SEN05650-05

Shop Manual

WHEEL LOADER **WA380-7**

SERIAL NUMBERS 10001 and up

KOMATSU®

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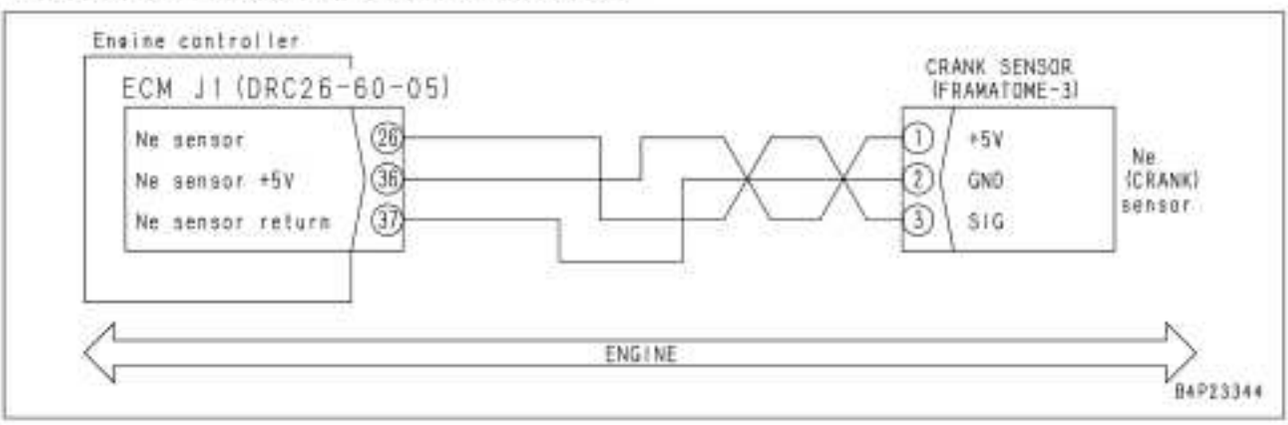
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No.	Cause	Procedure, measuring location, criteria and remarks		
6	Short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors ECM J1 and CRANK SENSOR and connect T-adapters to each female side.		
		Resis-tance	Between ECM J1 (female) (26) and (36) or CRANK SENSOR (female) (1) and (3)	Min. 100 kΩ
			Between ECM J1 (female) (26) and (37) or CRANK SENSOR (female) (2) and (3)	Min. 100 kΩ
7	Ground fault in wiring harness (contact with ground circuit)	1. Turn starting switch to OFF position. 2. Disconnect connectors ECM J1 and CRANK SENSOR and connect T-adapters to female side of ECM J1 or CRANK SENSOR.		
		Resis-tance	Between ground and ECM J1 (female) (26) or CRANK SENSOR (female) (3)	Min. 100 kΩ
8	Hot short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connector CRANK SENSOR and connect T-adapters to female side of CRANK SENSOR. 3. Turn starting switch to ON position.		
		Voltage	Between CRANK SENSOR (female) (3) and ground	Max. 1 V
9	Damage or loose mounting of speed sensing wheel	Check speed sensing wheel.		
10	Defective Ne speed sensor	If no failure is found by above checks, Ne speed sensor is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		
11	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 engine Ne speed sensor

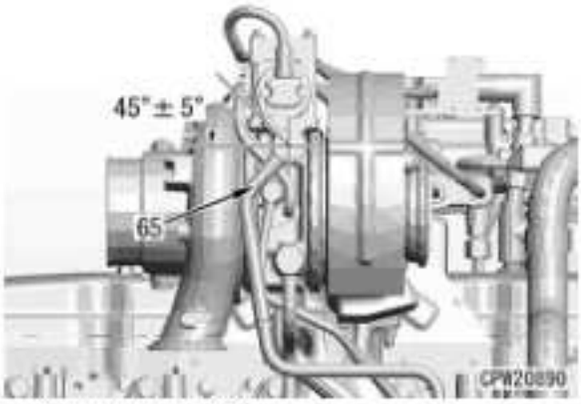


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Failure code [CA3318] KDOC Outlet Temp Sens In Range Error (WA380_7-CA3318-400-A-Z0-A)

Action level	Failure code	Failure	KDOC Outlet Temperature Sensor In Range Error
L03	CA3318		(Engine controller system)
Detail of failure	• Difference between temperature sensed by KDOC outlet temperature sensor and that by KDOC inlet temperature sensor is different from expected value. (Signal voltage is within input range.)		
Action of controller	• Uses KDOC inlet temperature for KDOC outlet temperature to run engine. (If failure is detected in KDOC inlet temperature sensor too, controller takes it that KDOC outlet temperature is at default value (250°C) and allows engine to run.) • Closes EGR valve. • Limits engine output and allows engine to run. • Stops KDPF regeneration control. ★ You can cancel above measure by "turning starting switch to OFF position once, then turning starting switch to ON position" after failure code is generated.		
Problem on machine	• Engine output decreases.		
Related information	⚠ **Since temperature of KDPF and KDOC becomes 500 °C or higher, take care not to get burn injury.** • Signal voltage from KDOC inlet temperature sensor can be checked with monitoring function. (Code: 47301 (V)) • Temperature sensed by KDOC inlet temperature sensor can be checked with monitoring function. (Code: 47300 (°C)) • Signal voltage from KDOC outlet temperature sensor can be checked with monitoring function. (Code: 47401 (V)) • Temperature sensed by KDOC outlet temperature sensor can be checked with monitoring function. (Code: 47400 (°C)) • Signal voltage from KDPF outlet temperature sensor can be checked with monitoring function. (Code: 47201 (V)) • Temperature sensed by KDPF outlet temperature sensor can be checked with monitoring function. (Code: 47200 (°C)) • KDOC inlet temperature sensor connector label "TEMP1" expressed in black embossed letters is seen on KDPF temperature sensor consolidating box (KDOC outlet temperature sensor connector label "TEMP2" and KDPF outlet sensor connector label "TEMP3" are shown similarly to "TEMP1"). • As to procedure for accessing KDPF temperature sensor, see 50 Disassembly and assembly, "Removal and installation of KDPF assembly" and "Disassembly and assembly of KDPF". • Engine controller stops approximately 30 seconds after starting switch is turned to OFF position. So when you restart engine, wait one minute minimum before turning starting switch to ON position again.		
Machine operation for clearing failure code	• When this failure code appears, perform troubleshooting according to following work flow. A. Identification of cause and fixing ↓ B. Machine operation for clearing failure code ★ This failure code does not disappear by simply turning starting switch to ON position from OFF position after repair. You must perform machine operation for clearing failure code after fixing trouble. ★ In machine operation for clearing failure code, "dummy temperature sensor: 799T-601-4680" is used.		

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7) Install tube (60).

V-clamp:
7 ± 1.1 Nm {0.7 ± 0.11 kgm}

- MIKALOR clamp

★ Be sure to use a new clamp.

1] Align hose to its original position (marked position).

★ Reference

Air hose insertion depth:
50 mm (aftercooler side)

Air hose insertion depth:
40 mm (KVGT side)

2] Set bridge (BR) under clamp tightening bolt, and adjust overlap (b) between bridge (BR) and band to min. 5 mm.
Dimension b:
Min. 5 mm

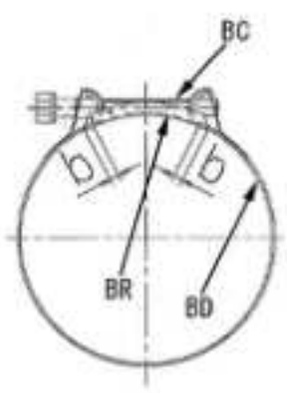
Clamp tightening bolt threaded portion (BC):
Lubricating oil (ThreeBond PANDO18B)

★ Impact wrench is not allowed to use.

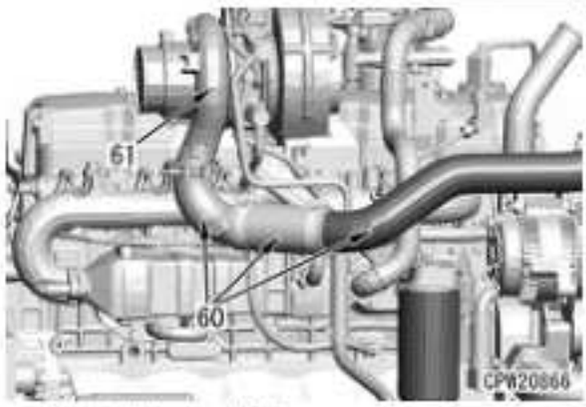
- When reusing hose
  Align clamp position to trace of clamp left on hose.

Clamp bolt:
Min. 6 Nm {0.6 kgm}

- When hose is new
  Tighten it until dimension BDG becomes as shown below.
  BDG:
  7 to 10 mm



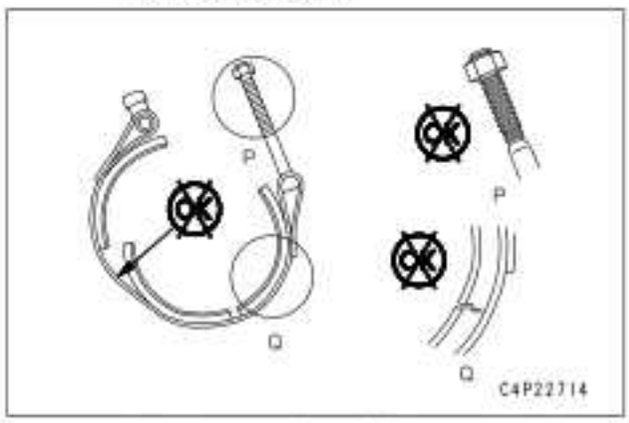




8) Install bracket (59).
9) Using tool A9, install tube (48) using V-clamp.

★ The V-clamp can be reused. However, replace it with a new one when it is under the following condition.

- V-clamp is deformed
- Threads of T-bolt are crushed
- V-groove is cracked
- V-groove is flaking



- Width across flats of V-clamp tightening nut:
  7/16 in. (11.1 mm)

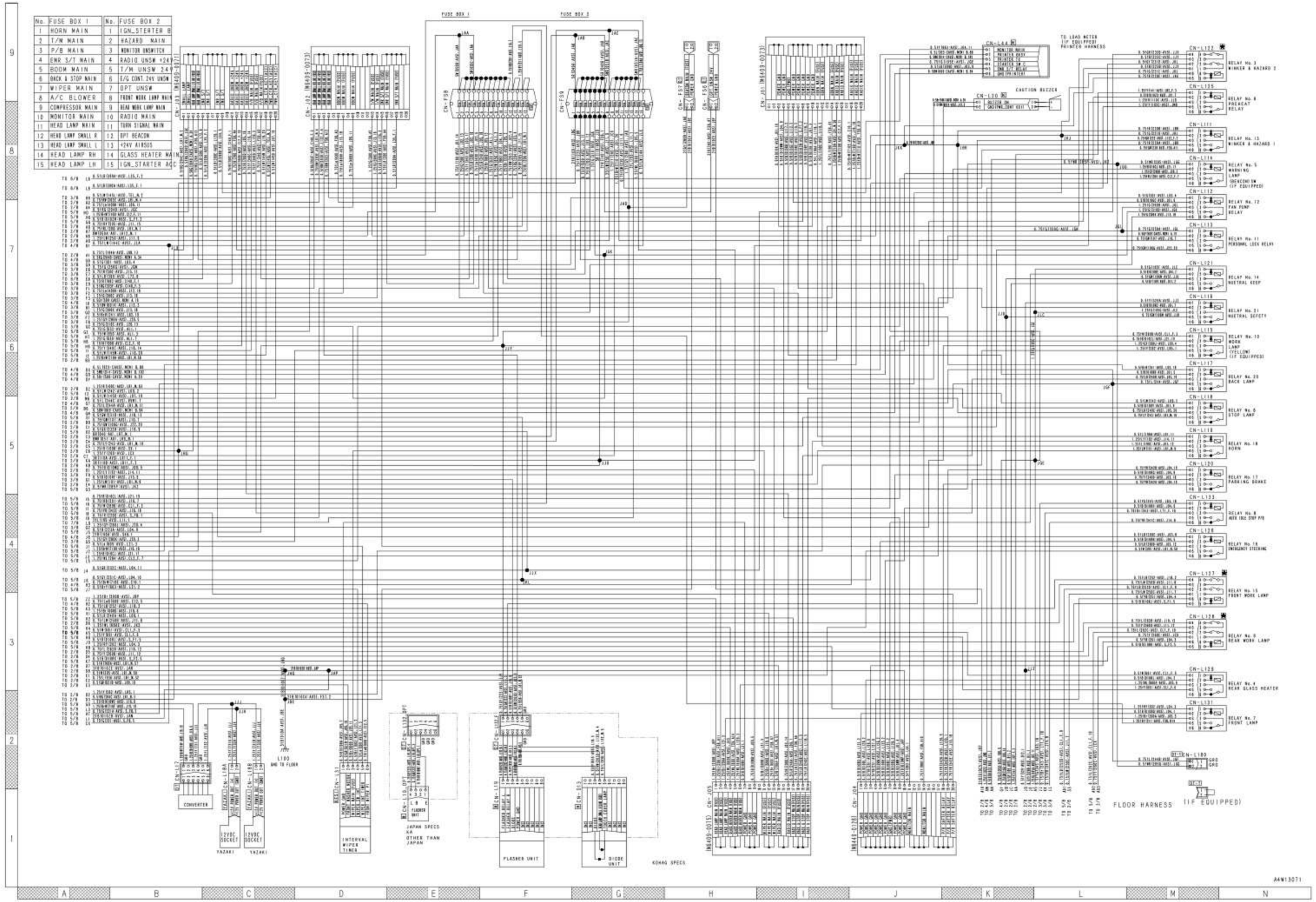
V-clamp tightening nut:
13.6 ± 0.5 Nm {1.38 ± 0.05 kgm}

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Electric circuit diagram of floor (1/8) (EU specification)

WA380-7

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



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