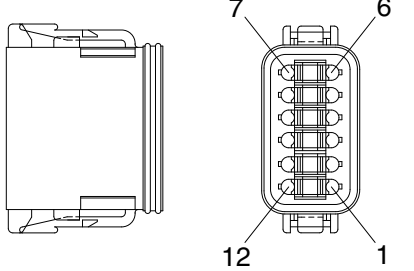
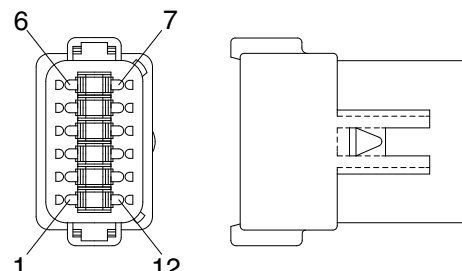
E005 : Combination - E004 & E003

EP04 : End cap

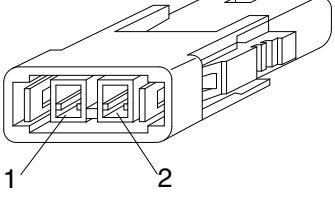
EP06 : Combination P012 & EP04

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

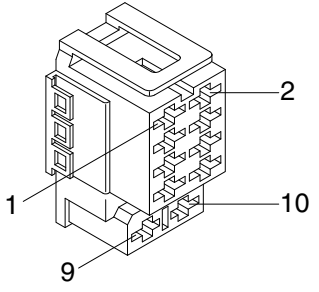
No. of pin	Receptacle connector (female)	Plug connector (male)
2	<p>DT06-2S</p>	<p>DT04-2P</p>
3	<p>DT06-3S</p>	<p>DT04-3P</p>
4	<p>DT06-4S</p>	<p>DT04-4P</p>

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

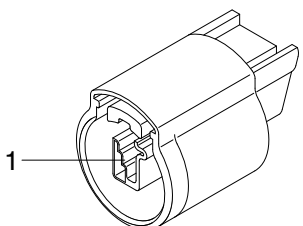
15) MOLEX 2CKTS CONNECTOR

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

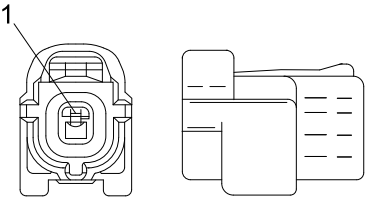
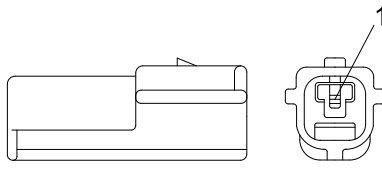
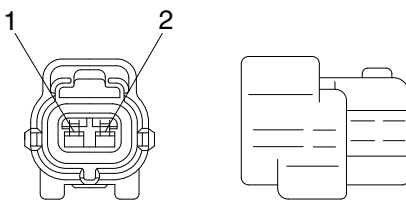
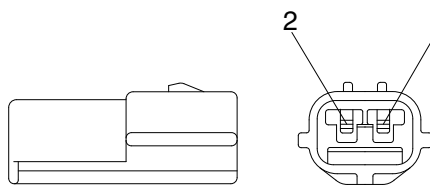
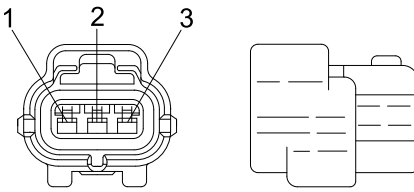
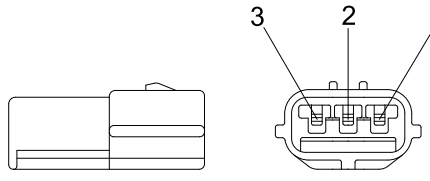
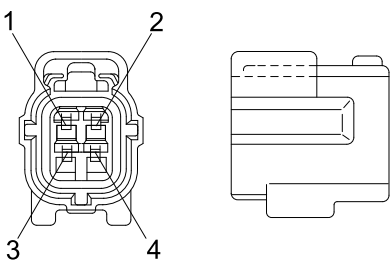
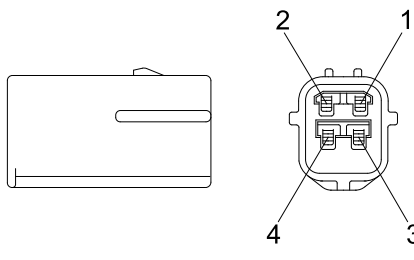
16) ITT SWF CONNECTOR

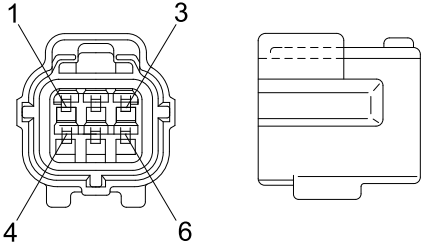
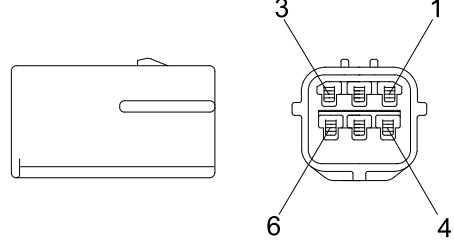
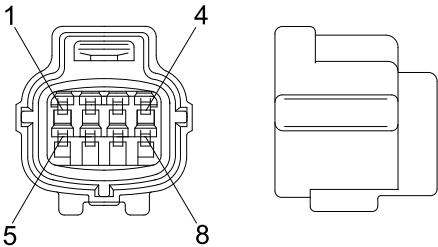
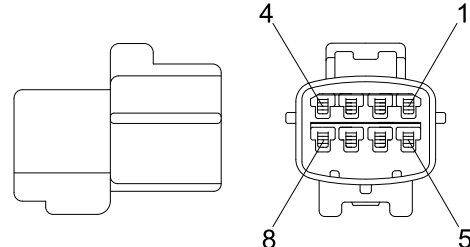
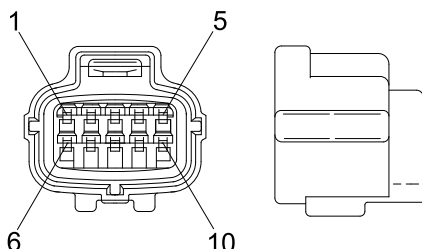
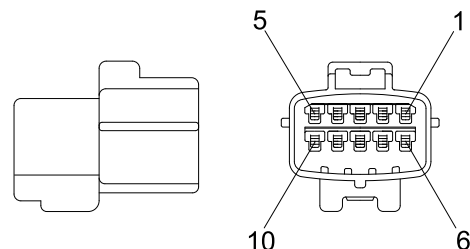
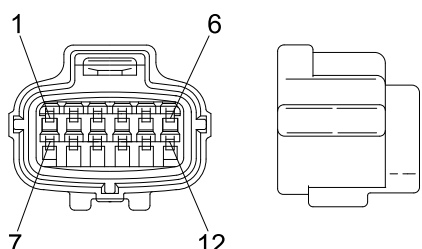
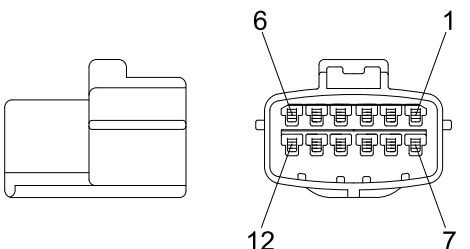
No. of pin	Receptacle connector (female)	Plug connector (male)
10	 <p style="text-align: right;">SWF593757</p>	

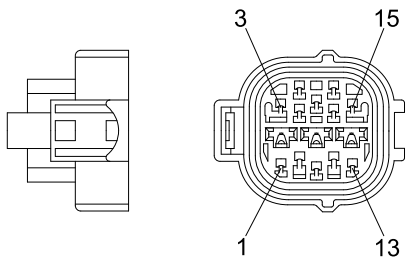
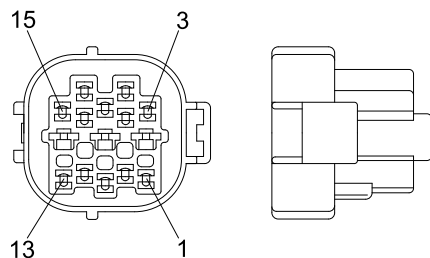
17) MWP NMWP CONNECTOR

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

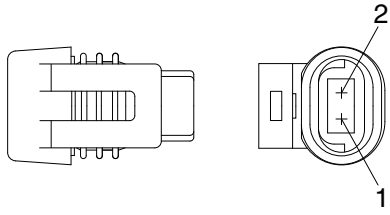
18) ECONOSEAL J TYPE CONNECTORS

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

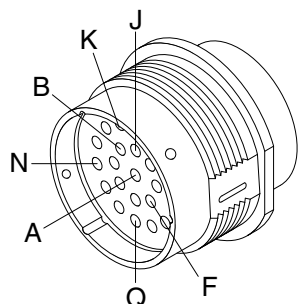
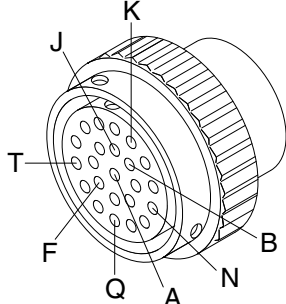
No. of pin	Receptacle connector (female)	Plug connector (male)
6	 <p data-bbox="686 638 837 672">S816-006002</p>	 <p data-bbox="1236 638 1388 672">S816-106002</p>
8	 <p data-bbox="686 1041 837 1075">S816-008002</p>	 <p data-bbox="1236 1041 1388 1075">S816-108002</p>
10	 <p data-bbox="686 1444 837 1478">S816-010002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

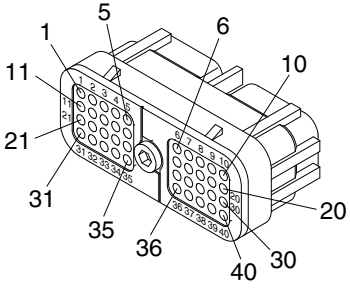
19) METRI-PACK TYPE CONNECTOR

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

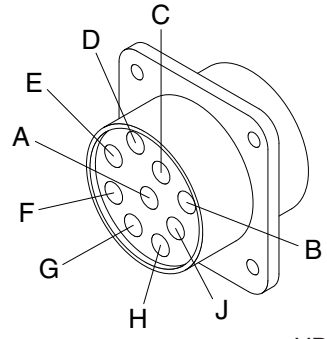
20) DEUTSCH HD30 CONNECTOR

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>

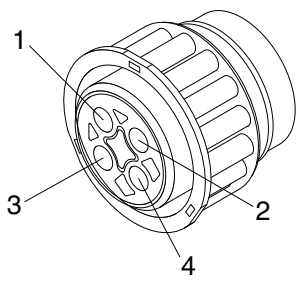
21) DEUTSCH MCU CONNECTOR

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

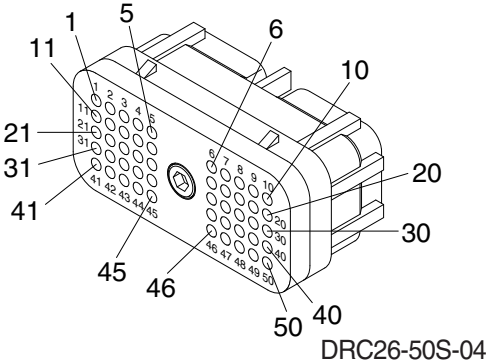
22) DEUTSCH SERVICE TOOL CONNECTOR

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

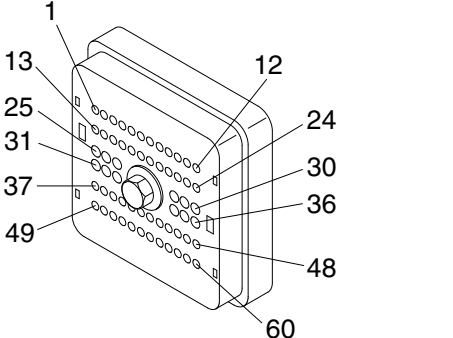
23) AMP FUEL WARMER CONNECTOR

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>	