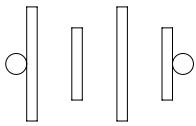
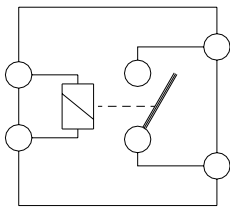
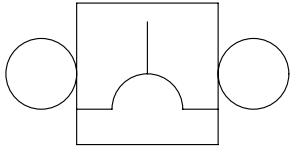
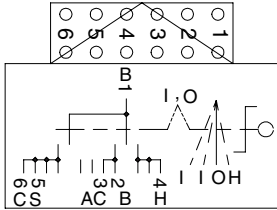
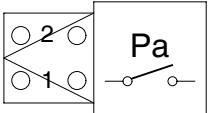
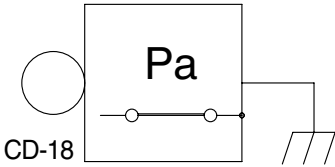
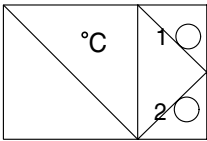
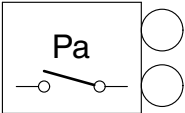
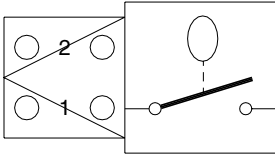
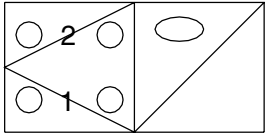
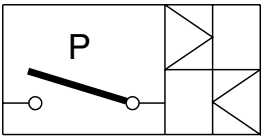
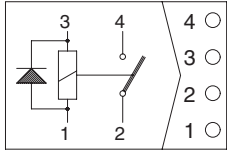
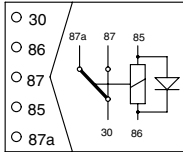
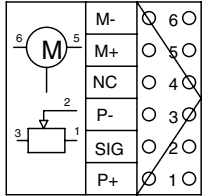
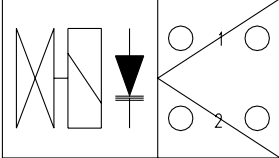
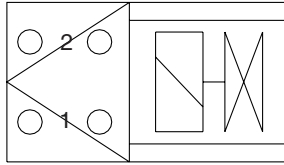
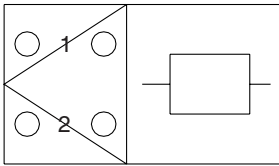
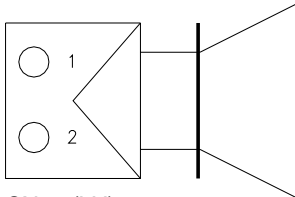
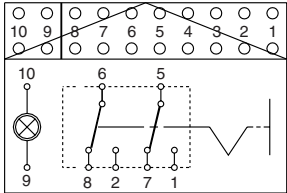
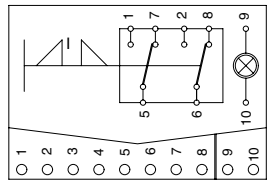
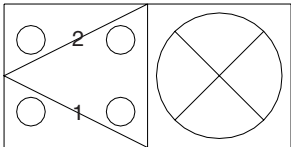
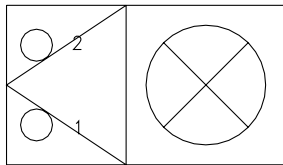
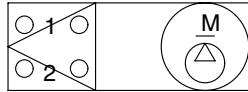


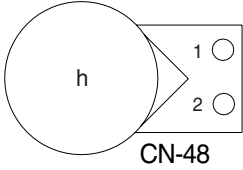
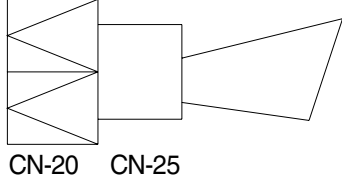
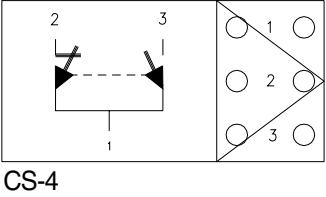
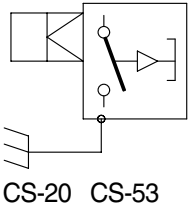
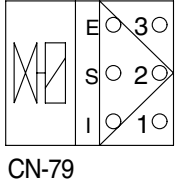
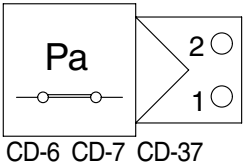
## GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

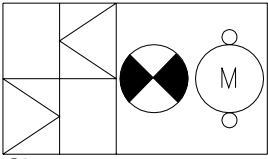
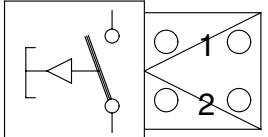
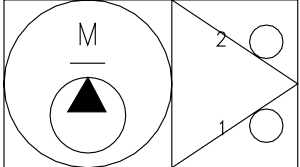
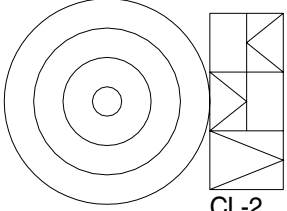
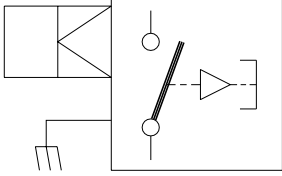
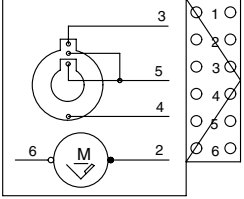
Part name	Symbol	Specification	Check
Battery		12V × 100Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 ~ 1.250 : Normal 1.250 below : Recharging
Battery relay	 <p style="text-align: center;">CR-1</p>	Rated load : 24V 100A(continuity) 1000A(30seconds)	※ Check coil resistance (M4 to M4) Normal : About 50 Ω ※ Check contact Normal : ∞ Ω
Reset button	 <p style="text-align: center;">CS-60 CS-61</p>	24V 60A	※ Check disconnection Normal : About 0 Ω Check button is up.
Start key		B-BR : 24V 1A B-ACC : 24V 10A B-ST : 24V 40A	※ Check contact OFF : ∞ Ω (For each terminal) ON : 0 Ω (For terminal 1-3 and 1-2) START : 0 Ω (For terminal 1-5)
Pressure switch (For overload)	 <p style="text-align: center;">CD-31</p>	3 ~ 6 kgf/cm <sup>2</sup> (N.O TYPE)	※ Check contact Normal : ∞(OPEN)

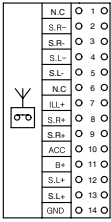
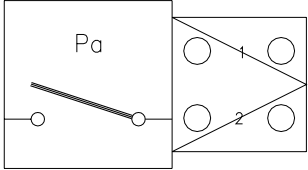
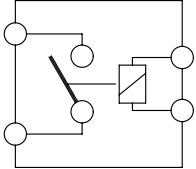
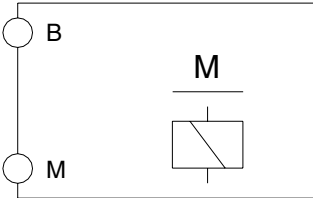
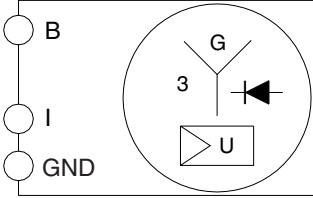
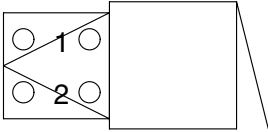
Part name	Symbol	Specification	Check
Pressure switch (For engine oil)	 <p>CD-18</p>	0.5 kgf/cm <sup>2</sup> (N.C TYPE)	※ Check resistance Normal : 0 Ω (CLOSE)
Temperature sensor	 <p>CD-1</p>	-	※ Check resistance 50°C : 804 Ω 80°C : 310 Ω 100°C : 180 Ω
Air cleaner pressure switch	 <p>CD-10</p>	Pressure: 635mmH <sub>2</sub> O (N.O TYPE)	※ Check contact Normal : ∞ Ω
Coolant level sensor	 <p>CD-16</p>	24V 0.5A	※ Check contact High level : ∞ Ω Low level : 0 Ω
Fuel sender	 <p>CD-2</p>	-	※ Check resistance Full : 50 Ω      6/12 : 350 Ω 11/12 : 100 Ω    5/12 : 400 Ω 10/12 : 150 Ω    4/12 : 450 Ω 9/12 : 200 Ω     3/12 : 500 Ω 8/12 : 250 Ω     2/12 : 550 Ω 7/12 : 300 Ω     1/12 : 600 Ω Empty warning : 700 Ω
Tacho sensor	 <p>CD-17</p>	-	※ Check resistance Normal : 300 Ω (For terminal 1,2)

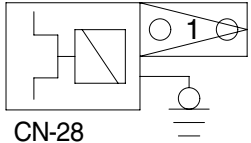
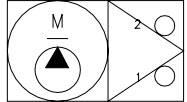
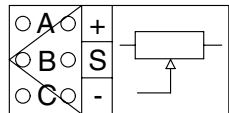
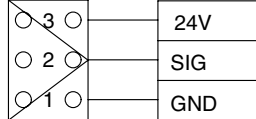
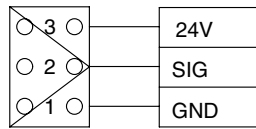
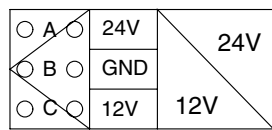
Part name	Symbol	Specification	Check
Heater relay	 <p>CR-46</p>	24V 20A	※ Check resistance Normal : About 200 Ω (For terminal 1-3) : 0 Ω (For terminal 2-4)
Relay (Horn, Safety, Ac comp, Power, Preheat)	 <p>CR-2 CR-35 CR-5 CR-36 CR-7</p>	24V 16A0	※ Check resistance Normal : About 160 Ω (For terminal 85-86) : 0 Ω (For terminal 30-87a) : ∞ Ω (For terminal 30-87)
Accel actuator	 <p>CN-76</p>	-	※ Check resistance Normal : 10 Ω (For terminal 5-6) 5kΩ (For terminal 1-3)
Solenoid valve	 <p>CN-66 CN-68 CN-70 CN-88 CN-133 CN-137</p>	24V 1A	※ Check resistance Normal : 15~25 Ω (For terminal 1-2)
EPPR valve	 <p>CN-75 CN-131</p>	700mA	※ Check resistance Normal : 18~25 Ω (For terminal 1-2)
Resistor	 <p>CN-47</p>	50 Ω 20W ± 5%	※ Check resistance Normal : 50 Ω

Part name	Symbol	Specification	Check
Speaker	 CN-23(LH) CN-24(RH)	4 Ω 20W	※ Check resistance Normal : 4 Ω
Switch (Locking type)	 CS-23 CS-27 CS-50 CS-52 CS-54	24V 8A	※ Check contact Normal ON - 0 Ω (For terminal 1-5,2-6) - ∞ Ω (For terminal 5-7,6-8) OFF - ∞ Ω (For terminal 1-5,2-6) - 0 Ω (For terminal 5-7,6-8)
Switch (Quick clamp)	 CS-67	24V 8A	※ Check contact Normal ON - 0 Ω (For terminal 1-5,2-6) - ∞ Ω (For terminal 5-7,6-8) OFF - ∞ Ω (For terminal 1-5,2-6) - 0 Ω (For terminal 5-7,6-8)
Head lamp, Work lamp, Cab lamp	 CL-4 CL-5 CL-6 CL-8 CL-9	24V 70W (H3 TYPE)	※ Check disconnection Normal : 1.2 Ω
Room lamp	 CL-1	24V 10W	※ Check disconnection Normal : A few Ω
Fuel filler pump	 CN-61	24V 10A 35 l /min	※ Check resistance Normal : 1.0 Ω

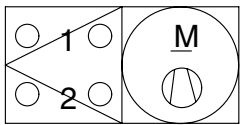
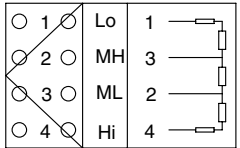
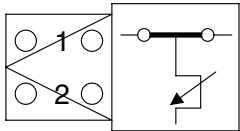
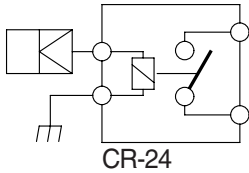
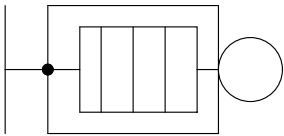
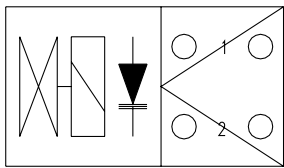
Part name	Symbol	Specification	Check
Hour meter		16V ~ 32V	※ Check operation ・ Supply power(24V) to terminal No. 2 and connect terminal No. 1 and ground.
Horn		DC 22.0 ~ 28.0V 2A	※ Check operation ・ Supply power(24V) to each terminal and connect ground.
Safety switch 1		24V 15A (N.C TYPE)	※ Check contact Normal : 0 Ω (For terminal 1-2) : ∞ Ω (For terminal 1-3) Operating : ∞ Ω (For terminal 1-2) : 0 Ω (For terminal 1-3)
Safety switch 2 Wiper cut sw		24V (N.C TYPE)	※ Check contact Normal : 0 Ω (one pin to ground)
Fuel cut-off		24V	※ Check resistance Normal : 15~25 Ω
Pressure switch (Travel, Work, 2pcs boom auto idle)		10bar (N.C type)	※ Check contact Normal : 0.1 Ω

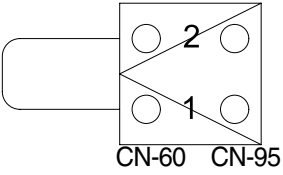
Part name	Symbol	Specification	Check
Beacon lamp	 <p>CL-7</p>	24V 70W	※ Check disconnection Normal : 1.1 Ω
Switch (Power max, One touch decel, Breaker, Horn)	 <p>CS-5 CS-19 CS-26 CS-26A CS-29</p>	24V 6A	※ Check contact Normal : ∞ Ω
Washer tank	 <p>CN-22</p>	24V 3.8A	※ Check contact Normal : 10.7 Ω (For terminal 1-2)
Cigar lighter	 <p>CL-2</p>	24V 5A 1.4W	※ Check coil resistance Normal : About 1MΩ ※ Check contact Normal : ∞ Ω Operating time : 5~15sec
Door switch	 <p>CS-1</p>	24V 2W	※ Check resistance Normal : About 5MΩ
Wiper motor	 <p>CN-21</p>	24V 2A	※ Check contact Normal : 7 Ω (For terminal 2-6)

Part name	Symbol	Specification	Check
Cassette radio	 <p>CN-27</p>	24V 2A	※ Check voltage 20 ~ 25V (For terminal 10-14,11-14)
Receiver dryer	 <p>CN-29</p>	24V 2.5A	※ Check contact Normal : 0 Ω
Start relay	 <p>CR-23</p>	24V 300A	※ Check contact Normal : 0.94 Ω (For terminal 1-2)
Starter	 <p>CN-45</p>	Delco Remy 28MT 24V	※ Check contact Normal : 0.1 Ω
Alternator	 <p>CN-74</p>	24V 60A	※ Check contact Normal : 0 Ω (For terminal B -1) Normal : 24 ~ 27.5V
Travel alarm buzzer	 <p>CN-81</p>	24V 0.5A	※ Check contact Normal : 5.2 Ω

Part name	Symbol	Specification	Check
Aircon compressor	 CN-28	24V 79W	※ Check contact Normal : 13.4 Ω
Prolix switch (up to #0179)	 CS-7	24V ~ 150V 15A	※ Check contact Normal : 0.2 Ω (For terminal 1-20) Emergency : 1.2 Ω (For terminal 2-3) : 5.2 Ω (For terminal 2-6) : 0 Ω (For terminal 5-6)
Accel dial	 CN-142	-	※ Check resistance Normal : About 5kΩ (For terminal A-C) ※ Check valtage Normal : About 5V (For terminal A-C) : 2 ~ 4.5V (For terminal C-B)
Transducer	 CD-32 CD-33 CD-42 CD-43	500 bar	0bar : 1V(For terminal 1-2) 500bar : 5V(For terminal 1-2)
Transducer	 CD-44	50 bar	0bar : 1V(For terminal 1-2) 50bar : 5V(For terminal 1-2)
DC/DC Converter	 CN-138	12V 3A	24V(A-B) 12V(B-C)



Part name	Symbol	Specification	Check
Blower motor		24V 9.5A	※ Check resistance 2.5 Ω (For terminal 1-2)
Aircon resistor		-	※ Check resistance 1.12 Ω (For terminal 4-2) 2.07 Ω (For terminal 2-3) 3.17 Ω (For terminal 3-1)
Duct sensor (Switch)		1°C OFF 4°C ON	※ Check resistance : 0 Ω (For terminal 1-2, the atmosphere temp : over 4°C)
Preheater relay		24V 200A	※ Check contact Normal : 0.94 Ω (For terminal 1-GND)
Preheater		24V 200A	※ check resistance : 0.25 ~ 0.12 Ω
Quick clamp		24V 6A	※ Check contact Normal : 28.9MΩ (For terminal 1-2)

Part name	Symbol	Specification	Check
Fusible link		60A	※ Check disconnection Normal : 0 Ω (Connect ring terminal and check resist between terminal 1 and 2)