CX300D
LC Version
Tier 4B (final)
Crawler Excavator

SERVICE MANUAL

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CASE CONSTRUCTION

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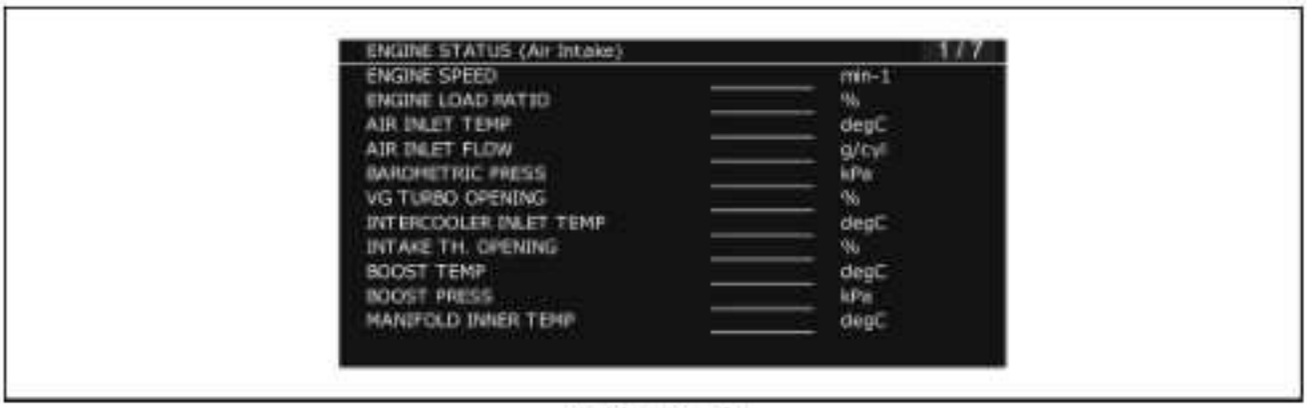
Component	Connector / Link	Description
WB-903	**Wiring harnesses - Electrical schematic sheet 29 - MAIN CAB-ECM INTER CONNECTOR (55.100)**	
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ENGINE STATUS

1/7



SML14CEX0006A 22

Display	Explanation	Value
ENGINE SPEED	Actual engine speed	**0 - 2500 RPM**
ENGINE LOAD RATIO	Engine torque (load ratio)	**0 - 100 %**
AIR INLET TEMP	Intake air temperature	**-40 - 210 °C (-40.00 - 410 °F)**
AIR INLET FLOW	Suction air volume per cylinder	**3 - 12 g**
BAROMETRIC PRESS	Barometric pressure	**0 - 125 kPa (0 - 18 psi)**
VG TURBO OPENING	VG turbo opening (degree)	**0 - 100 %**
INTERCOOLER INLET TEMP	Inter-cooler inlet temperature	**-40 - 210 kPa (-6 - 30 psi)**
INTAKE TH. OPENING	Intake throttle opening (degree)	**0 - 100 %**
BOOST TEMP	Boost temperature	**-40 - 210 °C (-40.00 - 410 °F)**
BOOST PRESS	Boost pressure	**0 - 500 kPa (0 - 73 psi)**
MANIFOLD INNER TEMP	Manifold internal intake-air temperature	**-40 - 210 °C (-40.00 - 410 °F)**

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P0523-Oil pressure sensor circuit high

Control Module : ECM

Solution:

1. Check and diagnose the below fault codes before you proceed with the diagnostics code P0523.

   Diagnostic trouble code P06A9

2. Turn OFF the ignition switch.

   Disconnect the harness connector **CN.E7** from the oil pressure sensor.

   Observe the oil pressure sensor display on the trouble diagnosis scan tool.

   If the reading is more than or equal to the **0.1 V**, inspect the signal circuit between the ECM and the oil pressure sensor.

   • Make sure that there is no short to the battery or ignition power supply.

   • Make sure that there is no short to the **5 V** power supply.

   A. If a problem is found, repair the signal circuit.

   B. If there are no problems, proceed to Step **3**

3. Inspect to see if there is an open circuit or high resistance in the GND circuit between the ECM and the oil pressure sensor.

   A. If a problem is found, repair the GND circuit.

   B. If there are no problems, proceed to Step **4**

   NOTE:
   • The oil pressure sensor shares the GND circuit with other sensors.
   • The diagnostic trouble code set on a sensor which shares this circuit may be detected.

4. Inspect the oil pressure sensor harness connector **CN.E7** for a poor connection.

   A. If a problem is found, repair the harness connector **CN.E7**.

   B. If the harness connector **CN.E7** is normal, replace the oil pressure sensor. (Refer to " **Engine oil pressure sensor and switch - Remove (55.013)** and **Engine oil pressure sensor and switch - Install (55.013)**")

   C. If there are no problems, proceed to Step **5**

5. Inspect the ECM harness connector **CN.D4** for a poor connection.

   A. If a problem is found, repair the harness connector **CN.D4**.

   B. If the harness connector **CN.D4** is normal, replace the ECM. (Refer to " **Engine Control Unit (ECU) - Remove (55.015)** and **Engine Control Unit (ECU) - Install (55.640)**")

6. Set the Injector ID Code, fuel delivery rate and engine number for the ECM.

7. Confirm resolution:

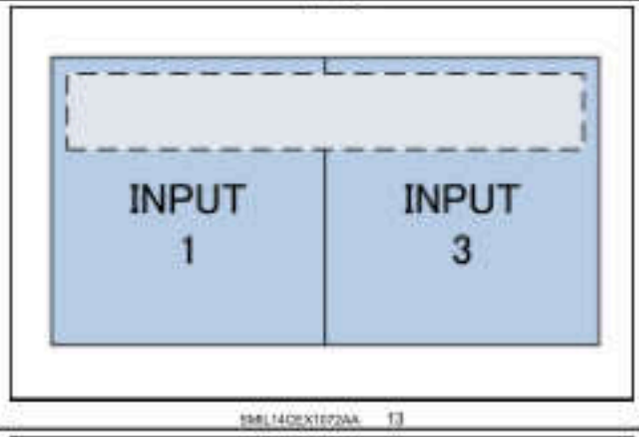
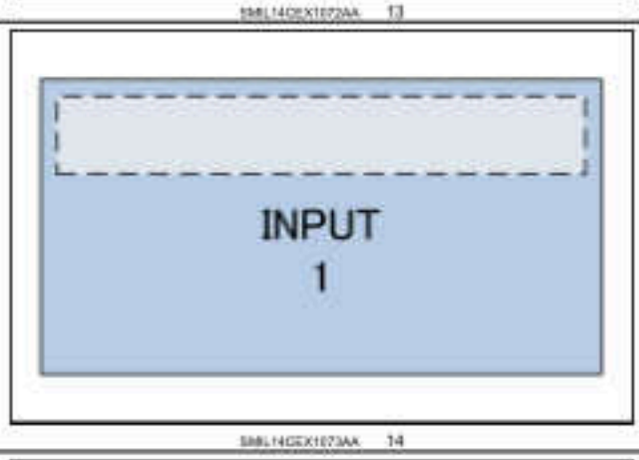
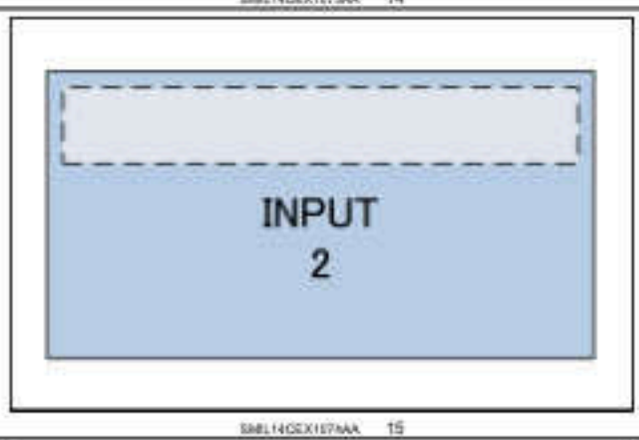
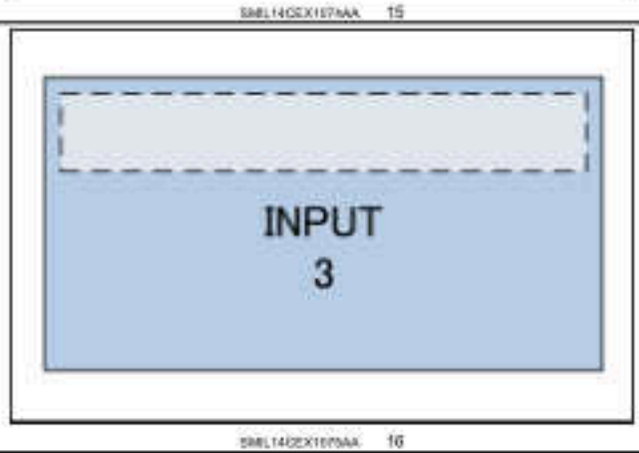
   1. Clear the diagnostic trouble code using the trouble diagnosis scan tool.

   2. Turn OFF the ignition switch for at least **30 s**.

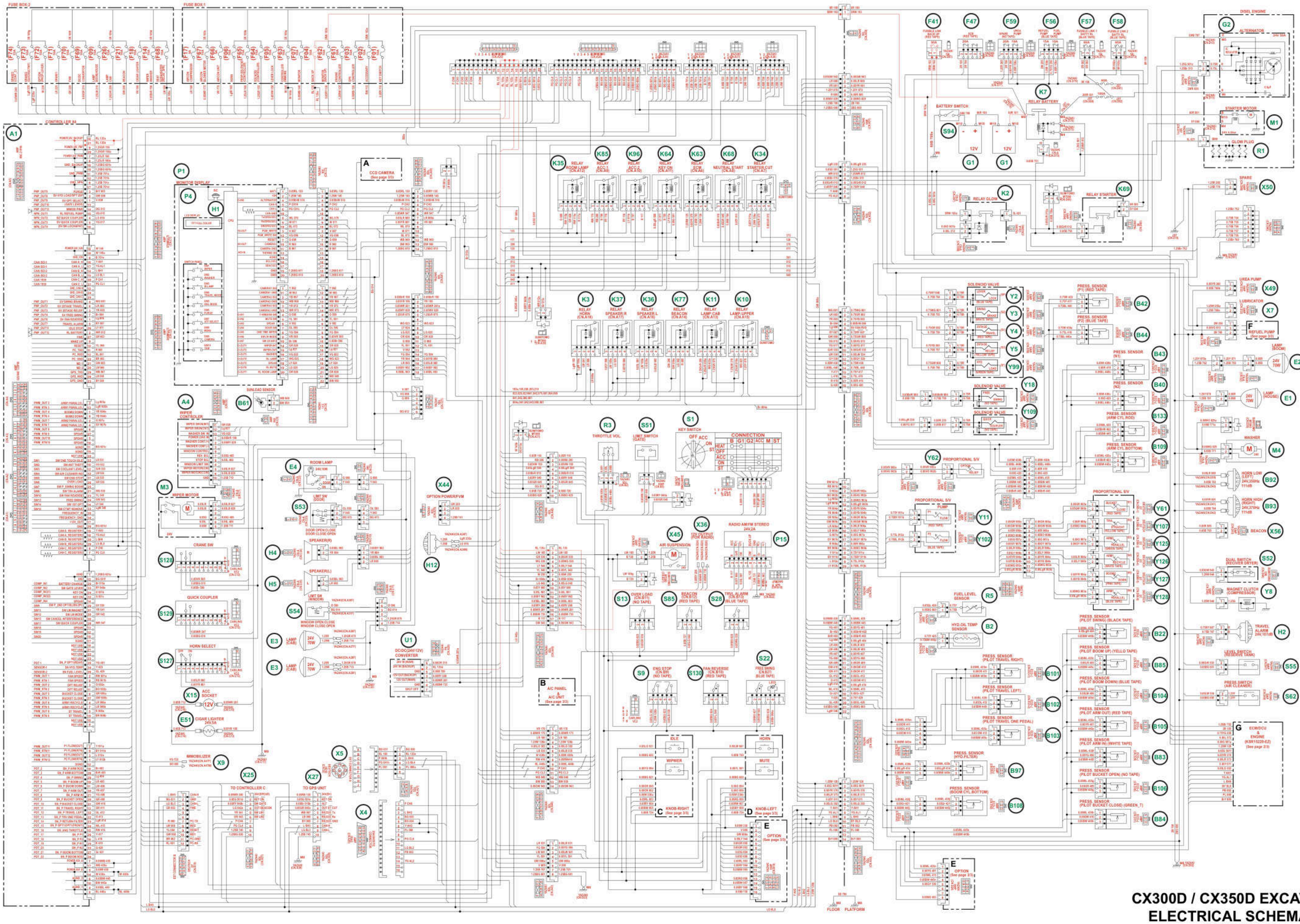
   3. Start the engine.

   4. Perform a test-run under the conditions for running the diagnostic trouble code.

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Type	Meter position	Camera input	Display
G	TOP	INPUT 1+3	
H	TOP	INPUT 1	
I	TOP	INPUT 2	
J	TOP	INPUT 3	

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