SEN06616-03

Shop Manual

HYDRAULIC
EXCAVATOR

PC210LCI-11

SERIAL NUMBERS 500470 and up

KOMATSU®

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No.	Cause	Procedure, measuring location, criteria and remarks
2	Defective KDPF system (Abnormal exhaust gas temperature to SCR)	1. If failure code [CA3251] is displayed, perform troubleshooting for [CA3251]. 2. If failure code [CA3253], [CA3254], or [CA3311] is displayed, perform troubleshooting for [CA3253], [CA3254], or [CA3311]. 3. If failure code [CA3255], [CA3256], or [CA3312] is displayed, perform troubleshooting for [CA3255], [CA3256], or [CA3312].
3	Defective SCR temperature sensor (installation error or malfunction)	See "Disassembly and assembly", "Removal and installation of SCR temperature sensor" and fix installation error, if any.
4	Improper AdBlue/DEF quality	1. Turn starting switch to ON position. 2. If failure code [CA4277] is displayed or failure code [CA4277] is logged on the abnormality record screen, perform troubleshooting these first. 3. Confirm the "AdBlue/DEF concentration" on the Pre-defined Monitoring screen (normal value: 29 to 36 %). 4. If failure code is still displayed after above checks, it may be contaminated. Replace the AdBlue/DEF in the tank. 5. Replace the AdBlue/DEF injector. 6. Perform "Loaded Diagnostics Operation To Confirm Failure Correction".
5	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.)
6	Defective SCR outlet temperature sensor (internal defect)	1. If the failure code persists after the above checks, replace the SCR temperature sensor. 2. Perform "Loaded Diagnostics Operation To Confirm Failure Correction".
		If the failure code is cleared, the SCR temperature sensor may be defective.

Loaded Diagnostics Operation To Confirm Failure Correction

Check if the repair has been completed with the following procedure:

(Make sure this failure code is not displayed after this procedure.)

REMARK

If this failure code is displayed during "Loaded Diagnostics Operation To Confirm Failure Correction", return to troubleshooting.

1. Clear this failure code by "Engine Controller Inducement Fault Clear".
2. Turn the starting switch to OFF position, and shut down the engine controller.
3. Turn starting switch to ON position, and start the engine.
4. Run the engine at low idle speed for approximately 1 minute.
5. After warm-up operation, set the swing lock to ON, the working mode to P, and set fuel control dial to MAX position.
6. Run the engine at high idle speed for 15 minutes.
7. If this failure code is not displayed, repair is completed.

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METHOD FOR INSTALLING COUNTERWEIGHT ASSEMBLY

Counterweight assembly

1. Install tool A to the place for eyebolt to be installed, sling counterweight assembly (3), and install it.

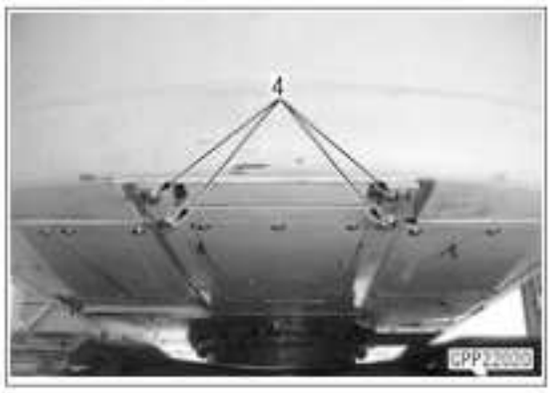


REMARK

When installing, take care not to hit against the machine body.

Counterweight assembly (3):
4400 kg

2. Tighten mounting bolts (4) by using tool C.



REMARK

If shims are inserted, check and record their places and quantity.

Threaded portion of counterweight assembly (3) mounting bolt (4):
Adhesive (LT-2)

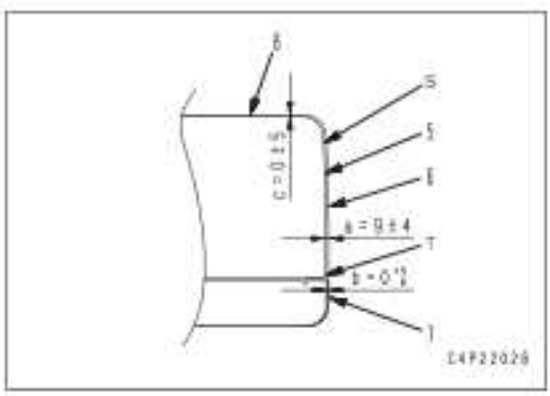
Counterweight assembly (3) mounting bolt (4):
1.72 to 1.91 kNm {175 to 195 kgm}

REMARK

Tighten the bolt to center torque:
1.82 kNm {185 kgm} .

Installing and adjusting counterweight

3. Adjust the step from the exterior cover (top and bottom gaps) with shims.



- Install it so that the clearances between side cover (5) and counterweight (6), and between revolving frame (7) and counterweight (6) (longitudinal direction) are 10±5 mm evenly. Make sure that the difference between the clearances at point (S) and point (T) should be 3 mm or less.
- Set the lateral difference (a) between side cover (5) and counterweight (6) to 9±4 mm.
- Set the lateral difference (b) between revolving frame (7) and counterweight (6) to Max. 5 mm.
- Set the vertical difference (c) between cover (8) on the top surface and counterweight (6) to Max. 5 mm.

Procedure for pasting soundproof sheet

4. Paste the counterweight soundproof sheet according to the following procedure.
   1) Paste soundproof sheets (5a) to (5c) on the front side of the counterweight.

NOTICE

Be sure to remove grease and rust from the pasting surface of the counterweight soundproof sheet.

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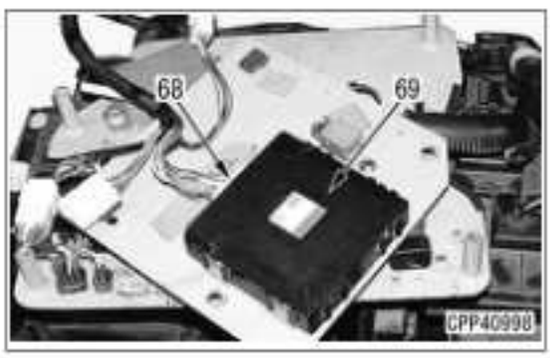
Connector

9. Connect the connectors (70), (71), and (72).
   (70): R.H. console intermediate wiring harness (H14)
   (71): R.H. console intermediate wiring harness (H15)



Air conditioner controller

10. Connect the connector (68), and install the air conditioner controller (69) to the air conditioner unit harness.
    (68): Air conditioner unit harness (AC04)

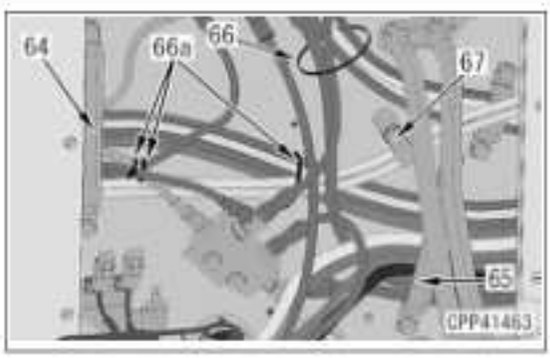


Hose, tube

11. Install the clamp (67) with the bolt (1 piece). (Machine with attachment)
12. Bind the cable tie (66a). (Machine with attachment)
13. Bind the cable tie (66).
14. Install the clamps (64) and (65) with the bolts (4 pieces).
15. Install the clamp (with spacer) (63) with the bolt (1 piece).
16. Connect the heater hose (62).

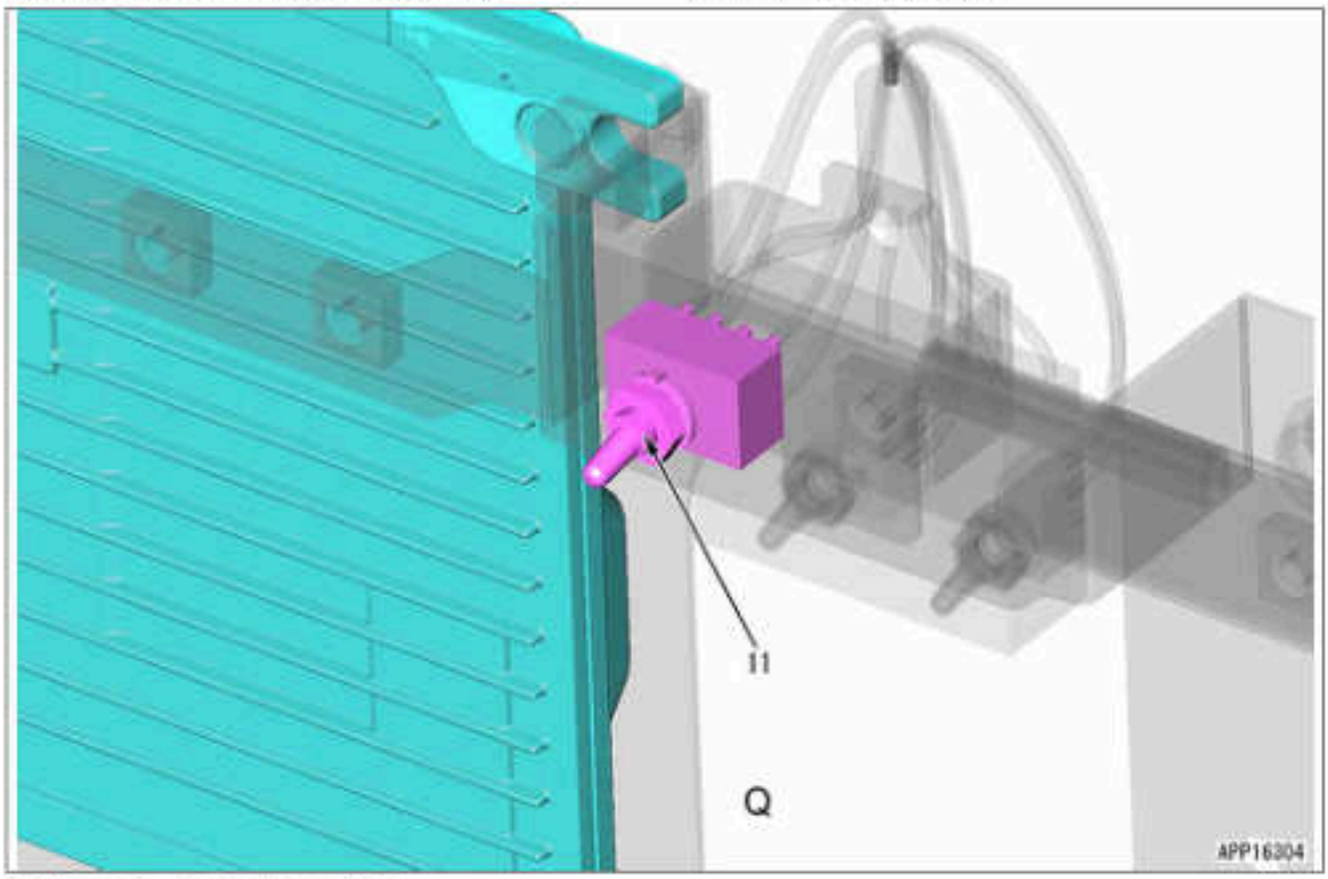
    NOTICE

    Install the heater hose (62) so that the white line (mark) becomes a straight line to avoid any twist of the heater hose.



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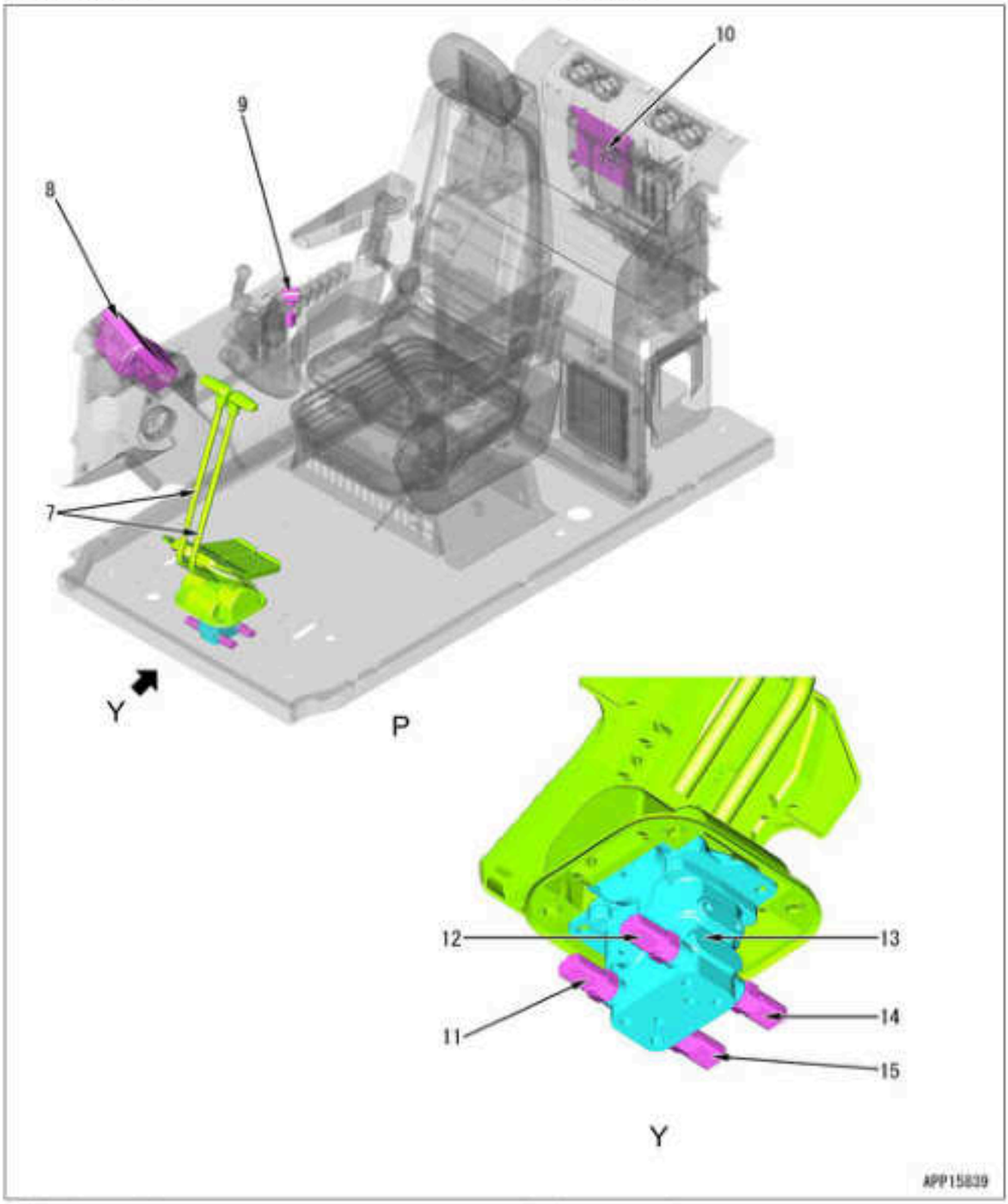
3: Pump controller
4: Resistor for PC-EPC valve
5: One-touch power maximizing switch
6: R.H. travel FORWARD pressure sensor
7: L.H. travel FORWARD pressure sensor
8: L.H. travel REVERSE pressure sensor
9: R.H. travel REVERSE pressure sensor
10: Service pressure switch



11: Pump drive secondary switch

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1: Control valve
2: Main pump
3: LS-EPC valve
4: Fuel supply pump
5: Engine controller
6: Travel alarm



7: Travel control lever
8: Machine monitor
9: Fuel control dial
10: Pump controller
11: R.H. travel REVERSE pressure sensor
12: R.H. travel FORWARD pressure sensor

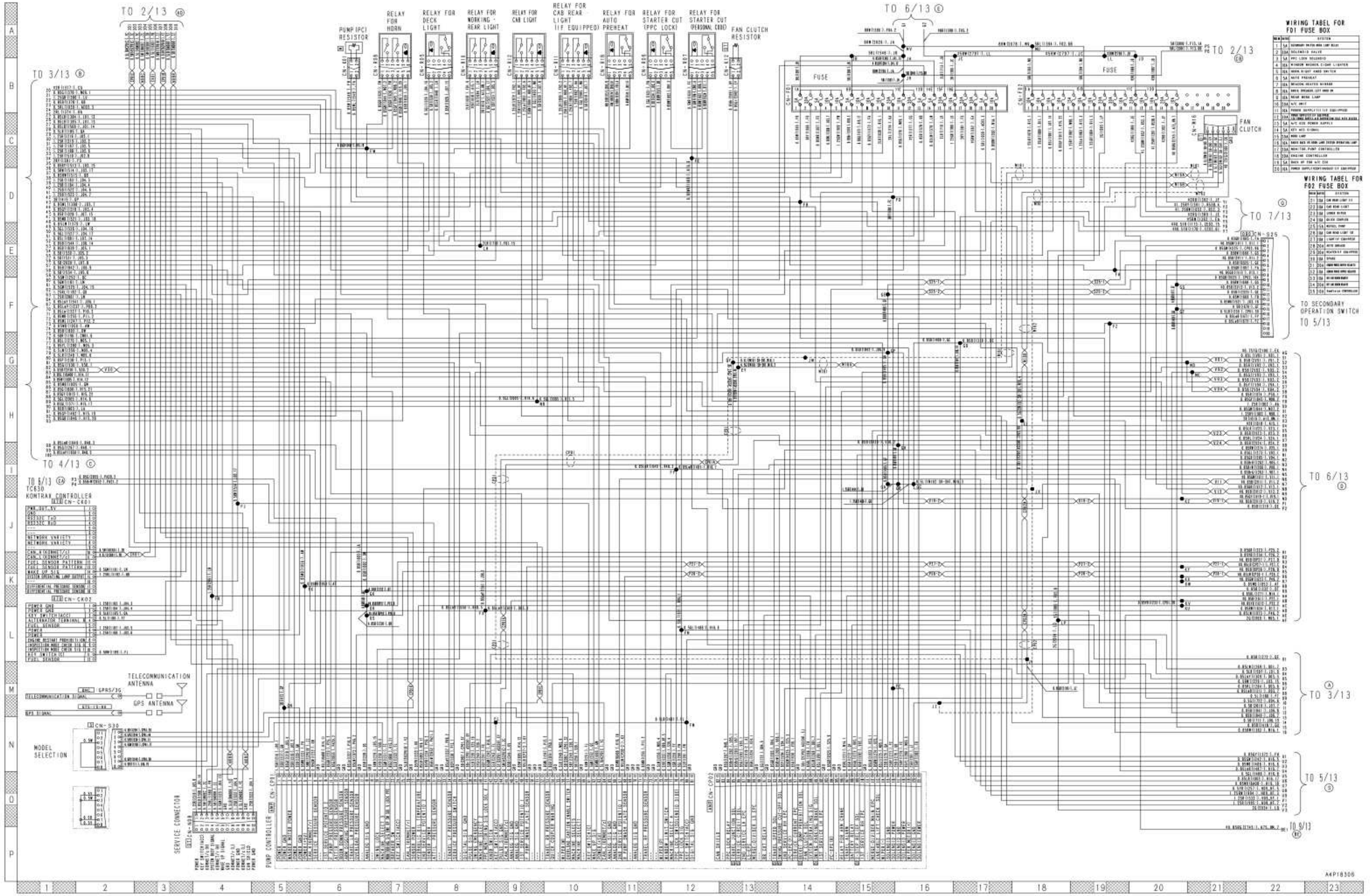
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ELECTRICAL CIRCUIT DIAGRAM (1/13)

PC210LCI-11 (For european union)

REMARK

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



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