SEN06513-04

Shop Manual

HYDRAULIC
EXCAVATOR

PC360LC-11

SERIAL NUMBERS 90001 and up

KOMATSU®

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FAILURE CODE [D8AQKR]

Action level	Failure code	Failure	CAN 2 Defective Communication (KOMTRAX) (Detected by machine monitor.) (Machine monitor system)
—	D8AQKR		
Detail of failure	Machine monitor does not recognize KOMTRAX over CAN communication-2 line (KOMNET/c).		
Action of machine monitor	None		
Phenomenon on machine	None		
Related information	• After repairing, check if the failure code is cleared by the following procedure. Procedure: Turn starting switch to ON position. • Start of CAN communication is recognized by each controller when ACC signal of starting switch is received. • 4 different failure codes, [DA2QKR], [DB2QKR], [D8AQKR], and [DAZQKR], are used for defective CAN communication by CAN2 when it is detected by machine monitor. When all of these 4 failure codes are displayed, ground fault, short circuit or hot short in wiring harness (CAN communication circuit) can be suspected. Since air conditioner is also operated through CAN communication, you must, in such case, check on air conditioner screen whether air conditioner is operable (ON/OFF and air flow of air conditioner). **REMARK** Air conditioner can be controlled even when failure code is displayed on screen. If air conditioner is controlled, wiring harness (CAN communication line) does not have ground fault, short circuit, or hot short circuit. • Since each controller and machine monitor are connected directly to battery, they are supplied with power even after starting switch is turned to OFF position. • Since signal of active CAN communication line is pulse voltage, it cannot be measured by using multimeter.		

No.	Cause	Procedure, measuring location, criteria and remarks		
1	Defective fusible link F05	1. Turn starting switch to OFF position. 2. Disconnect fusible link F05 and connect T-adapter to female side.		
		Resistance	Between F05 (female) (1) and (2)	Max. 1 Ω
		REMARK If fusible link is blown, circuit may have ground fault.		
2	Defective fuse No. 17 in fuse box F01.	1. Turn starting switch to OFF position. 2. Remove fuse No. 17 in fuse box F01.		
		If fuse is blown, circuit probably has ground fault.		
3	Defective CAN communication 2 system	Perform checks on causes 4 to 9 in troubleshooting for failure code [DB2QKR].		
4	Defective KOMTRAX terminal	If no failure is found by the above checks, KOMTRAX terminal is defective. (In case of an internal defect, troubleshooting is impossible as an assembly. Replace whole assembly.)		
5	Defective machine monitor	If failure code is still displayed after above checks, machine monitor is defective. (Because this is an internal defect, troubleshooting cannot be performed.)		

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7. Install boom cylinder hoses (1) (4 pieces).



Engine hood assembly

8. Install the engine hood assembly. For details, see "REMOVE AND INSTALL ENGINE HOOD ASSEMBLY".

Counterweight assembly

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

Work equipment assembly

10. Install the work equipment assembly. For details, see "REMOVE AND INSTALL WORK EQUIPMENT ASSEMBLY".

Refilling with hydraulic oil

11. Refill the hydraulic tank to the specified level through the oil filler port. Start the engine to circulate the oil through the piping, and check the oil level again. (For details, see STRUCTURE AND FUNCTION, "TABLE OF FUEL, COOLANT, AND LUBRICANTS".)

Bleeding air

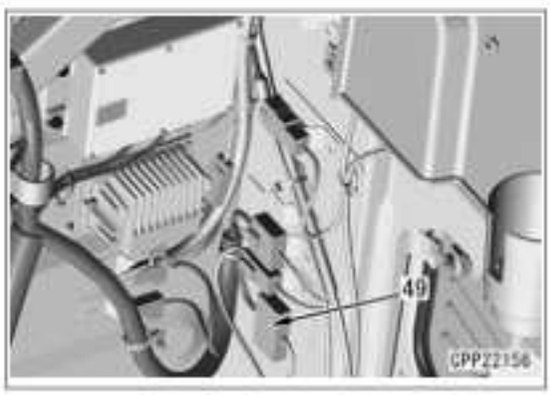
12. Bleed air in the fuel system. For details, see TESTING AND ADJUSTING, "BLEED AIR FROM FUEL SYSTEM".

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Connector

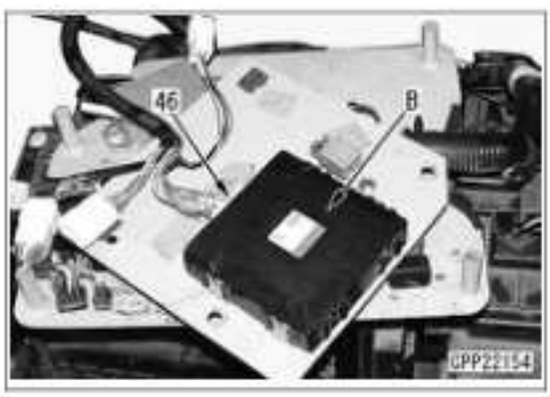
8. Install connectors (47) to (49).
   (47): R.H. console intermediate wiring harness (H14)
   (48): R.H. console intermediate wiring harness (H15)
   (49): L.H. console intermediate wiring harness (H16)

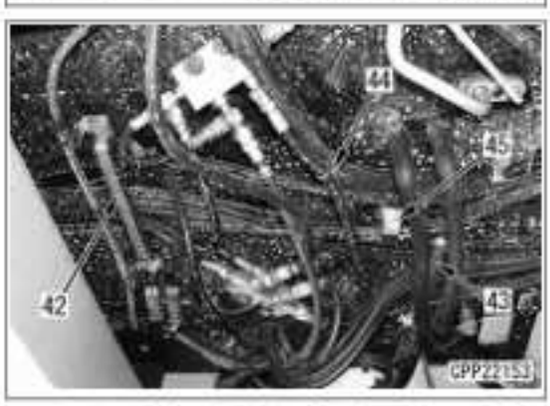




Air conditioner controller

9. Install connector (46), and install air conditioner controller (B) from the main wiring harness.
   (46): Machine main wiring harness (AC04)

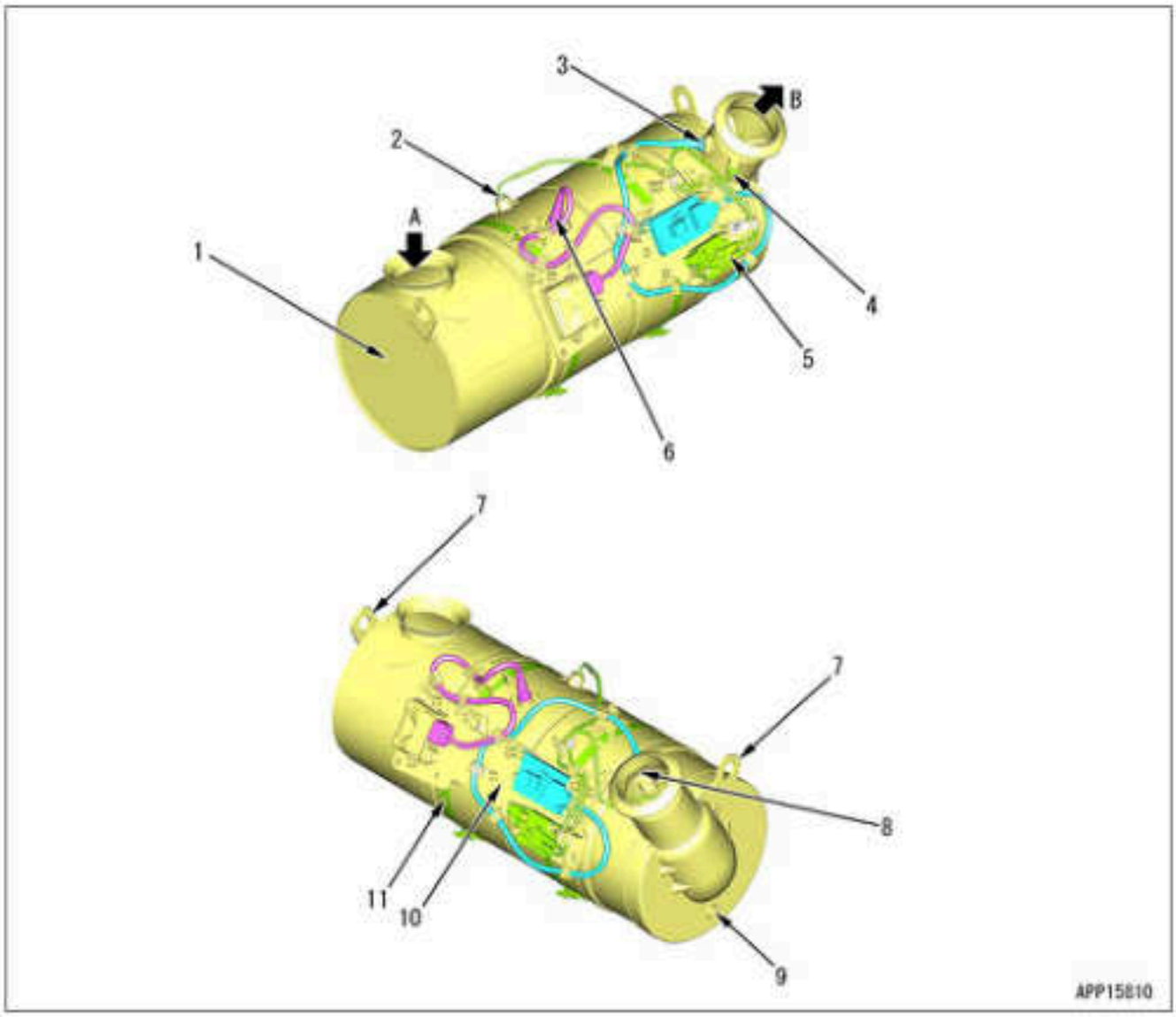


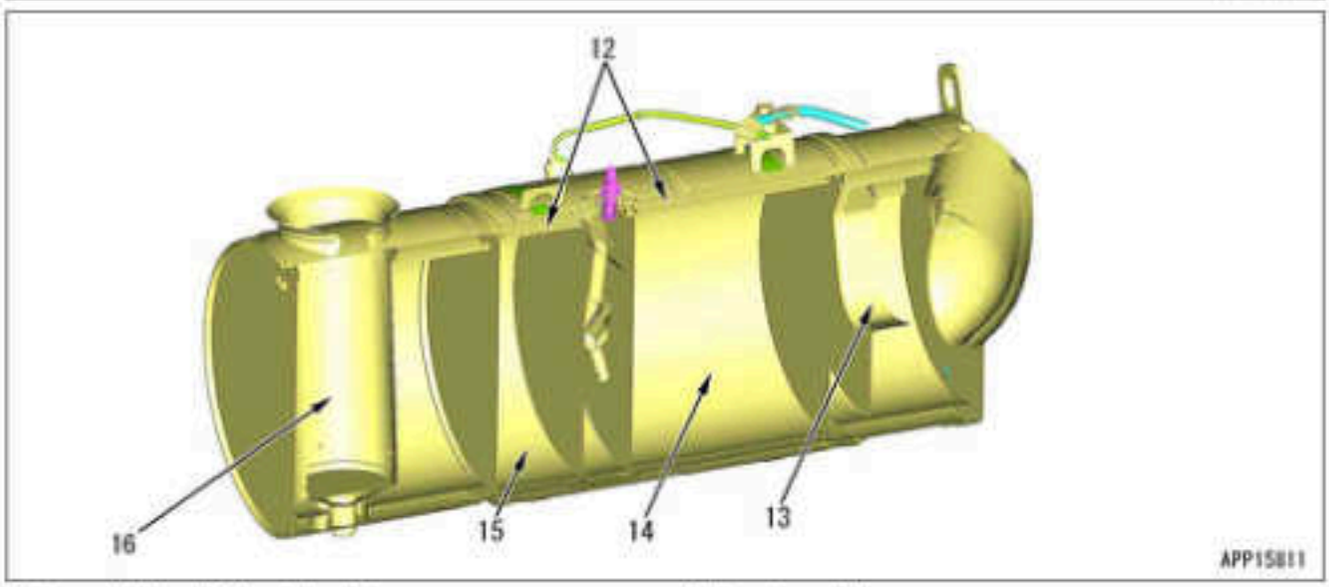


Clamp

10. Install clamp (45) (1 bolt). (Machines equipped with attachment)
11. Install cable tie (44).
12. Install clamps (42) and (43) (2 bolts each).

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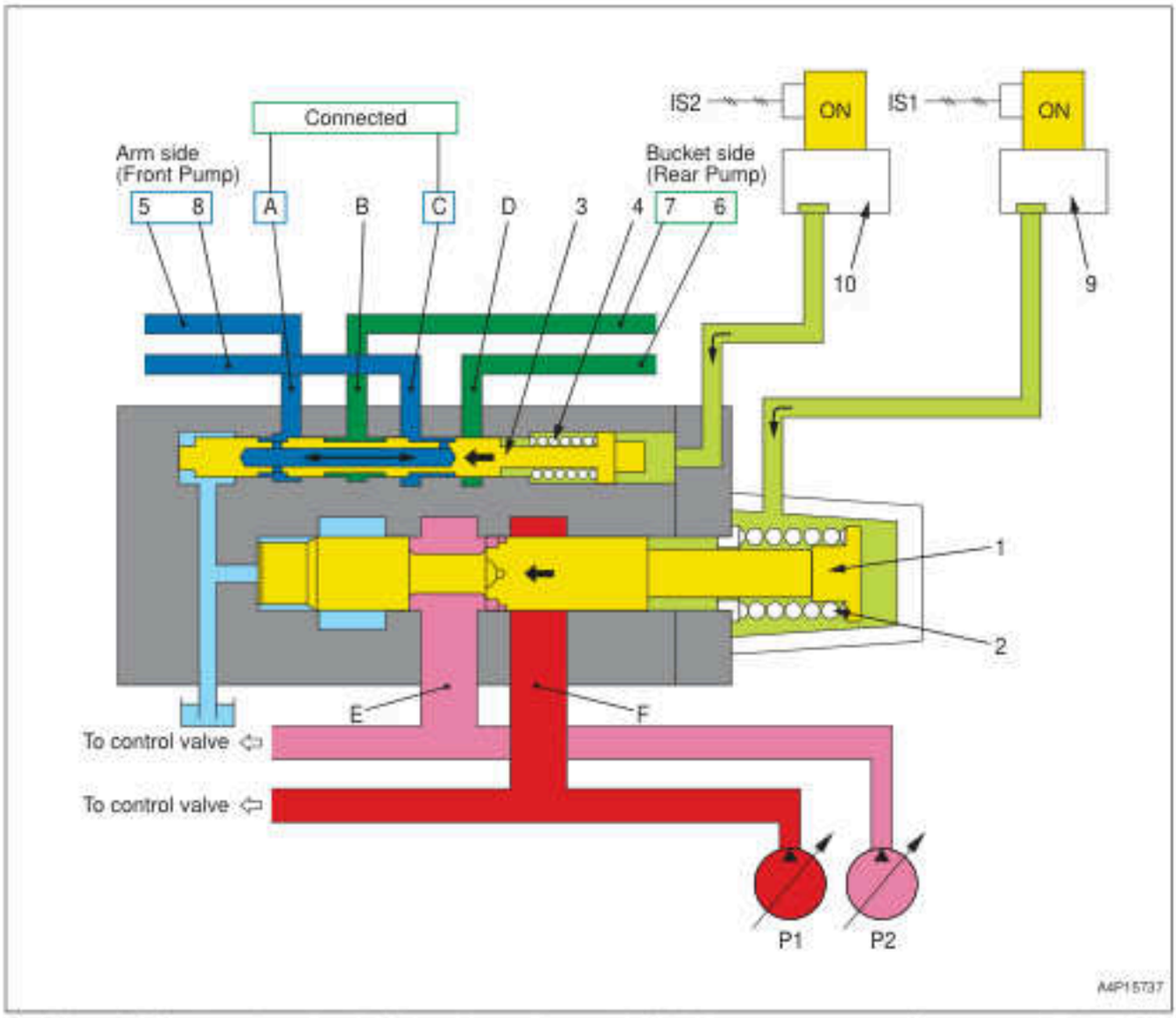




A: From AdBlue/DEF mixing tube
B: To exhaust pipe
1: SCR body
3: SCR outlet NOx sensor
2: SCR temperature sensor
4: SCR outlet temperature sensor

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When pumps are divided "when merge-divider valve selector signals (IS1) and (IS2) are ON"



1. Since EPC valve drive signal (IS1) to the main spool is ON, the output pressure from merge-divider EPC valve moves main spool (1) to the left, and ports (E) and (F) are disconnected.
2. The pressurized oils discharged from the 2 pumps are sent to the respective control valve groups.
   Pressure P1: To bucket, L.H. travel, and boom
   Pressure P2: To swing, R.H. travel, and arm
3. When EPC valve drive signal (IS2) to LS spool (3) is turned ON, the output pressure from merge-divider EPC valve moves the LS spool to the left, ports (A) and (C) are connected, and other ports are disconnected.
4. LS pressures supplied from each control valve spool to LS circuits (5), (6), (7), and (8) are transmitted to the respective control valves.

LS SEPARATION VALVE OF CONTROL VALVE

LS

Abbreviation for Load Sensing

FUNCTION OF LS SELECT VALVE OF CONTROL VALVE

The illustration shows the state of simultaneous operation of swing and travel RIGHT. "It shows the state when pilot pressure (BP+) is supplied"

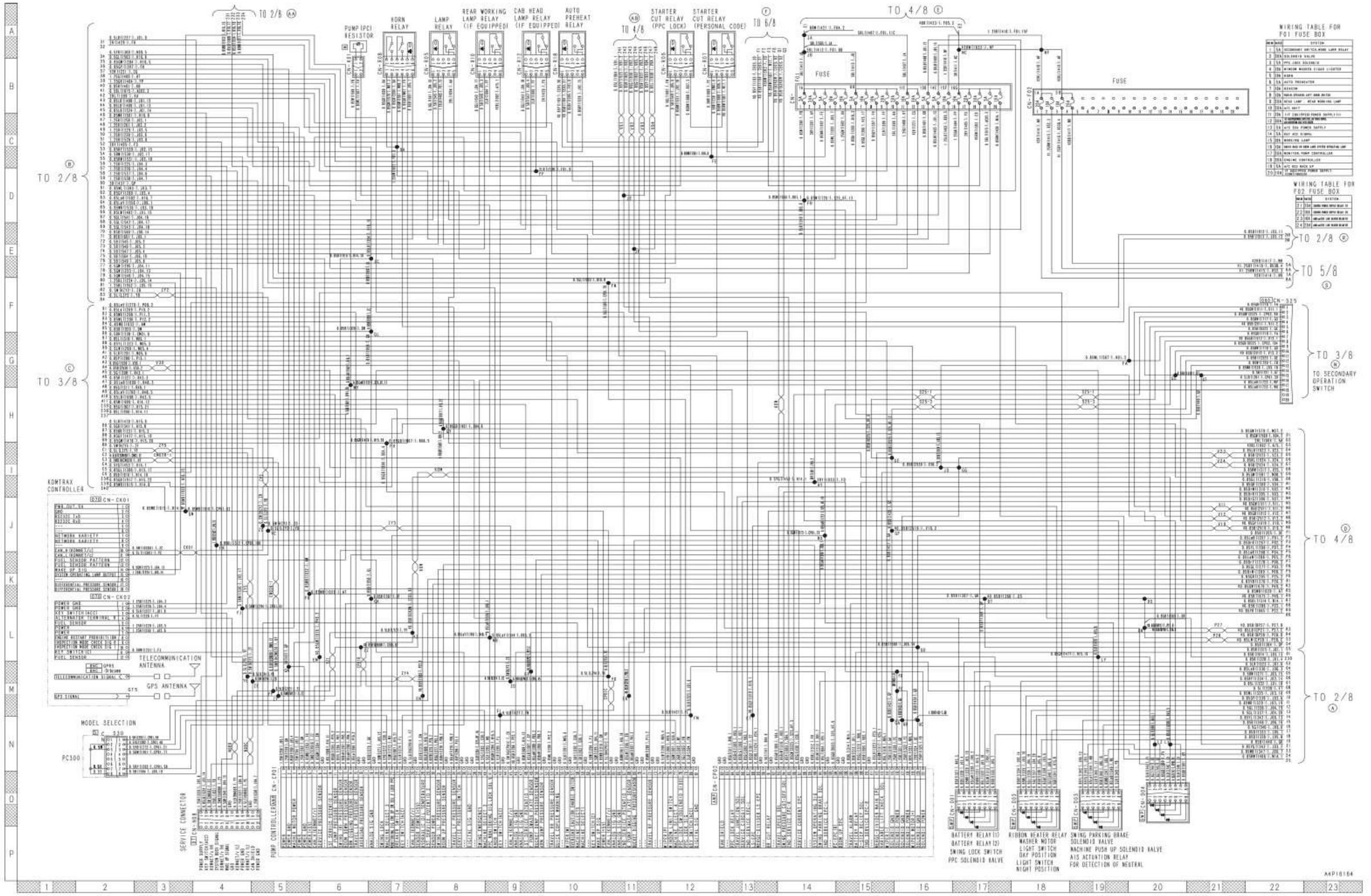
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ELECTRICAL CIRCUIT DIAGRAM (1/8)

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REMARK

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



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