CEBM017800

Shop Manual

KOMATSU®

GALEO

PC300LL-7E0

LOGGING/ROAD BUILDER EXCAVATOR

SERIAL NUMBERS **PC300LL-7E0 A86001** and UP

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December 2006

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Warm-up

- After the engine is started, if the engine coolant temperature is low, the engine speed is raised automatically to warm up the engine.

Operating condition (All)	⇒	Operated
Coolant temperature: Below 30°C (86°F) Engine speed: Max. 1,200 rpm		Engine speed: Max. 1,200 rpm

⇓

Resetting condition (Any one)		⇒	Reset
Auto	Coolant temperature: Above 30°C (86°F)		Engine speed: Any level
	Auto-warm-up operation time: Min. 10 minutes		
Manual	Fuel control dial: Kept at 70% of full level for 3 sec. or longer		

Overheat Prevention

- If the engine coolant temperature rises too high during work, the pump load and engine speed are reduced to protect the engine from overheating.
- This function is turned on when the coolant temperature rises above 95°C (203°F).

Operating condition	⇒	Operation/Remedy	⇒	Resetting condition
Hydraulic oil temperature: Above 95°C (203 °F)		Work mode: Travel Engine speed: Keep as is. Lower travel speed.		Hydraulic oil temperature: Below 95°C (203°F) • Under above condition, controller is set to condition before operation of function. (Automatic reset)

Operating condition	⇒	Operation/Remedy	⇒	Resetting condition
Hydraulic oil or coolant temperature: Above 100°C (212°F)		Work mode: P or E mode Engine speed: Keep as is. Lower pump discharge.		Hydraulic oil or coolant temperature: Below 100°C (212°F) • Under above condition, controller is set to condition before operation of function. (Automatic reset)

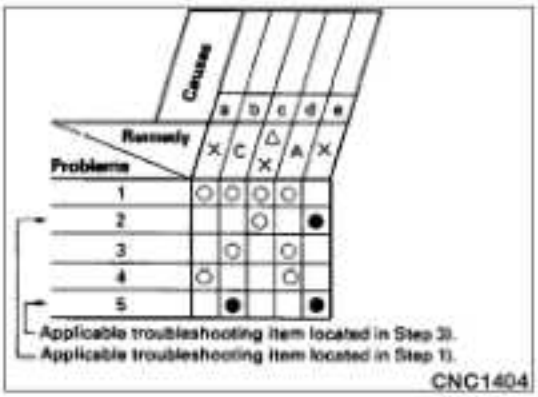
Operating condition	⇒	Operation/Remedy	⇒	Resetting condition
Hydraulic oil or coolant temperature: Above 102°C (216°F)		Work mode: P, E, B or L mode Engine speed: Keep as is. Monitor alarm lamp: Lights up. Lower pump discharge.		Hydraulic oil or coolant temperature: Below 102°C (216°F) • Under above condition, controller is set to condition before operation of function. (Automatic reset)

Operating condition	⇒	Operation/Remedy	⇒	Resetting condition
Hydraulic oil or coolant temperature: Above 105°C (221°F)		Work mode: Any mode Engine speed: Low idle Monitor alarm lamp: Lights up Alarm buzzer: Sounds		Hydraulic oil or coolant temperature: Below 105°C (221°F) Fuel control dial: Return to low idle position once. • Under above condition, controller is set to condition before operation of function. (Manual reset)

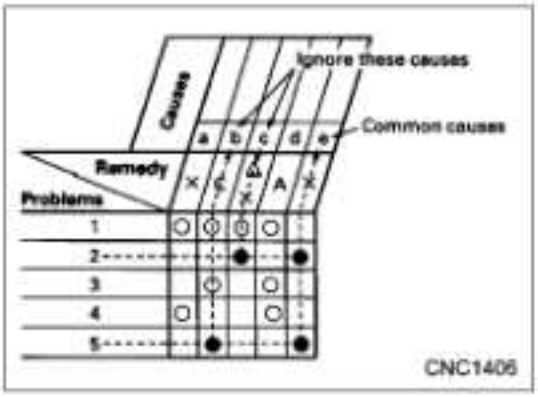
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C. Operate the machine and check the troubleshooting items other than in 1). Operate the machine and check the items in the same way as in 1), and if the symptom appears, record that item for further reference. (In the chart on the right, the symptom appears again for item 5).

D. Find the appropriate chart for the cause from the cause column. In the same way as in step 2), if the symptom appears, the ❍ marks on that line indicate the possible causes. (For items No. 5 in the table on the right, the possible causes are **b** or **e**).



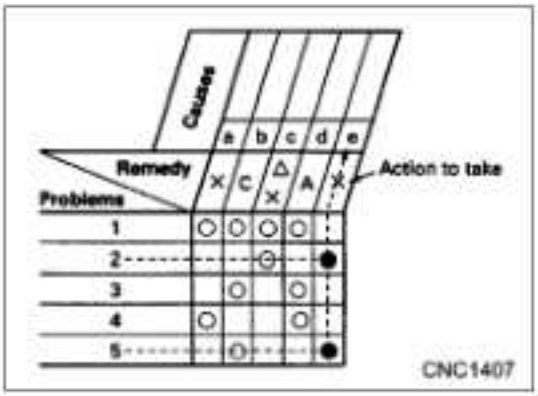
E. Narrow down the possible causes. There is one column causes among the causes located in Steps B) and D). (One cause marked ❍ appears on the line for both items.) This cause is comment to both the symptoms in troubleshooting Steps 1) and 3). The causes which are not comment to both troubleshooting items (items which are not marked ❍ for both symptoms) are unlikely causes, so it is advised to ignore them. (In the example given on the right, the causes for troubleshooting Item 2) are **c** or **e**, and the cause for troubleshooting Item 5) are **b** or **e**, so cause e is comment to both).



F. Repeat the operations in Steps C) and D) and E) until one cause (one comment cause) remains. If the cause cannot be narrowed down to one cause, narrow the causes down to a possible cause.

G. Remedy: If the causes are narrowed down to one comment cause, take action given in the remedy column. The symbols given in the remedy column indicate the following:

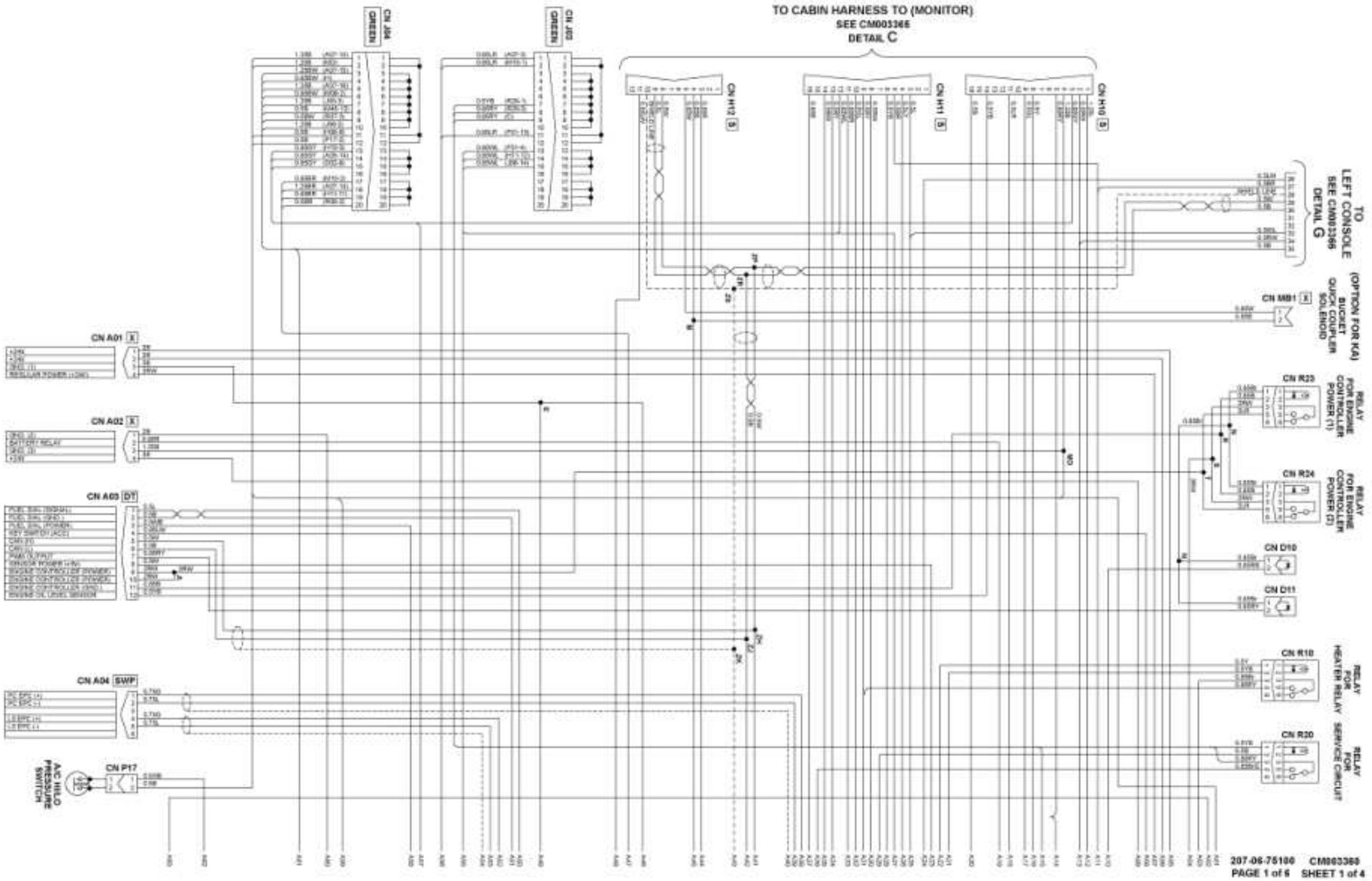
X: Replace **Δ : Repair** **A: Adjust** **C: Clean**



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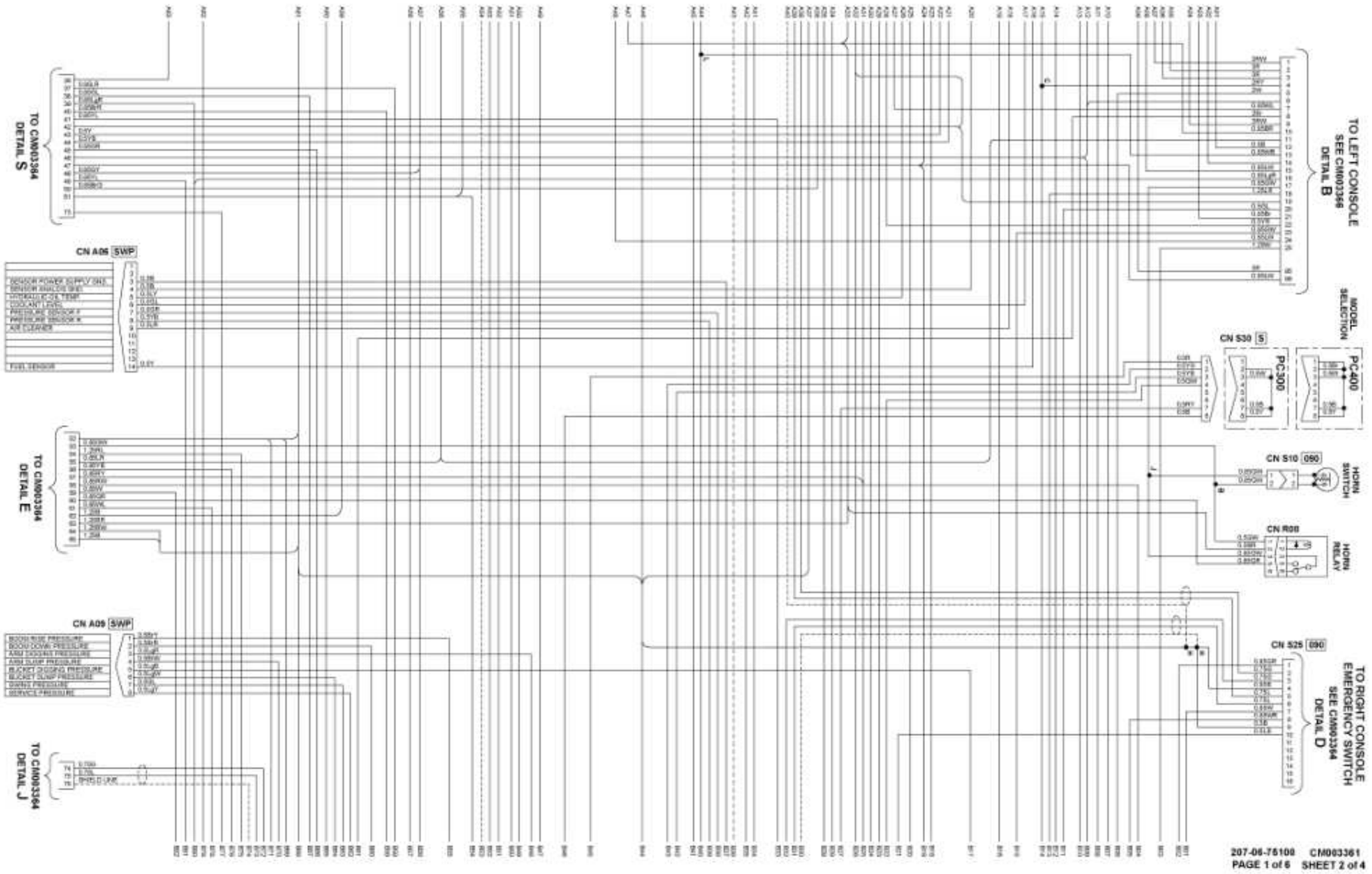
ELECTRICAL CIRCUIT DIAGRAMS

TO CABIN HARNESS



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CABIN HARNESS VIEW 1



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