SEN06256-01

Shop Manual

BULLDOZER

D61EXi-23
D61PXi-23

SERIAL NUMBERS D61EXi-30324 and up
D61PXi-30324

KOMATSU®

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Index (ALL-0310-001-A-00-A)

00 Index and foreword 00-1
Index 00-2
Foreword, safety and general information 00-16
Important safety notice 00-16
How to read the shop manual 00-23
Explanation of terms for maintenance standard 00-25
Handling equipment of fuel system devices 00-27
Handling of intake system parts 00-28
Handling of hydraulic equipment 00-29
Method of disconnecting and connecting of push-pull type coupler 00-31
Handling of electrical equipment 00-34
How to read electric wire code 00-42
Precautions when performing operation 00-45
Practical use of KOMTRAX 00-50
Standard tightening torque table 00-51
List of abbreviation 00-57
Conversion table 00-62
01 Specification 01-1
Table of contents 01-2
Specifications 01-3
Specification drawing 01-3
Specifications 01-5
Weight table 01-15
Table of fuel, coolant, and lubricants 01-19
10 Structure and function 10-1
Table of contents 10-2
Engine and cooling system 10-3
Engine related parts 10-3
KVGT 10-5
EGR system piping drawing 10-13
EGR system circuit diagram 10-15
EGR valve 10-17
EGR cooler 10-19
KCCV layout drawing 10-21
KCCV ventilator 10-23
KDPF 10-25
Cooling system 10-31
Cooling fan motor 10-33
Oil cooler bypass and HST charge safety valve 10-40
Power train 10-46
Power train system 10-46
Damper 10-49
Hydraulic component layout of HST 10-50
Steering and brake control 10-51
HST pump 10-53
HST motor 10-67
Charge pump 10-82
Solenoid valve 10-83
Final drive 10-92
Undercarriage and frame 10-96
Main frame 10-96
Suspension 10-97
Track frame and idler cushion 10-99
Hydraulic system 10-102
Hydraulic component layout of work equipment 10-102
Work equipment control system 10-104
Hydraulic tank 10-106
CLSS 10-108

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Work equipment and cooling fan pump 10-111
Control valve 10-122
Ripper PPC valve 10-144
Quick drop valve 10-150
Angle control EPC valve 10-153
Accumulator 10-158
Work equipment 10-160
Blade 10-160
Ripper 10-161
Piston valve 10-162
Cab and its attachments 10-163
ROPS cab 10-163
Cab mount 10-165
Electrical system 10-166
Electrical control system 10-166
Machine monitor system 10-208
KOMTRAX system 10-231
System component parts 10-235
Sensor 10-261
20 Standard value tables 20-1
Table of contents 20-2
Standard service value table 20-3
Standard value table for engine 20-3
Standard value table for machine 20-5
Standard value table for electrical system 20-14
30 Testing and adjusting 30-1
Table of contents 30-2
Related information on testing and adjusting 30-4
Tools for testing and adjusting 30-4
Sketch of tools for testing and adjusting 30-7
Engine and cooling system 30-9
Testing engine speed 30-9
Testing boost pressure 30-11
Testing exhaust gas color 30-13
Testing and adjusting valve clearance 30-15
Testing compression pressure 30-18
Testing blowby pressure 30-22
Testing engine oil pressure 30-24
Testing EGR valve and KVGT oil pressures 30-25
Testing fuel pressure 30-26
Testing fuel discharge, return and leakage 30-31
Bleeding air from fuel system 30-36
Testing fuel circuit for leakage 30-38
Handling cylinder cutout mode operation 30-39
Handling no-injection cranking operation 30-40
Testing of KDPF and muffler stack for looseness and damage 30-41
Testing of installed condition of cylinder heads and manifolds 30-42
Testing engine piping for damage and looseness 30-43
Replacing alternator belt 30-44
Power train 30-45
Testing and adjusting HST oil pressure 30-45
Testing output pressure of solenoid valve 30-50
Testing if machine travels straight 30-54
Simple test procedure for brake performance 30-55
Adjusting deceleration/brake pedal 30-56
Adjusting parking brake lever 30-59
Move disabled machine urgently 30-61
Undercarriage and frame 30-64
Adjusting idler clearance 30-64

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Checking sprocket wear 30-65
Testing and adjusting track tension 30-66
Hydraulic system 30-67
Releasing remaining pressure in work equipment cylinder 30-67
Testing and adjusting work equipment oil pressure 30-68
Testing source pressure of control circuit 30-70
Testing output pressure of work equipment EPC valve and fan EPC valve 30-71
Isolating the parts causing hydraulic drift in blade and ripper 30-73
Testing internal oil leakage of work equipment cylinder 30-74
Testing fan speed 30-76
Testing fan circuit oil pressure 30-77
Bleeding air from hydraulic circuit 30-78
Work equipment 30-79
Adjusting work equipment lock lever 30-79
Adjusting play of blade center ball 30-81
Electrical system 30-82
Special functions of machine monitor 30-82
Special functions of iB monitor 30-166
Testing stroke sensor for lift cylinder 30-195
Testing stroke sensor for tilt cylinder 30-197
Testing stroke sensor for angle cylinder 30-198
Testing and adjusting reset sensor for lift cylinder 30-199
Testing and adjusting reset sensor for angle cylinder 30-200
Adjustment method when HST controller has been replaced 30-201
Adjustment method when ICT sensor controller has been replaced 30-204
Adjustment method when devices have been repaired or replaced 30-207
Adjusting rearview camera angle 30-209
Handling voltage circuit of engine controller 30-210
Handling battery disconnect switch 30-211
Testing diodes 30-212
Pm clinic 30-213
Pm Clinic service 30-213
Pm Clinic check sheet 30-215
40 Troubleshooting 40-1
Table of contents 40-2
Related information on troubleshooting 40-11
Troubleshooting points 40-11
Sequence of events in troubleshooting 40-13
Checks before troubleshooting 40-15
Inspection procedure before troubleshooting 40-17
Preparation for troubleshooting of electrical system 40-34
Classification and procedures for troubleshooting 40-38
Symptom and troubleshooting numbers 40-40
Information in troubleshooting table 40-43
Procedure for troubleshooting wiring harness of pressure sensor system for open circuit 40-45
Connector list and layout 40-48
Connector contact identification 40-62
T-branch box and T-branch adapter table 40-100
Fuse location table 40-105
Precautions for KDPF (KCSF and KDOC) Cleaning and Replacement 40-110
Preparation of dummy temperature sensor (for KDOC and KDPF temperature sensors) 40-113
Preparation of short circuit electrical connector (for failure codes [CA1883] and [CA3135]) 40-114
Failure codes table 40-115
Troubleshooting by failure code (Display of code) 40-127
Failure code [6091NX] HST Oil Filter Clogging 40-127
Failure code [989L00] Engine Controller Lock Caution 1 40-129

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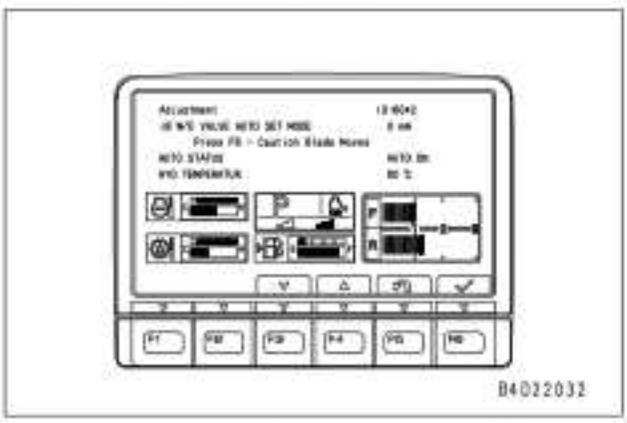
4. The current setting of track specifications is displayed. Check whether they are the same as the actual specifications and press [F6] to enter.
   - Alarm buzzer sounds when the specifications are entered.
   - If the track specifications are incorrect, press [F3] or [F4] to select the correct track specifications, and then press [F6] to enter.

Monitor display	Track specifications
PLUS	PLUS type track
CONVENTIONAL	Standard type track

5. When the check of machine specification screen of step 1 is displayed, the recognition of machine specifications is complete.
6. Press [F5], and return to "Adjustment" screen, and turn the starting switch OFF.

   ★ The adjustment results are reflected after turning the starting switch to ON position again.

Adjustment ID: 8042 (iB W/E VALVE AUTO SET MODE) *(D61-LL8S-270-K-00-A)*



- This adjustment code is used to save the characteristics of control valve in ICT controller.

★ When ICT sensor controller is replaced or control valve is repaired or replaced, be sure to perform this adjustment once.

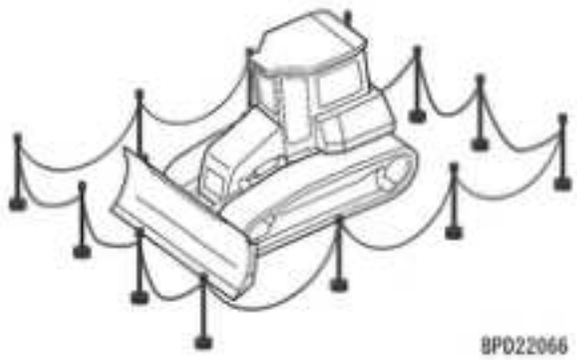
- Functions of function switches
  [F3]: No use
  [F4]: No use
  [F5]: Returns the display to the ID input screen
  [F6]: Perform adjustment
- Condition when adjusting

  ★ When performing this adjustment, keep the following condition.

  Thoroughly warm-up the hydraulic oil so that HST oil temperature (hydraulic oil temperature) becomes within the range of condition.

  1. Fuel control dial: MAX
  2. HST oil temperature (hydraulic oil temperature): 50 to 80 °C
  3. Parking brake lever: LOCK position
  4. Work equipment lock lever: FREE position
  5. Blade control lever: NEUTRAL position
  6. Auto/manual switch: ON
  7. State of machine: Placed and stopped on a level ground where are no obstacles for the operation of work equipment
  8. Condition of work equipment: Blade is lowered to the ground
  9. Pitch rod length: 470 ± 10 mm
  10. Fan mode: 70%
- Operating method:

⚠ **Machine moves automatically during the adjustment. Secure the safety around the machine by roping in the machine before starting the adjustment.**



⚠ **Machine moves automatically during the adjustment. If it stops at the time of starting or during adjustment, secure the safety around the machine, and press [F6].**

⚠ **Work equipment lock lever and blade control lever are available during performing adjustment. But to avoid the hazardous condition, always put your hand on the blade control lever.**

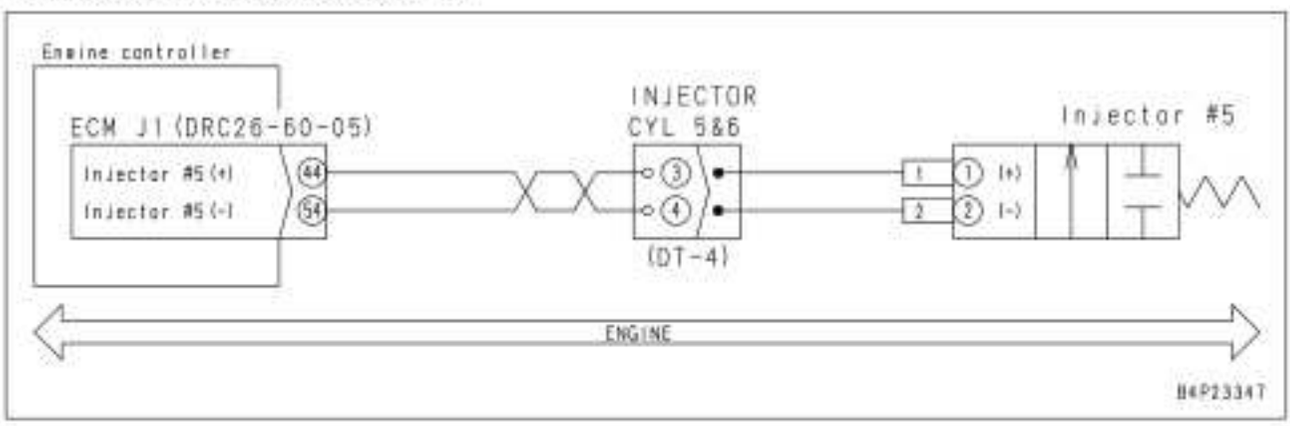
★ If any of adjustment conditions 1 to 6 is not met during performing adjustment, "ERROR!! PLEASE RETRY" is displayed on machine monitor, the work equipment stops, and the adjustment is not complete. In this case, hold the adjustment condition again, press [F5], and restart it by inputting adjustment ID again.

★ When performing adjustment work thoroughly and any of the adjustment conditions of 1 to 6 is not met after "CALIBRATION FINISHED" is displayed, "ERROR!! PLEASE RETRY" is displayed on machine monitor, however, adjustment is complete. In this case, press [F5], and return to adjustment ID input screen.

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No.	Cause	Procedure, measuring location, criteria and remarks		
6	Short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors ECM J1 and INJECTOR CYL 5 & 6, and connect T-adapters to female side of ECM J1. ★ Check by using multimeter in continuity mode.		
		Continuity	Between ECM J1 (female) (44) and each pin other than pin (44)	No continuity (No sound is heard)
			Between ECM J1 (female) (54) and each pin other than pin (54)	No continuity (No sound is heard)
7	Defective injector of other cylinder	If failure codes of other injectors are displayed, perform troubleshooting for them first.		
8	Defective injector harness of other cylinder	If failure codes of other injectors are displayed, perform troubleshooting for them first.		
9	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.)		

Circuit diagram related to injector #5



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Failure code [DK57KB] FR lever2: Hot Short (D61-DK57KB-400-A-Z0-A)

Action level	Failure code	Failure	FR lever 2: Hot Short (HST controller system)
L03	DK57KB		
Detail of failure	• Signal voltage of joystick (steering, directional, and gear shift lever) potentiometer 2 (FR2) is 4.5 V or more.		
Action of controller	• Continues to control with signals of joystick (steering, directional, and gear shift lever) potentiometer 1 (FR1). • Restricts engine operation.		
Problem on machine	• Once machine stops, engine speed is restricted to medium (half) speed. • Once machine stops, travel is restricted to F1 and R1.		
Related information	• Signal voltage of joystick (steering, directional, and gear shift lever) potentiometer 2 can be checked with monitoring function. (Code: 50203 "FR Lever2 Potentio") • Method of reproducing failure code: Turn starting switch to ON position and operate joystick (steering, directional, and gear shift lever) (directional shifting).		

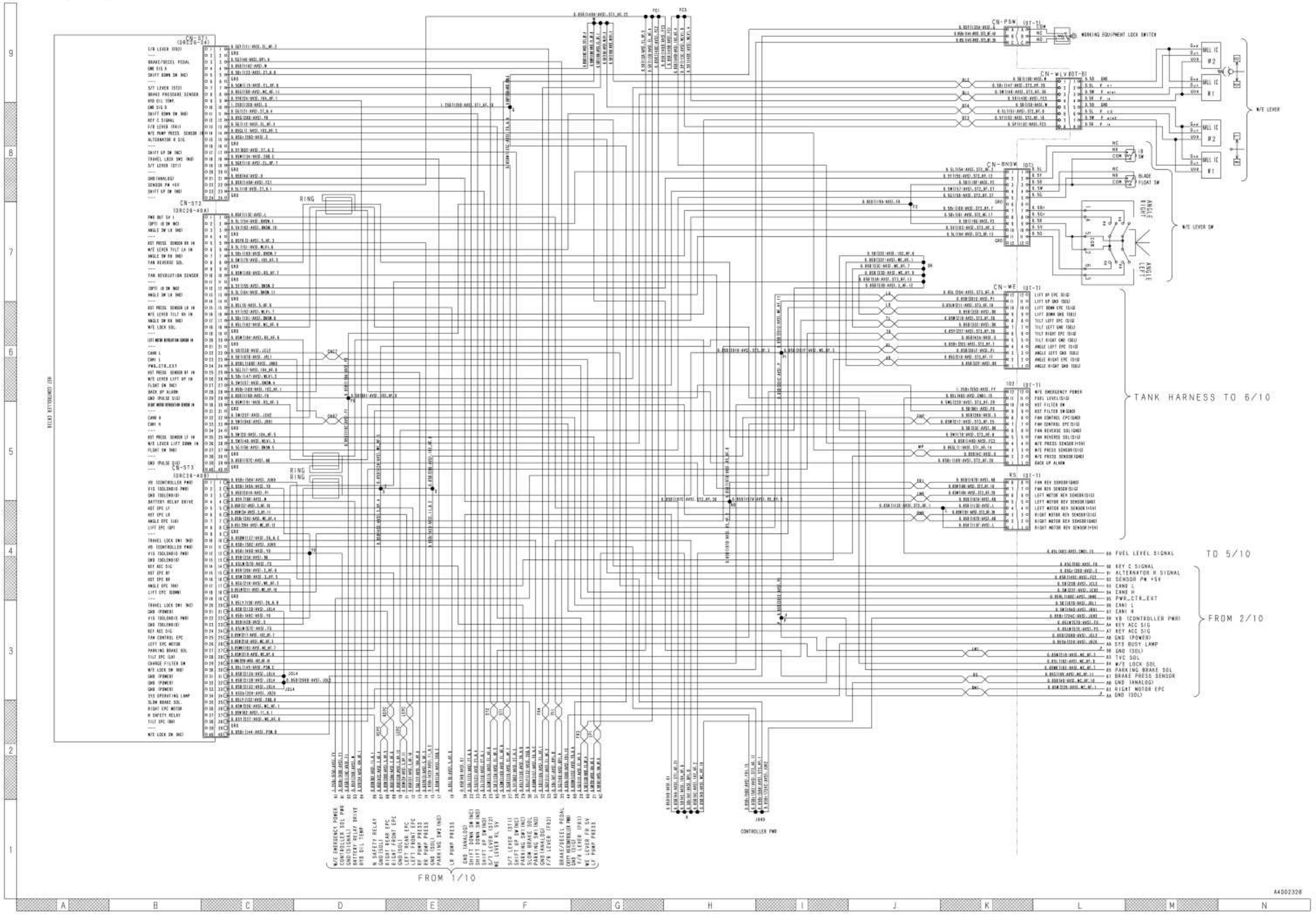
No.	Cause	Procedure, measuring location, criteria and remarks		
1	Defective 5 V sensor power supply system	If failure code [DAJ6KK] is also displayed, perform troubleshooting for it first.		
2	Defective joystick (steering, directional, and gear shift lever) potentiometer 2 (internal short circuit) or ground fault	1. Turn starting switch to OFF position. 2. Disconnect connector EL. 3. Turn starting switch to ON position. 4. Perform troubleshooting by operating joystick (steering, directional, and gear shift lever) (directional).		
		If failure code [DK57KB] disappears, joystick (steering, directional, and gear shift lever) potentiometer is defective. (If failure code is still displayed, wiring harness or HST controller is defective.) ★ Since connector EL is disconnected, many failure codes appear. Ignore failure codes other than [DK57KB].		
3	Hot short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connector EL and connect T-adapter to female side. 3. Turn starting switch to ON position.		
		Voltage	Between EL (female) (2) and (1) or ground	7 to 11 V
4	Short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors ST1 and EL, and connect T-adapter to female side of ST1. ★ Check by using multimeter in continuity mode.		
		Continuity	Between ST1 (female) (1) and each pin other than pin (1)	No continuity (No sound is heard)
5	Defective HST controller	If no failure is found by above checks, HST controller is defective. • Reference 1. Turn starting switch to OFF position. 2. Insert T-adapter into connector ST1. 3. Turn starting switch to ON position. 4. Perform troubleshooting by operating joystick (steering, directional, and gear shift lever) (directional).		
		Voltage	Between ST1 (1) and (4)	0.5 to 4.5 V

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Electrical circuit diagram (3/10)

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★ This diagram covers optional components that are unavailable in some areas.



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