SEN06006-05

Shop Manual

WHEEL LOADER **WA470-7**

SERIAL NUMBERS 10001 and up

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 00-18
Important safety notice 00-18
How to read the shop manual 00-25
Explanation of terms for maintenance standard 00-27
Handling equipment of fuel system devices 00-29
Handling of intake system parts 00-30
Handling of hydraulic equipment 00-31
Method of disconnecting and connecting of push-pull type coupler 00-33
Handling of electrical equipment 00-36
How to read electric wire code 00-44
Precautions when performing operation 00-47
Practical use of KOMTRAX 00-52
Standard tightening torque table 00-53
List of abbreviation 00-59
Conversion table 00-64
01 Specification 01-1
Table of contents 01-2
Specifications 01-3
Specification drawing 01-3
Specifications 01-5
Weight table 01-10
Table of fuel, coolant, and lubricants 01-12
10 Structure and function 10-1
Table of contents 10-2
Engine and cooling system 10-4
Engine related parts 10-4
KVGT 10-6
EGR system piping drawing 10-12
EGR system circuit diagram 10-14
EGR valve 10-15
EGR cooler 10-17
KCCV layout drawing 10-19
KCCV ventilator 10-21
KDPF 10-23
Cooling system 10-27
Cooling fan pump 10-30
Cooling fan motor 10-39
Power train 10-46
Power train system 10-46
Drive shaft 10-49
Power train piping drawing 10-50
Transmission control 10-51
Torque converter 10-54
Transmission 10-59
Transmission control valve 10-78
Forward and reverse clutch ECMV and 1st and 2nd clutch ECMV 10-81
3rd, 4th clutch ECMV 10-88
Lockup clutch ECMV 10-95
Main relief and torque converter relief valve 10-99
Axle 10-101
Differential 10-103
Final drive 10-113
Steering system 10-115
Layout of steering parts 10-115
Steering column 10-116

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Joystick steering lever linkage 10-117
Steering pump 10-118
Steering valve 10-130
Orbit-roll valve 10-144
Stop valve 10-150
Emergency steering motor 10-151
Emergency steering pump 10-152
Brake system 10-153
Layout of brake parts 10-153
Charge valve 10-155
Brake valve 10-161
Slack adjuster 10-165
Accumulator (for brake) 10-168
Brake 10-169
Parking brake control 10-172
Parking brake 10-173
Parking brake solenoid valve 10-174
Parking brake emergency release valve 10-177
Undercarriage and frame 10-178
Axle mount and center hinge pin 10-178
Tire 10-179
Hydraulic system 10-181
Hydraulic component layout 10-181
Work equipment control 10-183
Hydraulic tank 10-185
Double type gear pump 10-188
Work equipment pump 10-189
Control valve 10-210
CLSS 10-219
Hydraulic circuit diagram and names of valves 10-223
Accumulator charge valve 10-234
Work equipment lock solenoid valve 10-238
Accumulator (for PPC circuit) 10-239
Accumulator (for ECSS) 10-240
Work equipment 10-241
Work equipment linkage 10-241
Bucket 10-242
Bucket positioner and boom positioner 10-243
Cab and its attachments 10-244
ROPS cab 10-244
Engine control system 10-245
Preheating system 10-247
Engine power mode selector circuit 10-249
Engine output limit function 10-250
Automatic warm-up function 10-251
Parking brake control system 10-252
System operating lamp function 10-254
Battery disconnect switch function 10-256
Transmission controller system 10-258
Work equipment control system 10-283
Machine monitor system 10-302
Rear view monitor system 10-325
KOMTRAX system 10-328
System component parts 10-331
Sensor 10-362
20 Standard value tables 20-1
Table of contents 20-2
Standard service value table 20-3
Standard value table for engine 20-3

MidWestTech | Komatsu WA470-7 Wheel Loader Service Manual | Publication SEN06...
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Standard value table for machine 20-5
Standard value table for electrical system 20-21
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 30-8
Engine and cooling system 30-10
Testing engine speed 30-10
Testing boost pressure 30-12
Testing exhaust gas color 30-14
Testing and adjusting valve clearance 30-16
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 return rate and leakage 30-27
Bleeding air from fuel system 30-31
Testing fuel circuit for leakage 30-33
Handling cylinder cutout mode operation 30-34
Handling no-injection cranking operation 30-35
Testing of KDPF and muffler stack for looseness and damage 30-36
Testing of installed condition of cylinder heads and manifolds 30-37
Testing engine piping for damage and looseness 30-38
Testing and adjusting air conditioner compressor belt tension 30-39
Testing and adjusting alternator belt tension 30-41
Procedures for cleaning fuel doser 30-43
Writing compensation values at replacement of injector and engine controller 30-46
Power train 30-50
Adjusting transmission output speed sensor 30-50
Adjusting transmission input speed sensor 30-51
Flushing procedure for torque converter and transmission hydraulic circuit 30-52
Retrieval of disabled machine due to transmission valve failure 30-54
Testing oil leakage from axle final drive 30-56
Testing drive shaft for looseness, backlash, and damage 30-57
Testing and adjusting power train oil pressure 30-58
Steering system 30-73
Testing directional lever 30-73
Testing steering wheel 30-74
Testing work equipment control lever 30-76
Testing and adjusting steering circuit oil pressure 30-78
Bleeding air from steering cylinder circuit 30-81
Testing and adjusting steering stopper valve 30-82
Brake system 30-83
Testing brake pedal 30-83
Testing and adjusting brake pedal linkage 30-84
Testing braking performance 30-85
Testing and adjusting of accumulator charge pressure 30-86
Testing of brake accumulator nitrogen gas pressure and procedure for charging brake accumulator with nitrogen gas 30-88
Testing wheel brake oil pressure 30-92
Testing lowering of wheel brake pressure 30-94
Testing wear of wheel brake disc 30-96
Bleeding air from wheel brake circuit 30-97
Releasing remaining pressure in brake accumulator circuit 30-99
Testing parking brake performance 30-100
Testing parking brake oil pressure 30-101
Testing wear of parking brake disc 30-102

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Failure code [CA3311] KDOC Outlet Temp High Error 2 (WA470_7-CA3311-400-A-Z0-A)

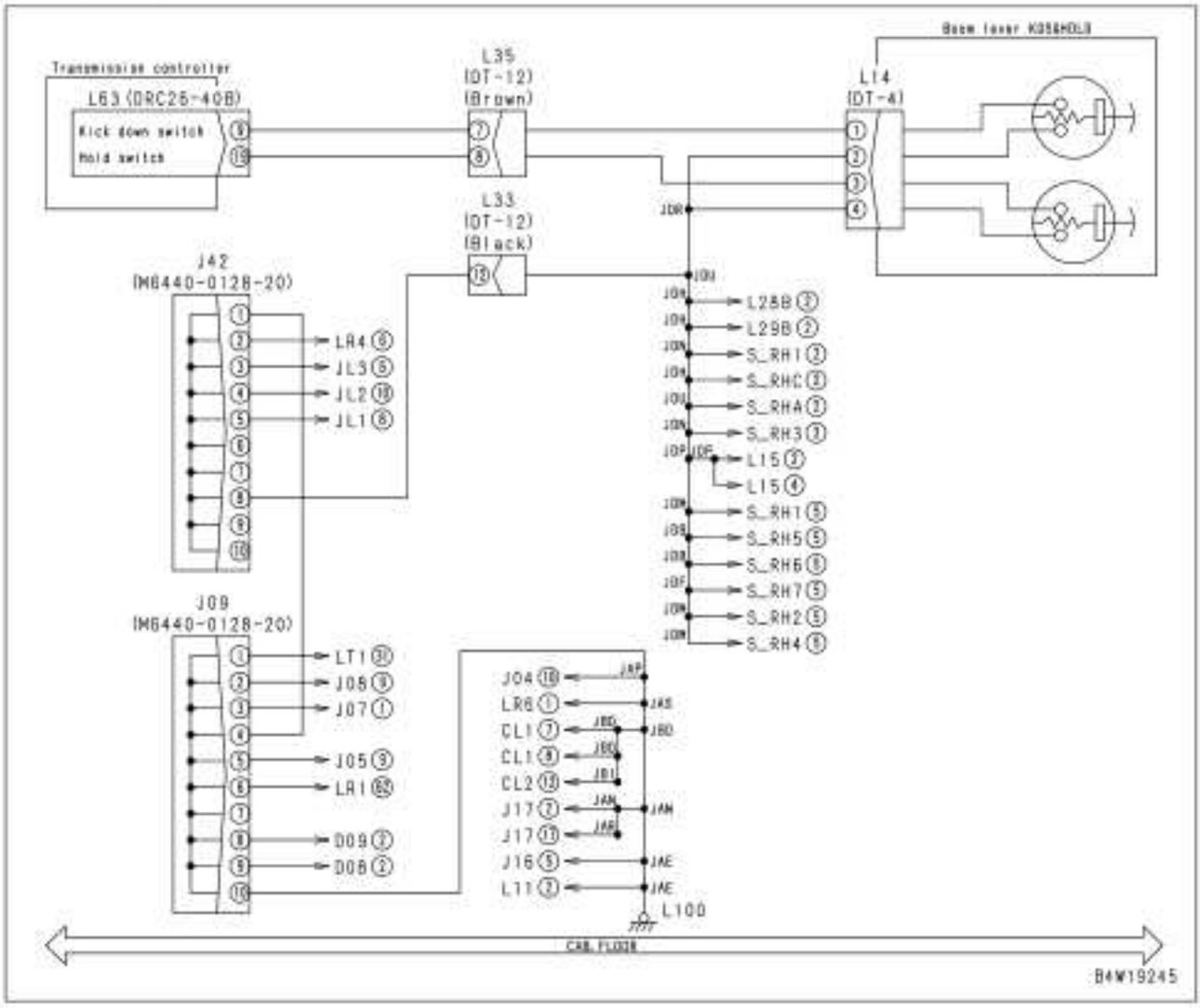
Action level	Failure code	Failure	KDOC Outlet Temperature High Error 2 (Engine controller system)
L03	CA3311		
Detail of failure	• KDOC outlet temperature remains extremely high relative to KDOC inlet temperature.		
Action of controller	• Closes EGR valve and opens VGT fully. • Limits engine output and allows engine to run. • Stops KDPF regeneration control. ★ You can cancel above measures 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 reduces.		
General information	⚠ **Since KDPF and KDOC are heated to 500°C or above, 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)) • 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 assembly". • Engine controller stops approximately 30 seconds after starting switch is turned to OFF position. So when you restart engine, wait 1 minute and more before turning starting switch to ON position again. ★ If this failure code is displayed, it indicates that KCSF may be damaged. After completing the repair of the problem, check the exhaust gas color according to the following procedure. Replace the KCSF if the black smoke comes out of the exhaust pipe outlet. 1. Start the engine, perform the quick acceleration from low idle to high idle two times, and then keep the engine running at high idle for 5 seconds. 2. Check that the black smoke does not come out of the exhaust pipe outlet during this quick acceleration and high idling.		
Machine operation for clearing failure code	• When this failure code appears, perform troubleshooting according to the following work flow. A. Identification of cause and repair ↓ C. Machine operation for confirming completion of repair ★ This failure code is cleared when starting switch is turned from OFF position to ON position after repair. However, following machine operation must be done to confirm completion of repair.		

A. Identification of cause and repair

No.	Cause	Procedure, measuring location, criteria and remarks
1	Defective KDOC outlet temperature sensor	If failure code [CA3316], [CA3317], or [CA3318] appears, perform troubleshooting for [CA3316], [CA3317] or [CA3318] first.
2	Defective wiring harness connector	1. See descriptions of wiring harness and connectors in "c: Electrical equipment" in "Checks before troubleshooting" of "General information on troubleshooting", and check it and repair as needed.

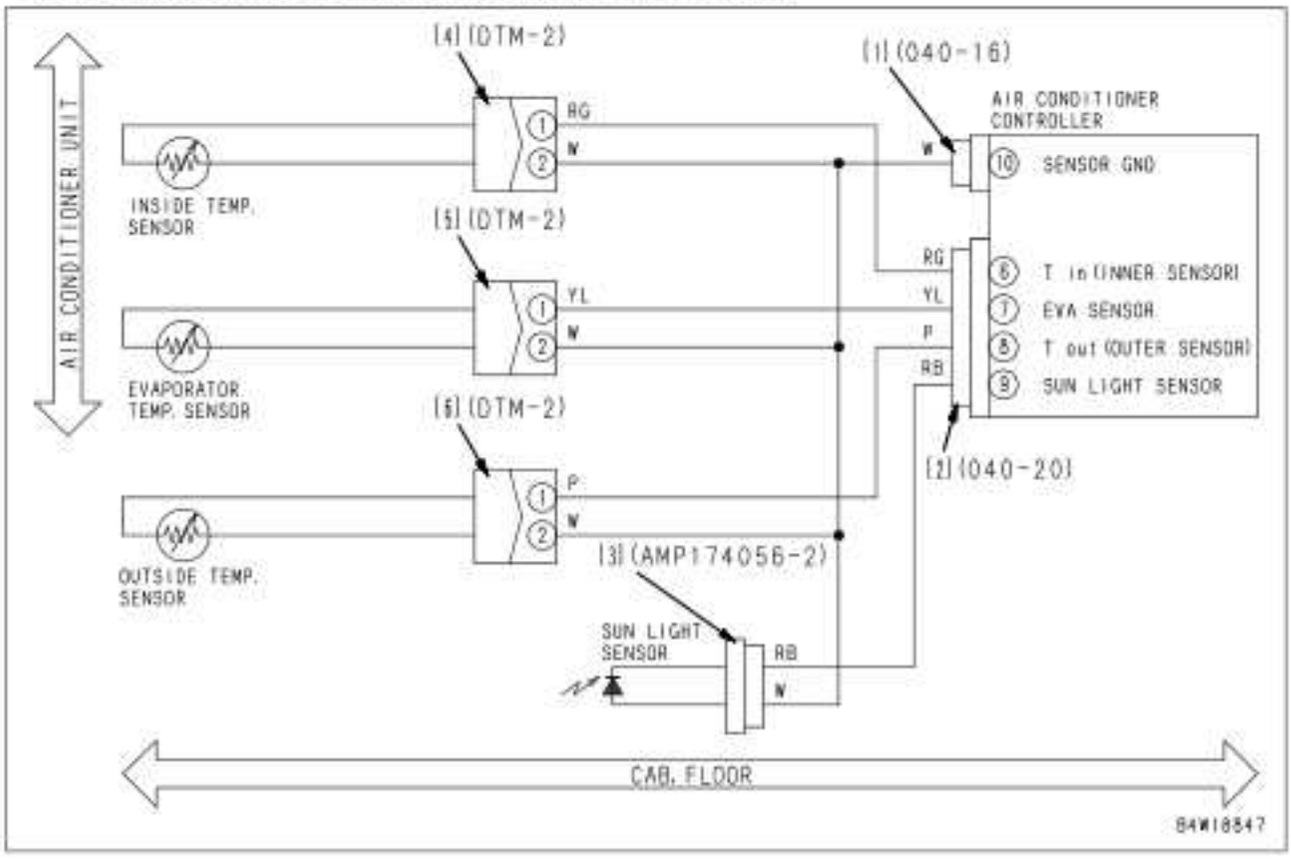
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Circuit diagram related to kickdown switch and hold switch (2-lever specification or 3-lever specification)



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Circuit diagram related to temperature sensor of air conditioner



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

WA470-7

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

No.	FUSE BOX 1
1	HORN
2	T/M CONTROL
3	PARKING BRAKE
4	EMERGENCY STEERING
5	WORK EQUIPMENT POSITIONER
6	BACKUP LIGHT BRAKE LIGHT
7	WIPER WASH WIND SHIELD WASHER
8	A/C BLOWER
9	COMPRESSOR MAIN CIRCUIT
10	MONITOR MAIN CIRCUIT
11	MAIN LAMP CIRCUIT
12	SIDE MARKER LIGHT (RIGHT)
13	SIDE MARKER LIGHT (LEFT)
14	HEAD LIGHT (RIGHT)
15	HEAD LIGHT (LEFT)

No.	FUSE BOX 2
1	IGNITION SWITCH
2	HAZARD MAIN WARNING LIGHT
3	INSTRUMENT PANEL
4	ROOM LAMP
5	T/M CONTROL
6	ENGINE CONTROL
7	OPT UNSW
8	FRONT WORKING LIGHT
9	REAR WORKING LIGHT
10	CAR RADIO
11	TURN SIGNAL LIGHT
12	BEACON LIGHT
13	OPE. SEAT AIR SUS
14	REAR GLASS HEATER
15	ENG CONTROL KEY SW ACC

FUSE BOX 1
FUSE BOX 2
TO LOAD METER
PRINTER HARNESS
(IF EQUIPPED)
CAUTION
BUZZER
DC/DC
CONVERTER
12VDC
SOCKET
YAZAKI
(STD)
12VDC
SOCKET
YAZAKI
(IF EQUIPPED)
GND TO
FLOOR
INTERVAL
WIPER
TIMER
FLASHER
UNIT
DIODE
UNIT
FLOOR HARNESS
RELAY NO. 3
WINKER &
HAZARD 2 RELAY
RELAY NO. 6
PREHEAT RELAY
RELAY NO. 13
WINKER &
HAZARD 1 RELAY
RELAY NO. 5
WARNING LAMP
RELAY
(IF EQUIPPED)
RELAY NO. 12
FAN PUMP
RELAY
RELAY NO. 11
PERSONAL CODE
RELAY
RELAY NO. 14
NUETRAL KEEP
RELAY
RELAY NO. 21
NUETRAL SAFETY
RELAY
RELAY NO. 10
WORK LAMP RELAY
(IF EQUIPPED)
RELAY NO. 20
BACK UP LAMP
RELAY
RELAY NO. 19
BRAKE LAMP
RELAY
RELAY NO. 18
HORN RELAY
RELAY NO. 17
PARKING BRAKE
SAFETY RELAY
RELAY NO. 8
AUTO IDLE STOP
PARKING RELAY
RELAY NO. 16
EMERGENCY
STEERING RELAY
(IF EQUIPPED)
RELAY NO. 15
FRONT WORK LAMP
RELAY
RELAY NO. 9
REAR WORK LAMP
RELAY
RELAY NO. 4
REAR GLASS
HEATER RELAY
RELAY NO. 7
FRONT LAMP
RELAY

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