SHOP MANUAL

KOMATSU®

D155AX-5

MACHINE MODEL	SERIAL NUMBER
D155AX-5	**76001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require.
  Materials and specifications are subject to change without notice.

- D155AX-5 mounts the SA6D140E-3 engine.
  For details of the engine, see the 140-3 Series Engine Shop Manual.

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●	Page to be replaced	Replace
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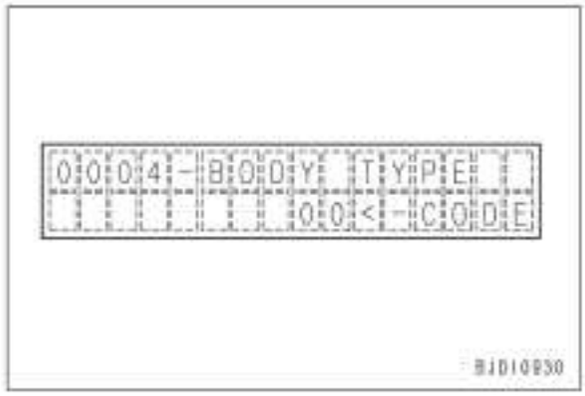
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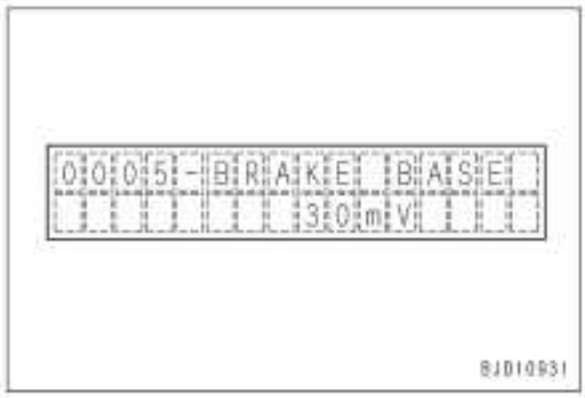
(3) [0004]: Machine specification set
- This code is used to have the machine specification recognized by the controllers which compose the system.
- The machine specification code is displayed on the lower line.
- Adjustment method:
  - ★ Since this code is reset when "Steering and transmission controller specification set" is executed, adjust it after that.
  - i) Select the code of the machine specification by setting shift up switch (6).
  - ii) Set buzzer cancel switch (4) in the [◇] position and check that the caution buzzer sounds.
  - ⚠ If the machine specification is different from the setting in the controller, the machine may move abnormally or an error may be made. Accordingly, be sure to match the setting to the machine specification.
  - ★ Even if this code is turned off, the setting is effective.



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No.	Specification
00	Standard specification
10	Pitch dozer specification
80	—
90	—

(4) [0005]: Brake potentiometer zero point adjustment
- This code is used to adjust the zero point of the potentiometer of the brake pedal.
- The deviation from the standard is displayed by voltage on the lower line (Display range: –2500 – 2500).
- Adjustment method:
  - i) Check that the brake pedal is in neutral (it is not depressed).
  - ii) With the brake pedal released, set buzzer cancel switch (4) in the [◇] position and check that the caution buzzer sounds.
  - ★ Even if the neutral position of the brake pedal is adjusted, the display of the lower line does not change.
  - ★ Even if this code is turned off, the setting is effective.
  - ★ This adjustment is performed to have the zero point of the potentiometer recognized by the controller. It is not performed to adjust the effect of the brake.

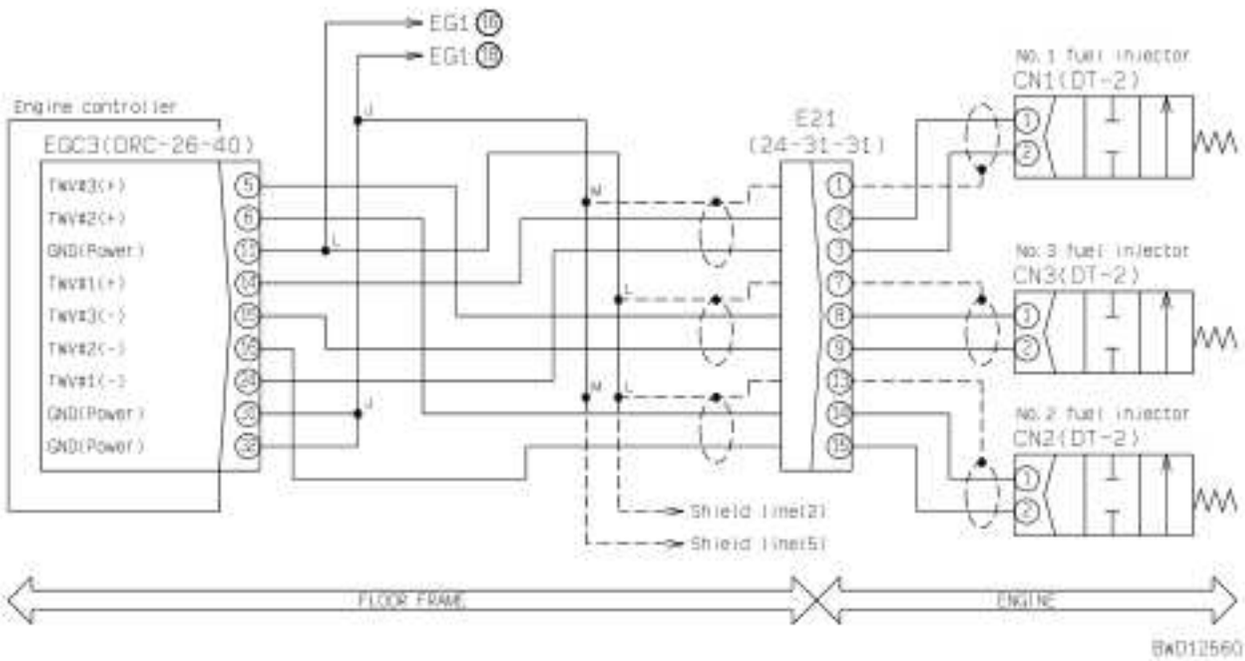


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<table>
<tr><td rowspan="9">Possible causes and standard value in normal state</td><td colspan="2">Cause</td><td colspan="4">Standard value in normal state/Remarks on troubleshooting</td></tr>
<tr><td rowspan="7">5</td><td rowspan="7">Defective harness hot short (Contact with 24V circuit)</td><td colspan="4">★Prepare with starting switch OFF, then turn starting switch ON for troubleshooting.</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (14) – CN1 (female) (1) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (24) – CN1 (female) (2) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (6) – CN2 (female) (1) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (16) – CN2 (female) (2) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (5) – CN3 (female) (1) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td colspan="2">Wiring harness between EGC3 (female) (15) – CN3 (female) (2) with chassis ground</td><td>Voltage</td><td>Max. 1V</td></tr>
<tr><td rowspan="5">6</td><td rowspan="5">Defective engine controller</td><td colspan="4">★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.</td></tr>
<tr><td colspan="2">EGC3 (female)</td><td colspan="2">Resistance</td></tr>
<tr><td colspan="2">Between (14) – (24)</td><td colspan="2">0.4 – 1.1Ω</td></tr>
<tr><td colspan="2">Between (6) – (16)</td><td colspan="2">0.4 – 1.1Ω</td></tr>
<tr><td colspan="2">Between (5) – (15)</td><td colspan="2">0.4 – 1.1Ω</td></tr>
<tr><td colspan="2">Between (5), (6), (14), (15), (16) and (24) – chassis ground</td><td colspan="2">Min. 1MΩ</td></tr>
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Circuit diagram related to No. 1, 2, and 3 injector solenoids



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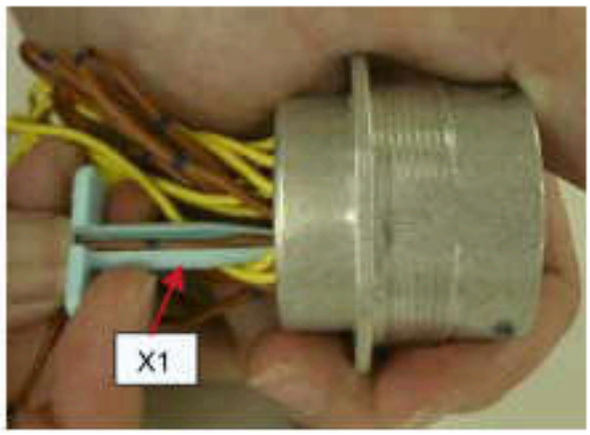
ERROR CODE DK30KA (STEERING LEVER POTENTIOMETER 1: DISCONNECTION IN WIRING)

Action code	Error code	Trouble	Steering lever potentiometer 1: Disconnection in wiring (Steering and transmission controller system)
CALL E03	DK30KA		
Contents of trouble	• Signal voltage of steering lever potentiometer 1 system is below 0.5V.		
Action of controller	• Flashes caution lamp and turns on caution buzzer. • Continues controlling with signal of steering lever potentiometer 2 system. • Limits operation of engine and transmission.		
Problem that appears on machine	• Once machine is stopped, engine speed is limited to medium (half). • Once machine is stopped, travel is limited to F1 and R1.		
Related information	• Input (Voltage) from steering lever potentiometer 1 can be checked in monitoring mode. (Code 50300: Voltage of steering lever potentiometer 1) • Method of reproducing error code: Turn starting switch ON and operate PCCS lever (for steering).		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective 5V sensor power source system	See if error code [DAQ5KK] [DB35KK] is displayed. If it is displayed, carry out troubleshooting for it first.			
	2	Defective steering lever potentiometer 1 (Internal disconnection or short circuit)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			TL2 (male)	PCCS lever	Resistance	
			Between (5) – (8)	Neutral	3.2kΩ ± 20%	
			Between (5) – (7)		1.6kΩ ± 20%	
			Between (7) – (8)		1.6kΩ ± 20%	
	3	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between STC1 (female) (22) – TL2 (female) (5)		Resistance	Max. 1Ω
			Wiring harness between STC1 (female) (2) – TL2 (female) (7)		Resistance	Max. 1Ω
	4	Short circuit with chassis ground in wiring harness (Contact with ground circuit)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Short circuit of wiring harness between STC1 (female) (2) – TL2 (female) (7) H with chassis ground		Resistance	Min. 1MΩ
	5	Defective steering and transmission controller	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			STC1	Voltage		
			Between (2) – (21)	0.5 – 4.5V		

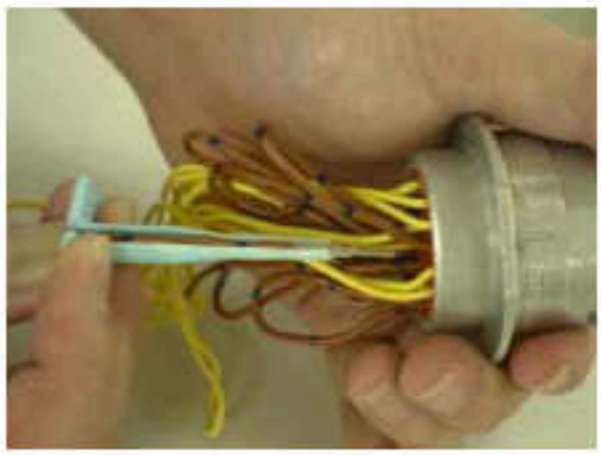
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2) Attach the chosen pull-out tool (X1) to the electric wire of pin and socket you will remove.
   - Do not use a metallic screwdriver; it damages a shielding rubber.



3) Slide the pull-out tool into a clearance between the electric wire and the connector shielding rubber, and then, push it in as far as it will go. (Be sure not to push it in forcedly to prevent the tool from being damaged.)

4) Pull out the electric wire with the pull-out tool.



6-2-3 Fitting in the terminal

1) Grasp wire behind the contact barrel.

2) Fit the terminal into the hole and push it in until you hear a click.

- Push it in until you hear a click (which occurs when the contact passes by the fixing lug) and you feel that the contact touches the back wall.
- If the electric wire bends when you try fitting it in and therefore, it cannot go in, attach a tool of Part No. 799-601-7830 or -7840 to the terminal's back-end and then, fit it in.

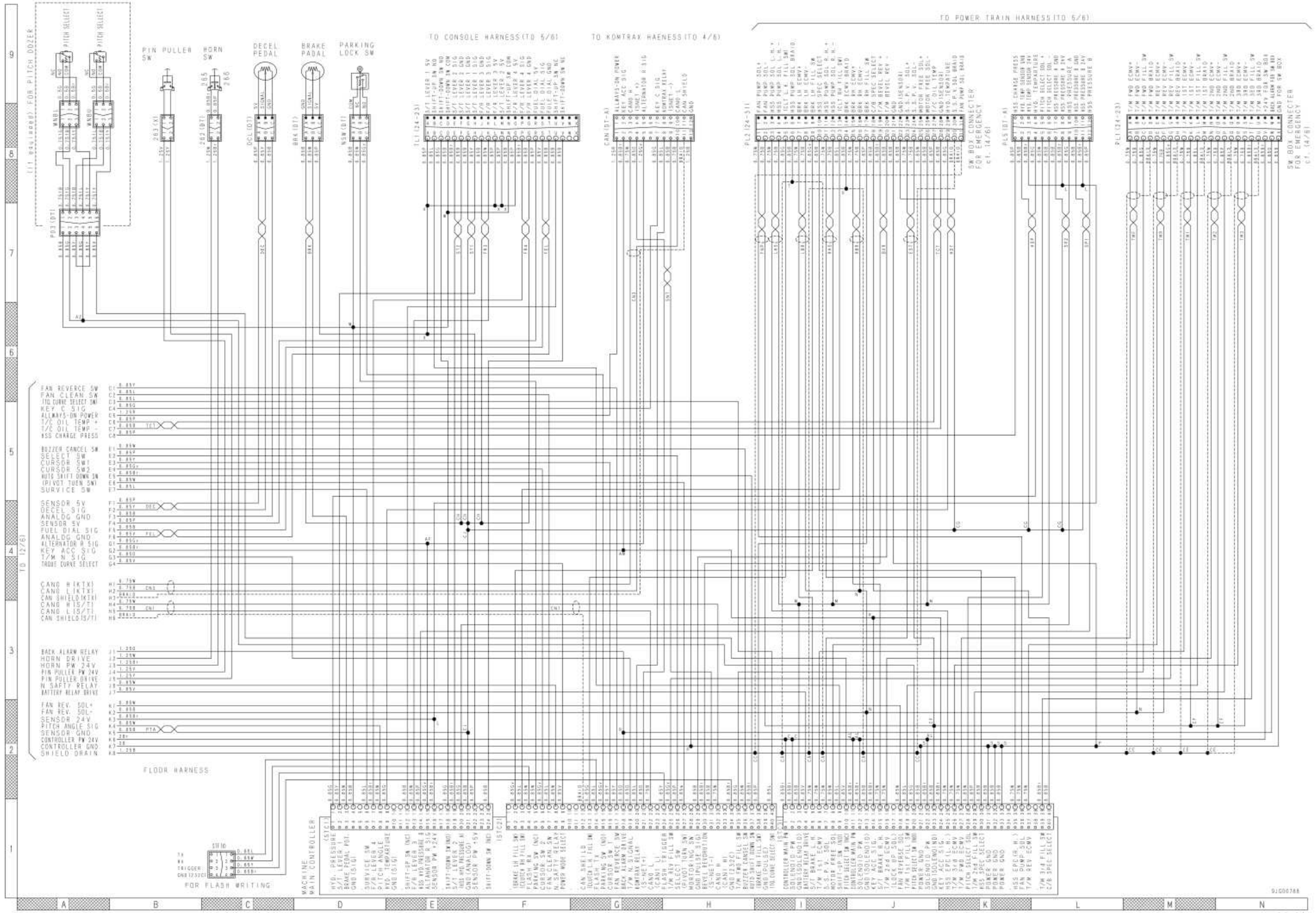
3) Slightly pull the electric wire in the pull-out direction to check that the contact on the electric wire's end is not detached.





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ELECTRIC CIRCUIT DIAGRAM (3/6)



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