WHEELED EXCAVATOR

SERVICE MANUAL

HW100A

HYUNDAI

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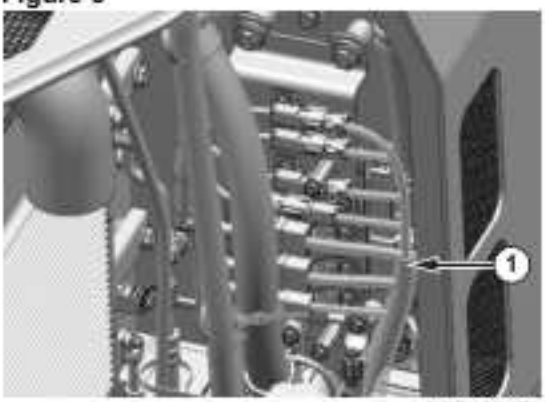
Engine Specification

Items		Specification
Engine	Type	Water-cooled, Direct Injection
	Emission	EU Stage V
	Model	D34
	Rated Net Power	75 kW (102 PS) @ 2,000 rpm (ISO 14396)
Number of Cylinders		4
Displacement		3,409 cc
Compression Ratio		18 : 1
Low Idle Speed		1,000 ± 10 rpm
Max. Full Load Speed		2,000 ± 25 rpm
Weight, without Coolant and Oil		365 kg (804 lb)
Cooling System	Coolant Temperature	90 – 95°C
	Number of Thermostats	1
	Thermostat, Opening Temperature	80°C
Electrical System	Type	12 V, DC
	Starter Motor (Standard Equipment)	12 V, 2.5 kW
	Alternator (Standard Equipment)	12 V, 140 A

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2. Disconnect wire harness connectors (1) from bracket.

Figure 5



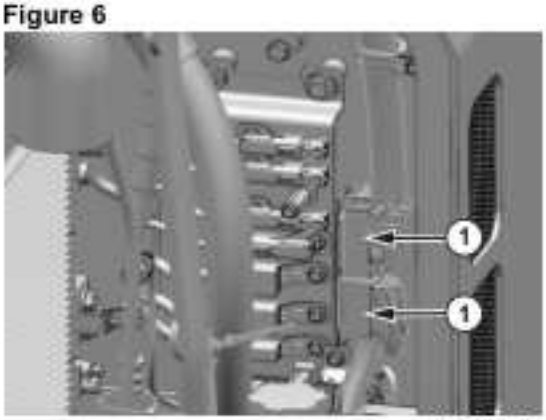
DS2105473

Wiring Harness

1. Disconnect harnesses (1) from ECU.

   NOTE: *Check the location of the connectors before disconnecting. Be careful not to let water get into electrical components. If water gets into electrical system, this will cause an electrical short circuit and result in improper machine operation.*

Figure 6



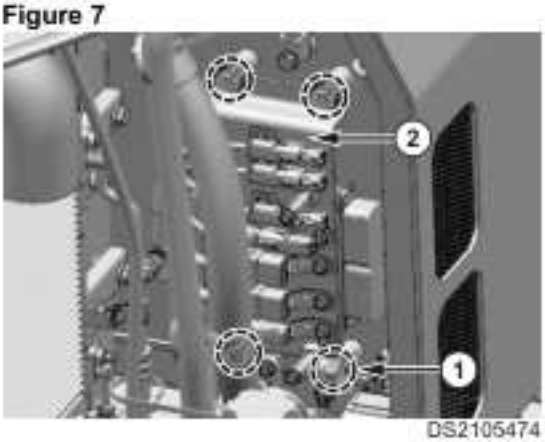
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ECU Assembly

1. Remove mounting bolts (1) and separate bracket (2).

   NOTE: *Do not tighten the fasteners too hard when installing.*

Figure 7



DS2105474

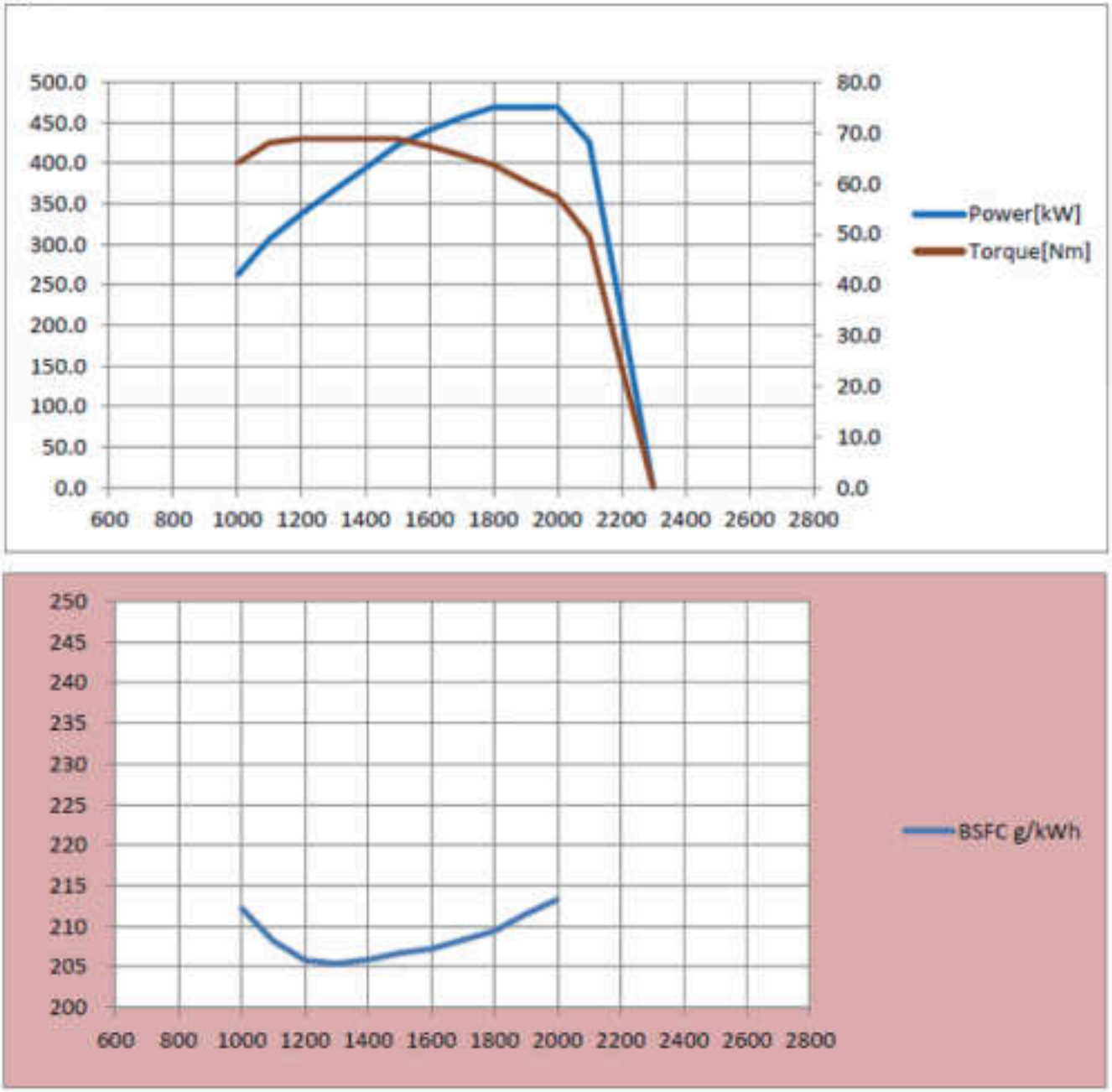
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35	VSV011	2 Pump Select Solenoid Valve (I)
36	VSV037	Quick Coupler Solenoid Valve
37	VRY002	Back Buzzer Relay
38	VRY016	Auto Shut Off Relay
39	VRY018	ACC Relay
40	VGC003	External Voice Warning Signal
41	VGC004	Wiper Operating Signal
42	VSP001	Front Pump Pressure(P2) Sensor
43	VSP002	Rear Pump Pressure(P1) Sensor
44	VSP003	Overload Warning Pressure Sensor
45	VSP004	Px (Front) Pressure Sensor
46	VSP005	Py (Travel) Pressure Sensor
47	VSP006	Boom Up Pressure Sensor
48	VSP010	Arm In Pressure Sensor
49	VSP014	Swing Pressure Sensor
50	VSP021	I-CEPT Sensor P1
51	VSP022	I-CEPT Sensor P2
52	VSE001	Oil Temperature Sensor
53	VSE002	Fuel Sensor
54	VSE004	WIF Sensor
55	VS5001	Thumb Wheel (RH)
56	VS5002	Thumb Wheel (LH)
57	VS5005	Dial
58	VS5006	Machine Controller +5 V Output 1
59	VS5007	Machine Controller +5 V Output 2
60	VAL001	Alternator Potential

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Engine Performance Curves

Figure 69



DS2105391

NOTE: *Barometric Pressure: 760 mm (30") Mercury*

Temperature: 20°C (68°F)

W/O Cooling Fan

Alternator: 12V, 140A

Exhaust System: Complete, attached

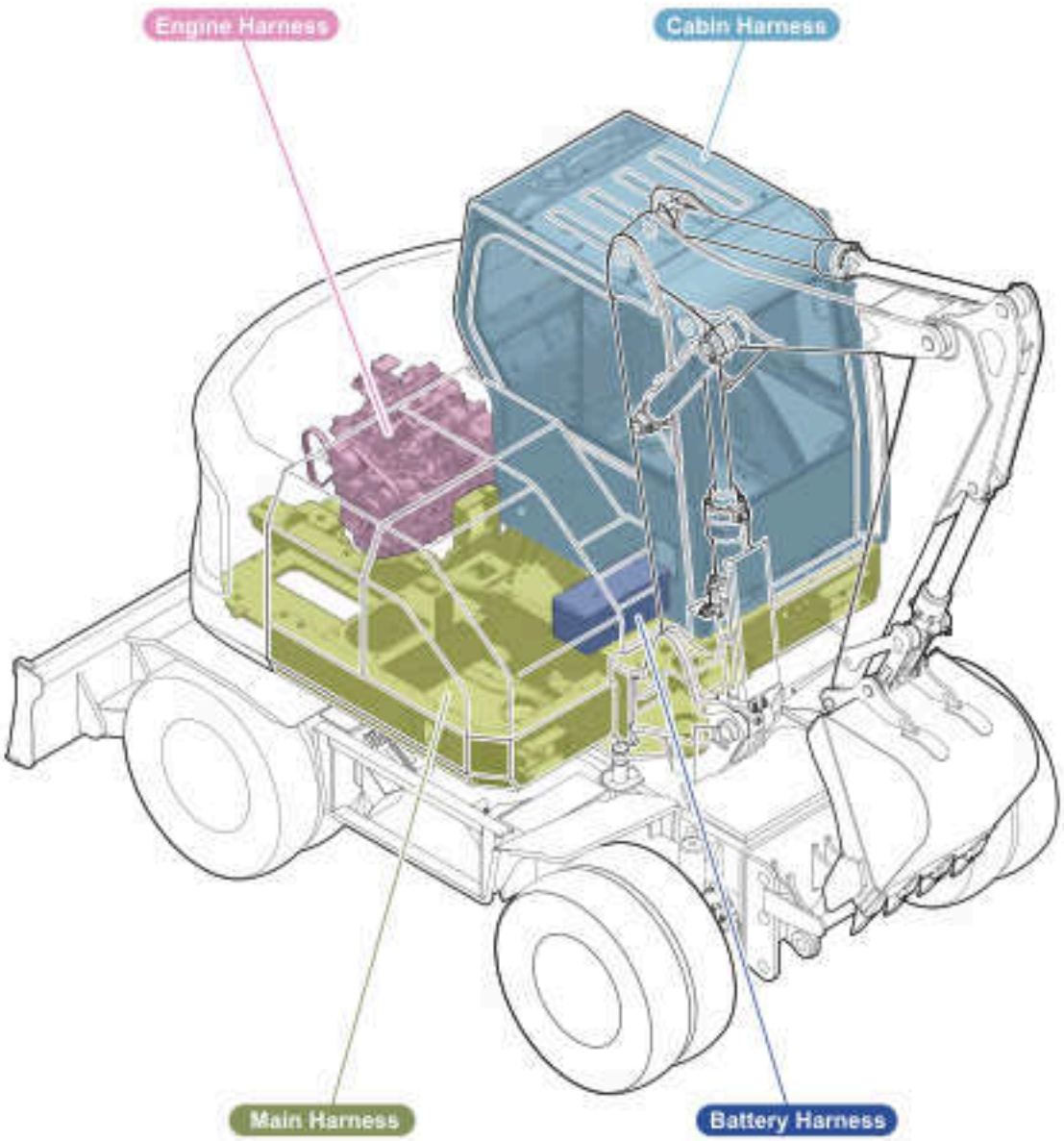
Air Cleaner, Installed

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WIRING DEVICE

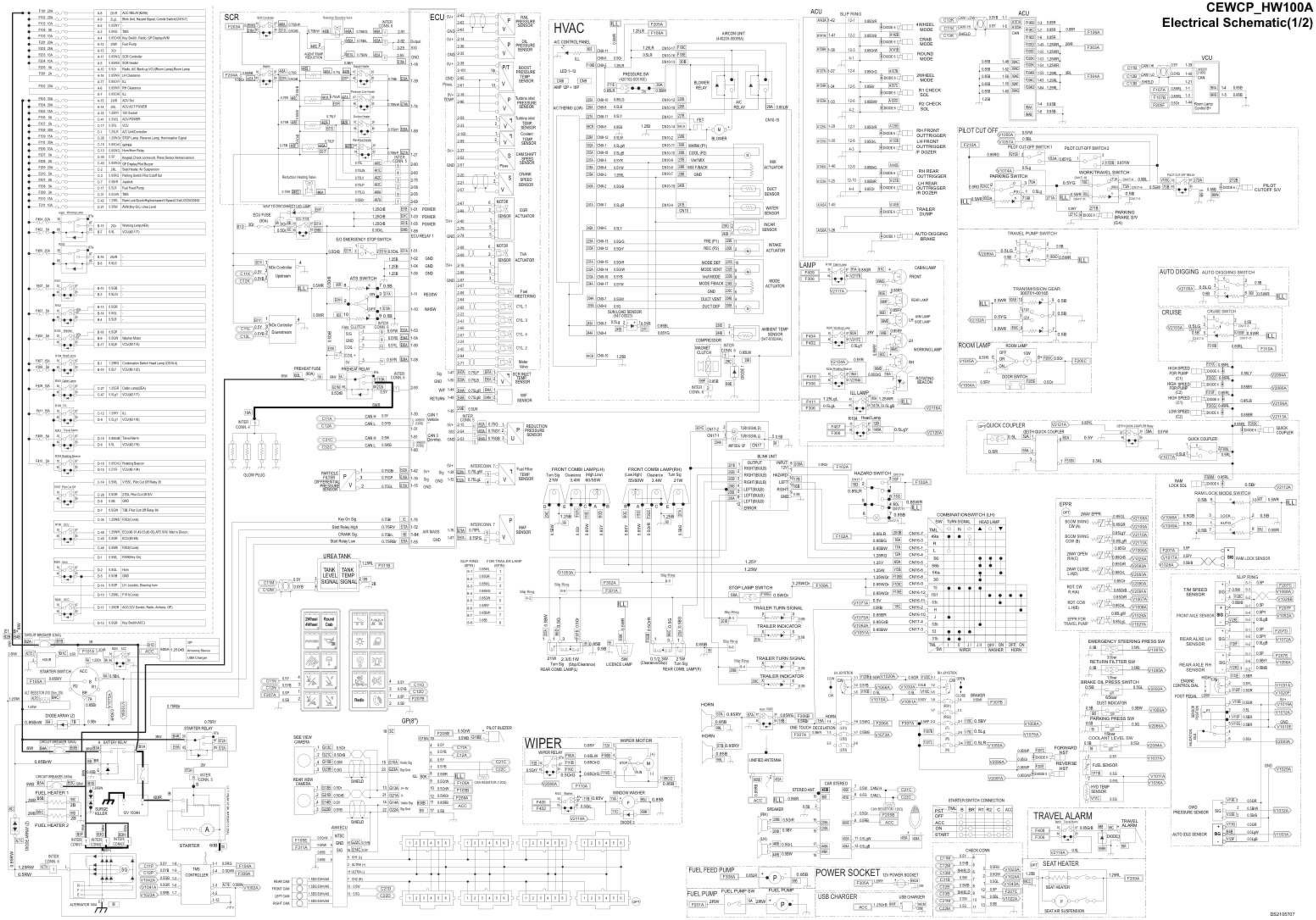
Wiring Harness Layout

Figure 1



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CEWCP_HW100A
Electrical Schematic(1/2)



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