CEBM031500

Shop Manual

KOMATSU®

PC490LCi-11

HYDRAULIC EXCAVATOR

SERIAL NUMBERS **PC490LCi-11 A45001 and up**

ENGINE **6D125E-7**

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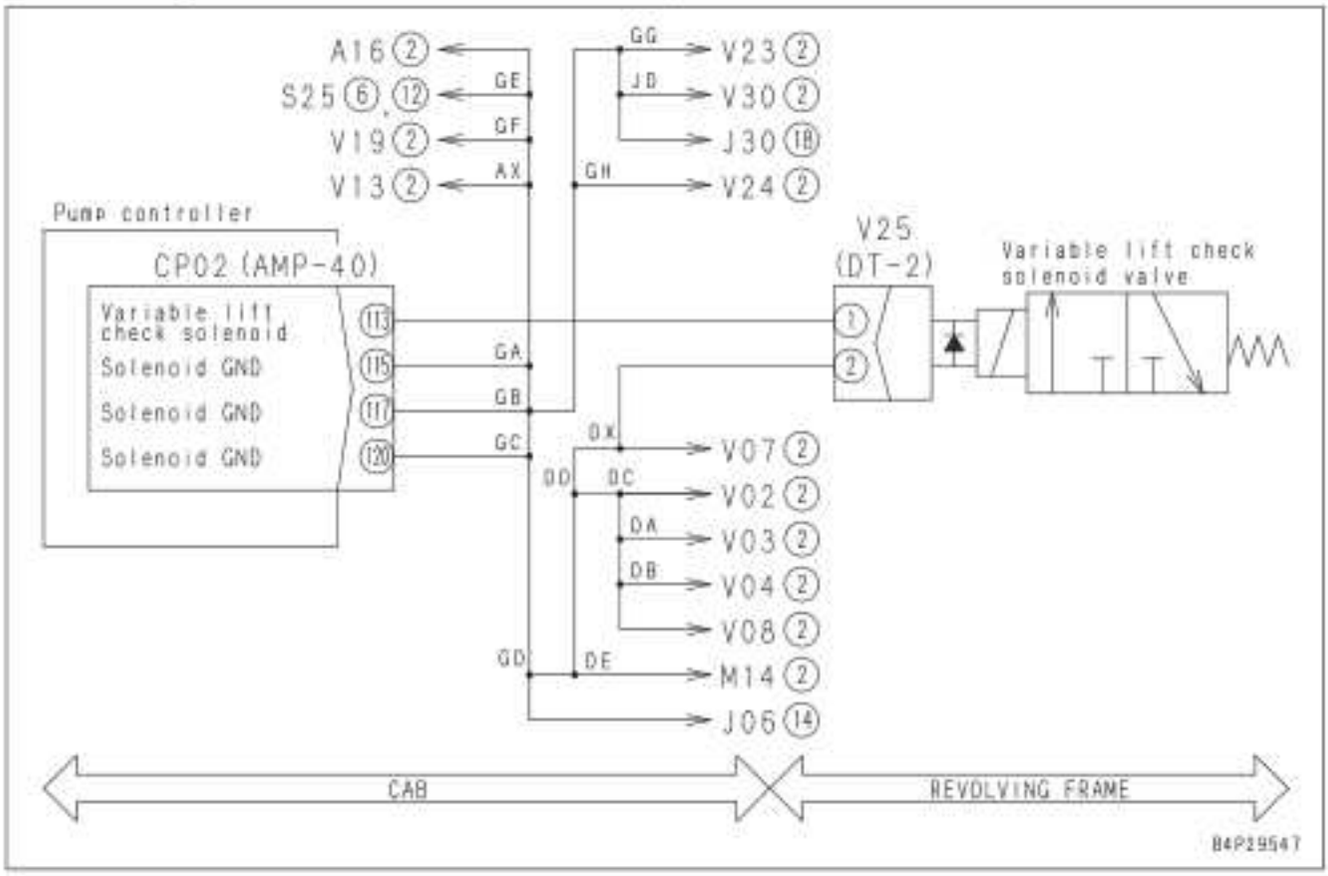
FAILURE CODE [CA4169] AdBlue/DEF Pump Heater OFF Stuck Error

Action level	Failure code	Failure	AdBlue/DEF Pump Heater OFF Stuck Error (Engine controller system)
L01	CA4169		
Detail of failure	AdBlue/DEF pump thawing is not complete.		
Action of controller	None in particular		
Phenomenon on machine	• AdBlue/DEF pump is not thawed • NOx emission increases because AdBlue/DEF injection is disabled at low temperature.		
Related information	• On the Pre-defined Monitoring screen troubleshooting for AdBlue/DEF pump thawing control is used. • 19309 "AdBlue/DEF Pump Heater State", 1: Thawing 2: Heating 3 or 0: OFF (the figures below denote monitoring codes). Troubleshooting for AdBlue/DEF pump thawing control 19107 AdBlue/DEF Pump Heater Control Command 19309 AdBlue/DEF Pump Heater State 19136 AdBlue/DEF Pump Temperature 19304 AdBlue/DEF Pump State 19400 Ambient Temperature 03203 Battery Power Supply **NOTICE** **After investigating the cause of the problem and completing the repair, perform "Loaded Diagnostics Operation To Confirm Failure Correction" to check if the repair is completed. (Clearing the failure code does not determine the completion of repair.) (This failure code is not cleared by starting switch at ON position or "AdBlue/DEF pump heater relay drive test" only.)** • **If "AdBlue/DEF pump temperature " is 45 °C or higher when starting switch is turned to ON position, "Loaded Diagnostics Operation To Confirm Failure Correction" cannot determine if the repair is completed successfully, therefore, wait until "AdBlue/DEF pump temperature" becomes 45 °C or lower.** • **In addition, if "AdBlue/DEF pump temperature " is 55 °C or higher, "AdBlue/DEF pump heater relay drive test" in "Loaded Diagnostics Operation To Confirm Failure Correction" is disabled.**		

No.	Cause	Procedure, measuring location, criteria and remarks
1	Defective AdBlue/DEF pump system	Perform troubleshooting for failure code [CA3558] or [CA3559] or [CA2976].
2	Defective AdBlue/DEF pump heater relay system	Perform troubleshooting for failure codes [CA4155] and [CA4156].
3	Defective AdBlue/DEF pump heater	1. Perform "Loaded Diagnostics Operation To Confirm Failure Correction". 2. If the AdBlue/DEF pump temperature does not rise by at least 5 °C during the test, replace the AdBlue/DEF pump. 3. Perform "Loaded Diagnostics Operation To Confirm Failure Correction".
4	Defective engine controller	If no failure is found by above checks, engine controller is defective. (Since this is an internal defect, troubleshooting cannot be performed.)

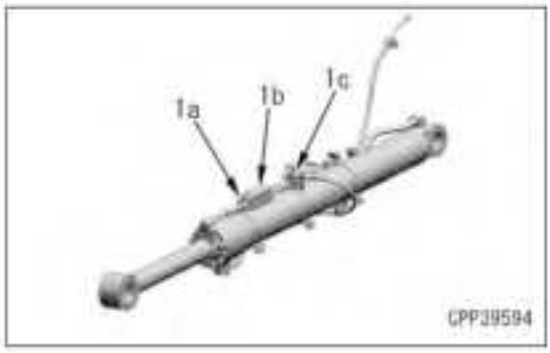
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Circuit diagram related to variable back pressure solenoid



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11. Install the cover (1b) with the bolts (1a) (2 pieces).



Boom cylinder hose

12. Install the boom cylinder hoses (1) (4 pieces).



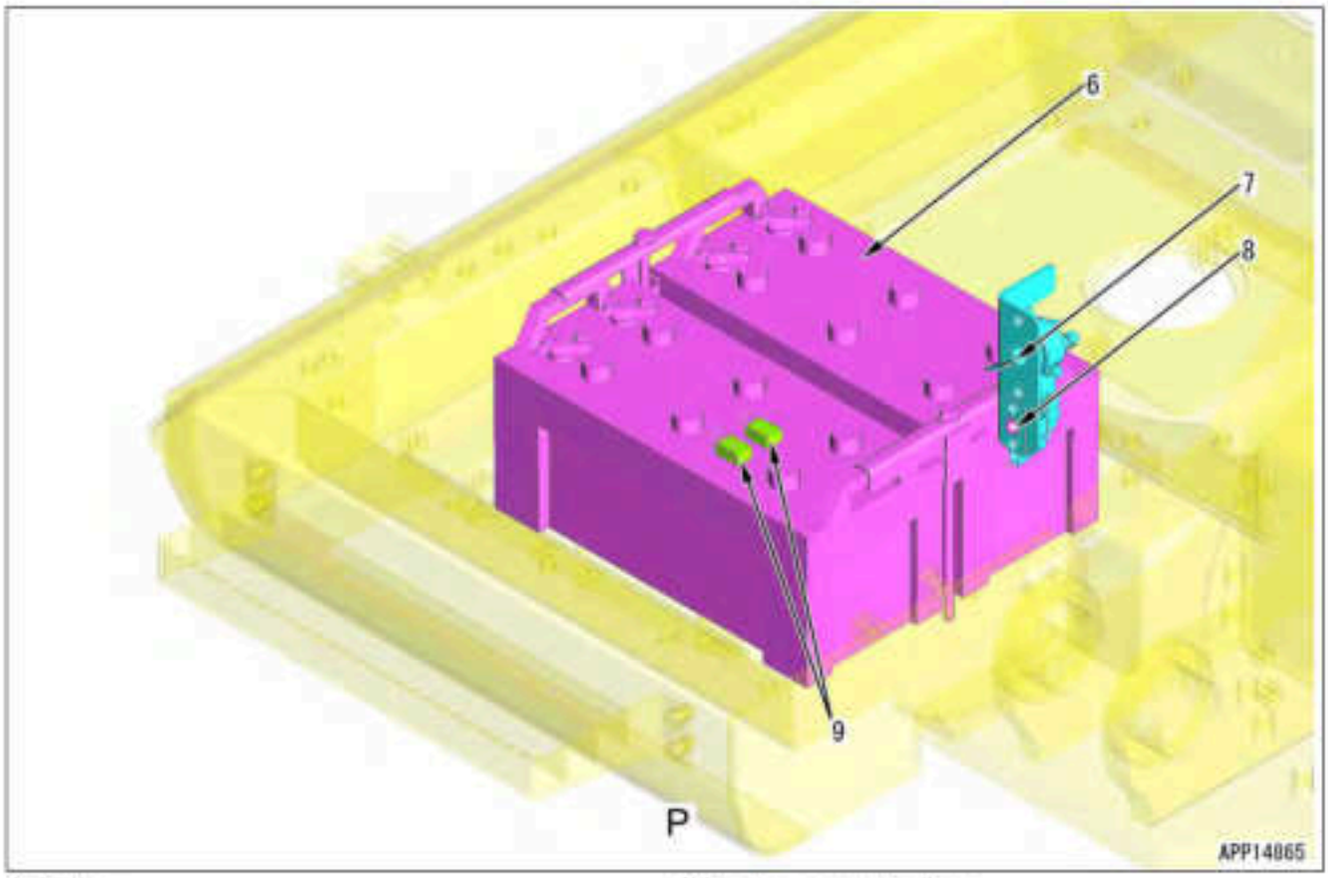
Counterweight assembly

13. Install the counterweight assembly. For details, see "REMOVE AND INSTALL COUNTERWEIGHT ASSEMBLY".

Work equipment assembly

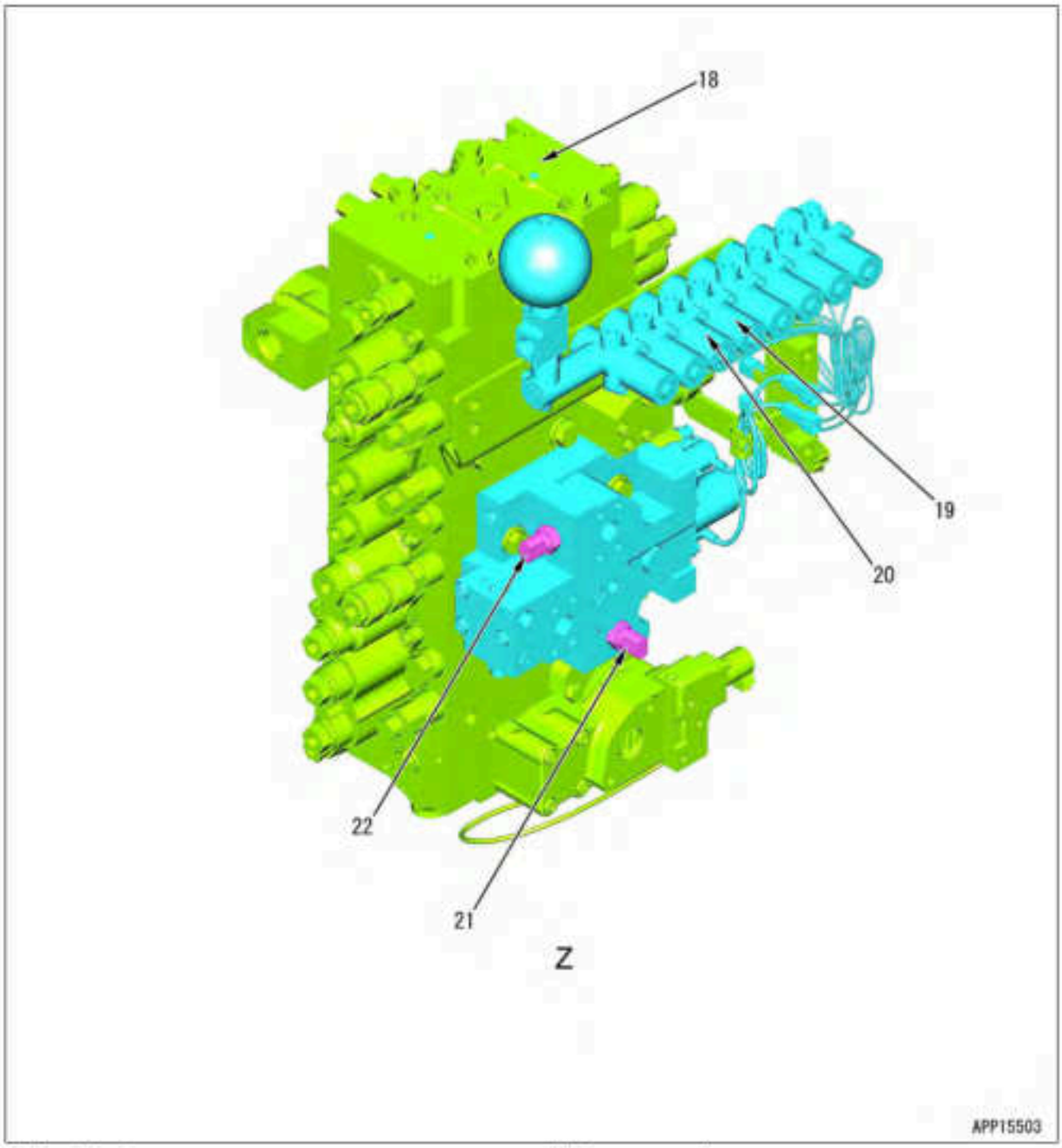
14. Install the work equipment assembly by referring to "REMOVE AND INSTALL WORK EQUIPMENT ASSEMBLY".

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6: Battery
7: Battery disconnect switch
8: System operating lamp
9: Fusible link

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18:Control valve
19:Travel speed increase solenoid valve
20:Travel junction solenoid valve
21:Rear pump oil pressure sensor
22:Front pump oil pressure sensor

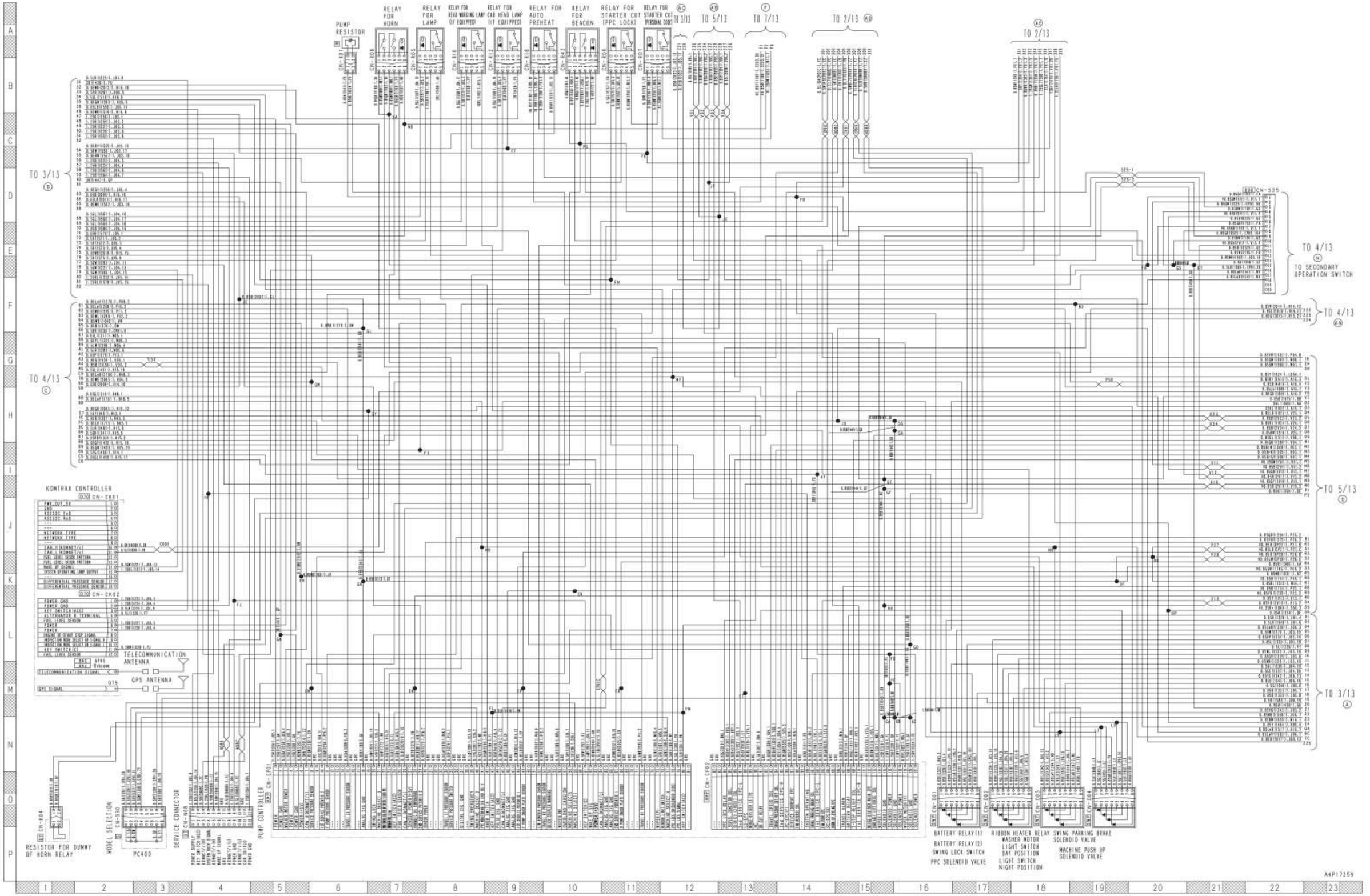
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ELECTRICAL CIRCUIT DIAGRAM (1/13)

PC490LCI-11

REMARK

This figure covers the equipment and devices that are unavailable as optional items in some areas.



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