CEBM010002

Shop Manual

KOMATSU®

WA400-5L

WHEEL LOADER

SERIAL NUMBERS **WA400-5L** **A40001** and UP

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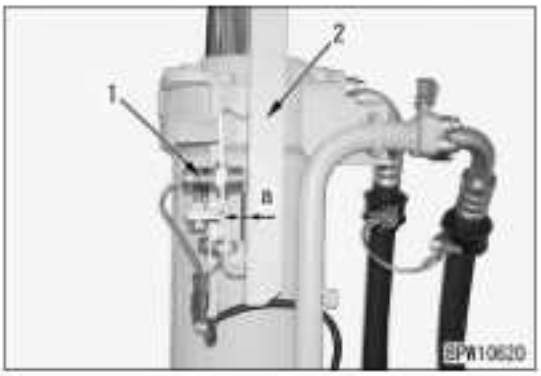
BUCKET POSITIONER

★ Engine water temperature: Within white range on engine water temperature gauge
★ Hydraulic oil temperature: 45 – 55 °C (113 – 131°F)

Testing

1. With the engine stopped, check that clearance **a** between proximity switch (1) and detector bar (2) is the standard value.

2. Start the engine, run at a midrange speed (1500 rpm), and check the actuation point. (Check three times and take the average.)

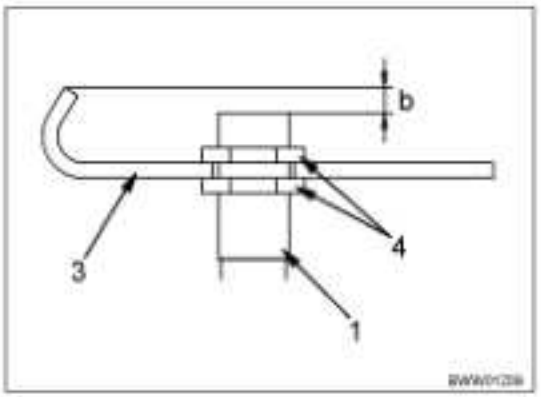


Adjusting

1. Lower bucket to the ground, set bucket to the desired digging angle, return lever to the HOLD position, and stop the engine.

2. Adjust nut (4) of the switch so clearance **b** between tip of switch protector (3) and sensing surface of the switch is in the standard value, then secure in position.
   ★ Clearance **b**: 0.5 – 1.0 mm (0.03 – 0.02 in) mm

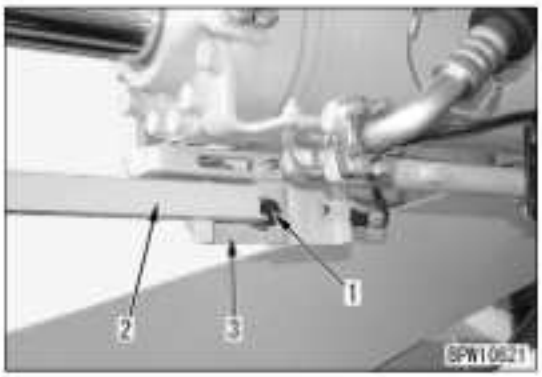
Mounting nut: . . . . . 20 Nm (177 lb-in)



3. Adjust with shims and the proximity switch bracket mounting bolts, and secure in position so that the clearance **a** between the sensing surface of proximity switch (1) and detector bar (2) is the standard value.
   ★ Clearance **a**: 3 – 5 mm (0.1 – 0.2 in)
   ★ Adjust so that the clearance **a** is within the standard value for the whole stroke of detector bar (2).

4. Adjusting installing position (stopping position).

   A. Lower the bucket to the ground and set it to a desired digging angle, then return the lever to the holding position and stop the engine.



   B. Secure switch protector (3) to the bucket cylinder so that sensing bar (2) will be at the center of the sensitive surface of proximity switch (1).
   • The installing position may be checked by checking the operation of the pilot lamp of the proximity switch with the starting switch at the ON position. (When the pilot lamp goes off, the bucket stops.)
   ★ After adjusting, start the engine and operate the bucket control lever to check that the bucket positioner operates at the desired position.

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ERROR CODE [DGE2KX]

ENGINE COOLANT TEMPERATURE (HIGH TEMPERATURE) SENSOR SYSTEM FAILURE

Contents Of Trouble	• Trouble in coolant temperature sensor system. • Action code E01 displayed. • Engine coolant temperature sensor gauge is at MAX position. • The monitoring function (Code 04103).

Tools and Procedures	• Digital Volt Ohm Meter. T-adapter kit. • Do not mark on original page of service manual. Remove this page from the service manual and make a copy for recording information while performing these tests. • If you are unable to copy this page, record readings on a separate paper referring to the (**No.**) numbers listed on the right of the procedure. • Follow each step throughout this procedure, do not skip steps, jump ahead or stop when a fault is found. It is important to complete all steps and record information for final analyzing.

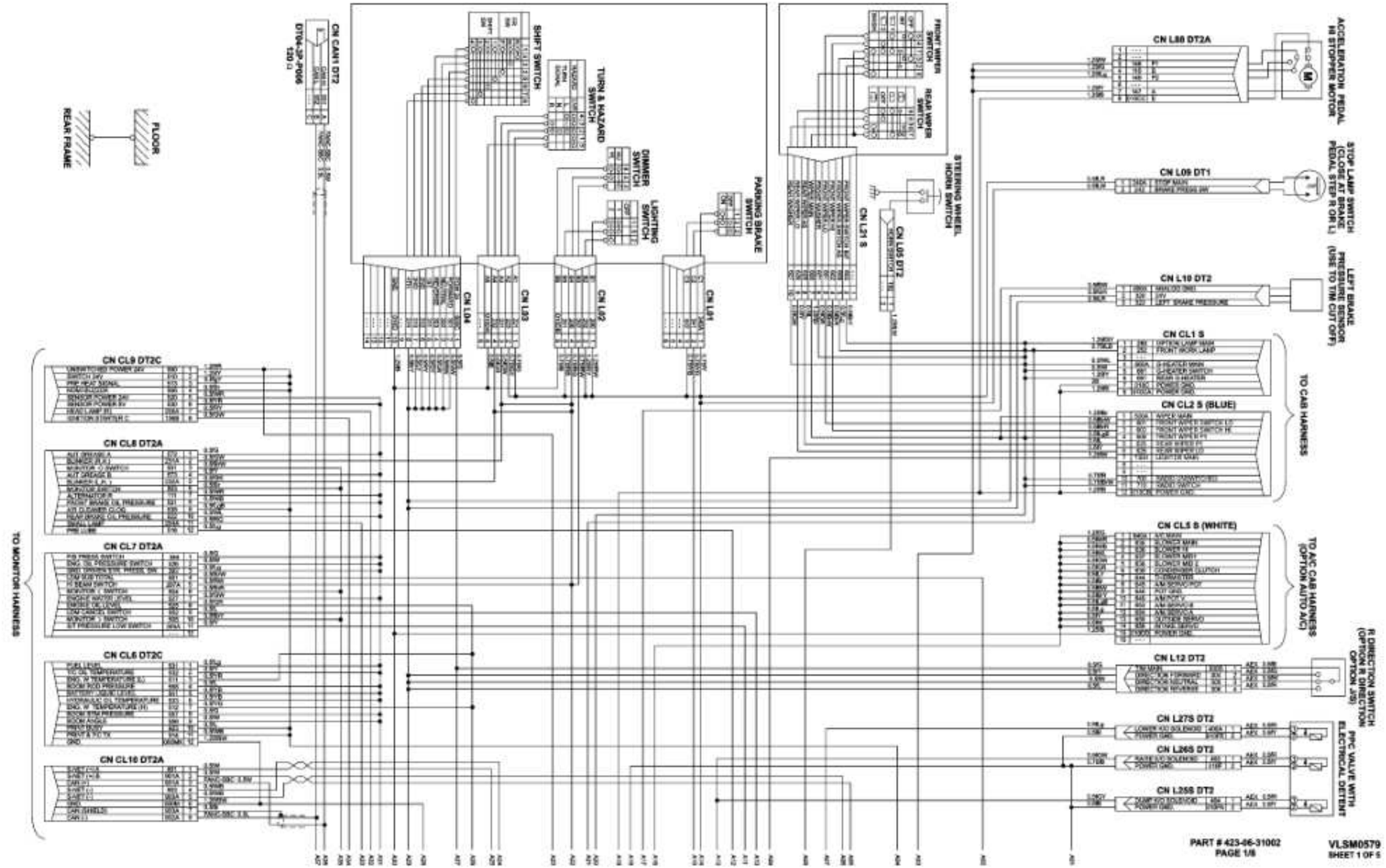
Steps	Circuit Diagnostic Procedures For Error Code [DGE2KX]		Specifications	No.	Readings
1.	**Coolant Temperature Sensor Unit** • With ignition switch in the "OFF" position. • Disconnect (E08) connector from temperature sensor. • Zero meter leads for proper Ω readings.				
A.	Sensor test	Resistance Ω	At sensor E08, between (1) and (2) at 10° C (50° F)	35 to 50kΩ	**1**	
			At sensor E08, between (1) and (2) at 100° C (212° F)	3.1 to 4.5kΩ	**2**	
			At sensor E08 between (1) or (2) and chassis ground.	(OL) open	**3**	
2.	**Wiring Harness Assembly Test** • With ignition switch in the "OFF" position. • Disconnect (E08) connector from temperature sensor. • Disconnect (L55) connector from monitor panel and install T-adapter on (L55) wiring harness connector only.				
A.	Open or high resistance	Resistance Ω	Between connectors E08, (1) and L55, (8)	0.0 to 1.0Ω	**4**	
			Between connectors E08, (2) and L55, (6)	0.0 to 1.0Ω	**5**	
			At connector E08, between (2) and chassis ground.	0.0 to 1.0Ω	**6**	
B.	Short to chassis ground or within harness	Resistance Ω	At connector E08, between (1) and chassis ground.	(OL) open	**7**	
			At connector E08, between (1) and (2)	(OL) open	**8**	
3.	**Monitor Panel Unit** • With ignition switch in the "OFF" position. • Disconnect connectors (L55). • Install T-adapter between (L55) connector and monitor panel.				
A.	Monitor panel	Resistance Ω	At connector L55, between (8) and chassis ground, temperature at 10° C (50° F)	35 to 50kΩ	**9**	
			At connector L55, between (8) and chassis ground, temperature at 100° C (212° F)	3.1 to 4.5kΩ	**10**	

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ELECTRICAL SCHEMATIC

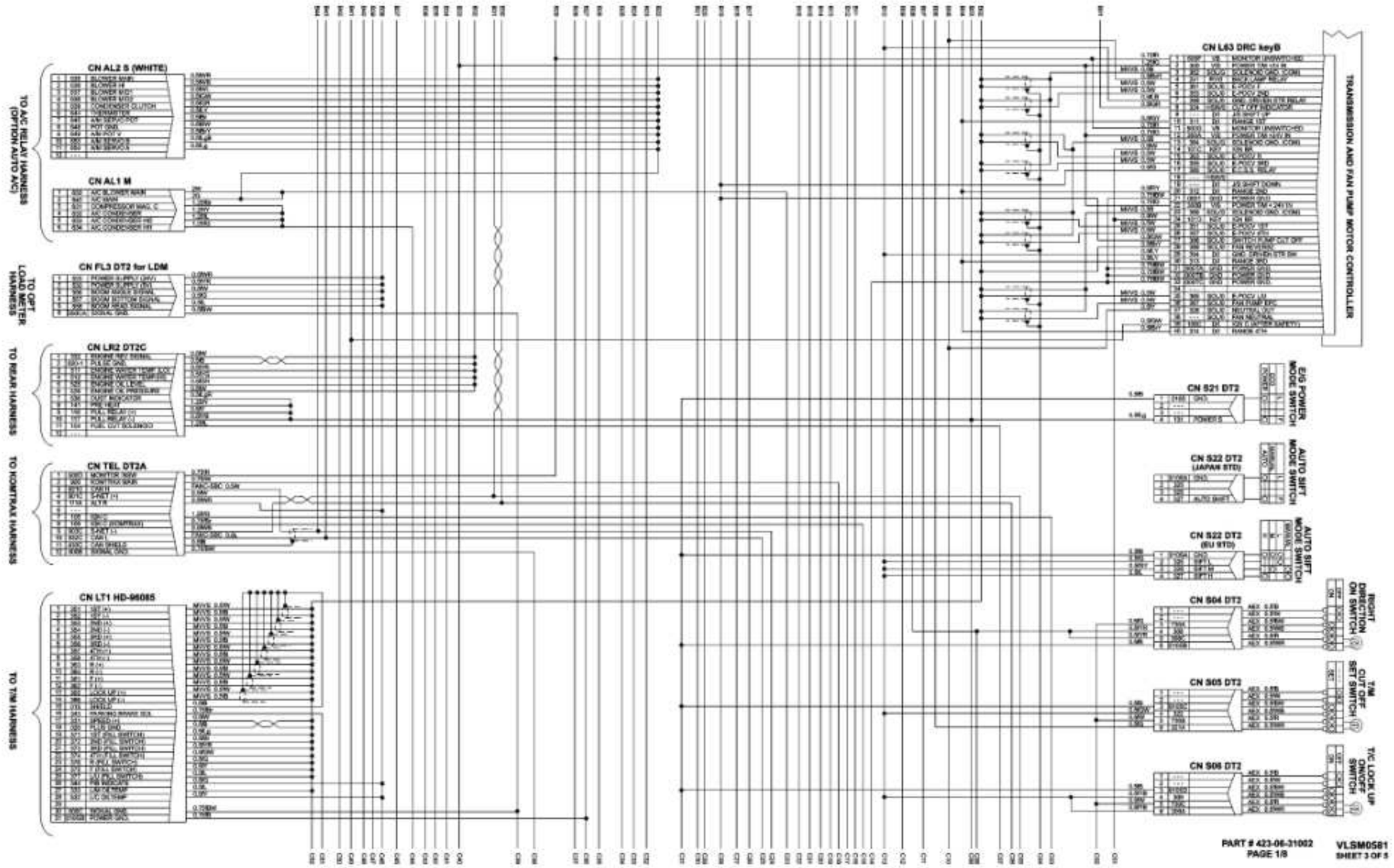
STANDARD

FLOOR HARNESS - CAB



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FLOOR HARNESS - TRANSMISSION HARNESS



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