SEN00783-03

Shop Manual

WHEEL LOADER

GALEO

WA470-6
WA480-6

SERIAL NUMBERS WA470- 85001 and up
WA480- 85001

ecot3

KOMATSU®

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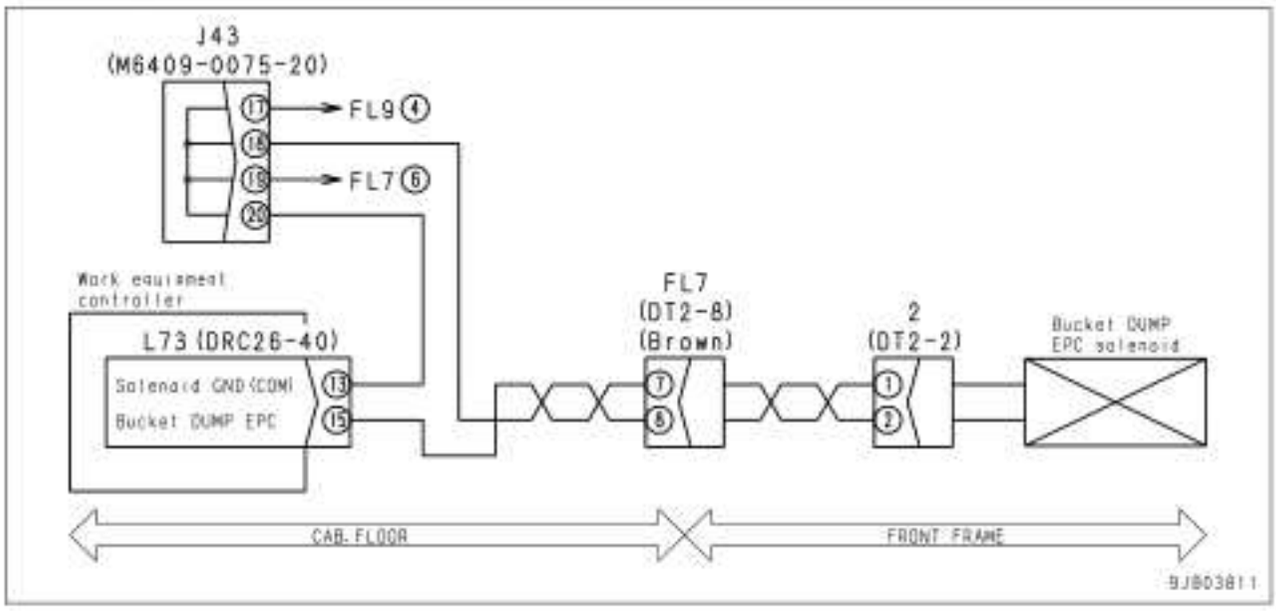
Specifications

	Machine model name		WA470-6		WA480-6	
	Serial No.		85001 and up		85001 and up	
Weight	Machine weight	kg	21,795		24,245	
	Machine weight (Front wheel) in SAE travel posture	kg	9,810		10,910	
	Machine weight (Rear wheel) in SAE travel posture	kg	11,985		13,335	
Performance	Bucket capacity (Heaped)	m^3	4.2		4.6	
	Normal load	kN{kg}	65.9 {6,720}		76.7 {7,820}	
			E-mode	P-mode	E-mode	P-mode
	Travel speed (Forward 1st)	km/h	5.0	5.8	5.7	6.3
	(Forward 2nd)		9.4	11.2	11.0	12.2
	(Forward 3rd)		17.1	20.2	19.5	21.7
	(Forward 4th)		27.7	33.1	30.8	34.5
	(Reverse 1st)	km/h	5.3	6.1	6.0	6.6
	(Reverse 2nd)		10.1	11.9	11.6	12.9
	(Reverse 3rd)		18.3	21.4	20.6	22.9
	(Reverse 4th)		29.6	34.7	31.8	35.6
	Maximum drawbar pull (Forward)	kN{kg}	186 {19,000}	209 {21,300}	175 {17,800}	195 {19,900}
	(Reverse)		176 {17,900}	196 {20,000}	165 {16,800}	183 {18,700}
	Gradeability	deg.	25		25	
	Min. turning radius (Center of outside tire)	mm	6,630		6,630	
	Turning radius (Cutting edge/BOC tip) SAE travel posture	mm	7,630/7,665		7,670/7,700	
Dimension	Overall length (With BOC)	mm	8,875		9,170	
	Overall width	mm	2,920		3,010	
	Bucket width (With BOC)	mm	3,170		3,170	
	Overall height (Cab top)	mm	3,435		3,500	
	Overall height with bucket lifted up	mm	5,895		6,175	
	Wheelbase	mm	3,450		3,450	
	Tread	mm	2,300		2,300	
	Minimum ground clearance	mm	460		525	
	Max. hinge pin height	mm	4,295		4,505	
	Dumping clearance (Teeth edge/BOC tip)	mm	3,205/3,120		3,300/3,205	
	Dumping reach (Teeth edge/BOC tip)	mm	1,260/1,305		1,370/1,410	
	Steering angle	deg.	35		35	
	Bucket tilt-back angle (Operating posture)	deg.	50		52	
	(Max. height)		65		60	
	Bucket tilt-forward angle (Max. height)	deg.	45		49	
	Digging depth, 10° (Cutting end/BOC tip)	mm	335/380		305/355	

★ BOC: Abbreviation for Bolt-On Cutting edge

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Circuit diagram related to bucket dump EPC solenoid



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*** Defective clutch and ECMV specifying method (Check by failure code)**

★ For the checking method of failure code display, see the paragraph of "Special functions of machine monitor."

★ When replacing the ECMV for troubleshooting, remove mud and dust around the ECMV completely and clean it, and then tighten the mounting bolt with the specified torque.

★ For the following diagnoses, start the engine and select the manual mode:

Table of Applicable Clutches

Gear Speed		Clutch					
		F	R	1st	2nd	3rd	4th
N	In the automatic mode				●		
	In the manual mode			○	○	○	○
F1		●		●			
F2		●			●		
F3		●				●	
F4		●					●
R1			●	●			
R2			●		●		
R3			●			●	
R4			●				●

★ When the gear speed is N in the manual mode, the clutch of the gear speed (Marked with ○), to which the gear shift lever is set, is ON.


● Even if the gear shift lever is used when the gear speed is N, the clutch position can not be changed.

No.		Diagnosis / Remedy	Failure code	Causes: Transmission a	b	c	d	e	f	ECMV g	h	i	j	k	l
				Wear or seizure of F clutch disc or wear of piston seal	Wear or seizure of R clutch disc or wear of piston seal	Wear or seizure of 1st clutch disc or wear of piston seal	Wear or seizure of 2nd clutch disc or wear of piston seal	Wear or seizure of 3rd clutch disc or wear of piston seal	Wear or seizure of 4th clutch disc or wear of piston seal	Defective operation of F clutch ECMV (Fill switch)	Defective operation of R clutch ECMV (Fill switch)	Defective operation of 1st clutch ECMV (Fill switch)	Defective operation of 2nd clutch ECMV (Fill switch)	Defective operation of 3rd clutch ECMV (Fill switch)	Defective operation of 4th clutch ECMV (Fill switch)
				×	×	×	×	×	×	×	×	×	×	×	×
1	(1)	The code is not displayed at R1 – R4 but is displayed at F1 – F4	15SAL1	○						○					
	(2)	When the failure code is 15SAL1 after the diagnosis in (1), the failure code comes not to be displayed when the F fill switch connector (CN-F.SW) is disconnected. When the failure code is 15SALH, the failure code comes not to be displayed when the ECMV is replaced with any one other than F clutch ECMV	15SALH							○					
2	(1)	The code is not displayed at F1 – F4 but is displayed at R1 – R4	15SBL1		○						○				
	(2)	When the failure code is 15SBL1 after the diagnosis in (1), the failure code comes not to be displayed when the R fill switch connector (CN-R.SW) is disconnected. When the failure code is 15SBLH, the failure code comes not to be displayed when the ECMV is replaced with any one other than R clutch ECMV	15SBLH								○				
3	(1)	The code is not displayed at F2, F3, and F4 but is displayed at F1	15SEL1			○						○			
	(2)	When the failure code is 15SEL1 after the diagnosis in (1), the failure code comes not to be displayed when the 1st fill switch connector (CN-1.SW) is disconnected. When the failure code is 15SELH, the failure code comes not to be displayed when the ECMV is replaced with any one other than the 1st clutch ECMV	15SELH									○			
4	(1)	The code is not displayed at F1, F3, and F4 but is displayed at F2	15SFL1				○						○		
	(2)	When the failure code is 15SFL1 after the diagnosis in (1), the failure code comes not to be displayed when the 2nd fill switch connector (CN-2.SW) is disconnected. When the failure code is 15SFLH, the failure code comes not to be displayed when the ECMV is replaced with any one other than the 2nd clutch ECMV	15SFLH										○		
5	(1)	The code is not displayed at F1, F2, and F4 but is displayed at F3	15SGL1					○						○	
	(2)	When the failure code is 15SGL1 after the diagnosis in (1), the failure code comes not to be displayed when the 3rd fill switch connector (CN-3.SW) is disconnected. When the failure code is 15SGLH, the failure code comes not to be displayed when the ECMV is replaced with any one other than the 3rd clutch ECMV	15SGLH											○	
6	(1)	The code is not displayed at F1, F2, and F3 but is displayed at F4	15SHL1						○						○
	(2)	When the failure code is 15SHL1 after the diagnosis in (1), the failure code comes not to be displayed when the 4th fill switch connector (CN-4.SW) is disconnected. When the failure code is 15SHLH, the failure code comes not to be displayed when the ECMV is replaced with any one other than the 4th clutch ECMV	15SHLH												○

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Electrical diagrams and drawings

Electrical circuit diagram (1/2)



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