SEN00837-03

Shop Manual

KOMATSU®

GALEO

WA430-6

(KA SPEC.)

WHEEL LOADER

SERIAL NUMBERS WA430-6 65001 and up

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Specifications

Machine model name			WA430-6	
Serial No.			65001 and up	
Weight	Machine weight	kg	18,110	
	Machine weight (Front wheel) in SAE travel posture	kg	8,655	
	Machine weight (Rear wheel) in SAE travel posture	kg	9,455	
Performance	Bucket capacity (Heaped)	m^3	3.5	
	Normal load	kN (kg)	54.9 {5,600}	
			E-mode	P-mode
	Travel speed (Forward 1st)	km/h	5.8	7.0
	(Forward 2nd)		10.0	12.3
	(Forward 3rd)		17.7	21.6
	(Forward 4th)		29.9	37.2
	(Reverse 1st)	km/h	6.1	7.6
	(Reverse 2nd)		10.7	12.9
	(Reverse 3rd)		18.8	23.0
	(Reverse 4th)		31.6	37.2
	Maximum drawbar pull (Forward)	kN {kg}	166 {16,900}	166 {16,900}
	(Reverse)		155 {15,850}	155 {15,850}
	Gradeability	deg.	25	
	Min. turning radius (Center of outside tire)	mm	6,335	
	Turning radius (Cutting edge/BOC tip) SAE travel posture	mm	7,230/7,270	
Dimension	Overall length (With BOC)	mm	8,310	
	Overall width	mm	2,820	
	Bucket width (With BOC)	mm	2,905	
	Overall height (Cab top)	mm	3,390	
	Overall height with bucket lifted up	mm	5,710	
	Wheelbase	mm	3,300	
	Tread	mm	2,200	
	Minimum ground clearance	mm	455	
	Max. hinge pin height	mm	4,165	
	Dumping clearance (Cutting edge/BOC tip)	mm	3,105/3,015	
	Dumping reach (Cutting edge/BOC tip)	mm	1,150/1,195	
	Steering angle	deg.	35	
	Bucket tilt-back angle (Operating posture)	deg.	46	
	(Max. height)		65	
	Bucket tilt-forward angle (Max. height)	deg.	49	
	Digging depth, 10° (Cutting end/BOC tip)	mm	305/350	

★ BOC: Abbreviation for Bolt-On Cutting edge

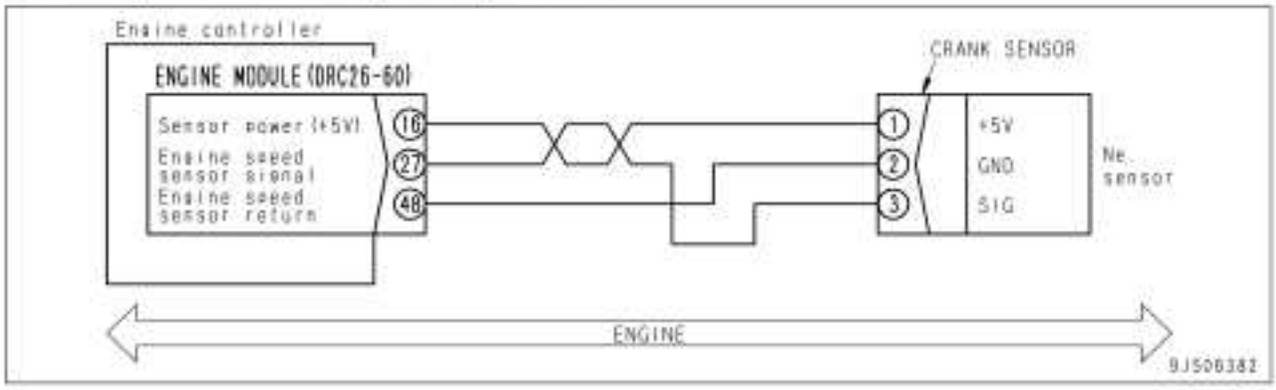
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Failure code [CA238] (Ne speed sensor power supply error)

Action code	Failure code	Trouble	Ne speed sensor supply power error (Engine controller system)
E03	CA238		
Contents of trouble	• Low voltage is detected in engine Ne speed sensor power supply circuit.		
Action of controller	• Controls Ne speed sensor with signals of Bkup speed sensor. • Turns the centralized warning lamp and alarm buzzer ON.		
Problem that appears on machine	• Starting performance is poor • There is hunting from engine.		
Related information	• Method of reproducing failure code: Turn the starting switch ON.		

	Causes		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state			★ Disconnect connector with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
	1	Defective sensor or wiring harness	Disconnect devices at right in order. If failure code disappears after reproduction operation is conducted, that device or wiring harness has a defect in it.	Ne speed sensor	CRANK SENSOR
				Engine wiring harness	ENGINE MODULE
	2	Defective wiring harness connector	Connecting parts among each sensor, engine wiring harness, and engine controller are suspected. Inspect them directly. • Loose connector, broken lock, broken seal • Corrosive, bent, broken, forced-in, or extended pin • Humidity in connector, entry of dirt or dust, poor insulation		

Circuit diagram related to engine Ne speed sensor



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Failure code [DXHLKB] (Joystick steering right EPC solenoid: Short circuit)

Action code	Failure code	Trouble	Joystick steering right EPC solenoid: Short circuit (Work equipment controller system)
E03	DXHLKB		
Contents of trouble	• Since the joystick steering right EPC solenoid system is shorted, abnormal current flows when the joystick steering right EPC solenoid output is ON.		
Action of controller	• Stops outputting the signal to the joystick steering right and left EPC solenoids. • Stops outputting the signal to the joystick steering solenoid cut-off relay. • Turns the centralized warning lamp and alarm buzzer ON. • Even if cause of failure disappears, system does not reset itself until starting switch is turned OFF.		
Problem that appears on machine	• Steering control with the joystick steering becomes unavailable (steering control from the handle mode is available).		
Related information	• The output state (current value) to the joystick steering right EPC solenoid can be checked with the monitoring function (Code: 41904, J/S EPC DIR RH). • Method of reproducing failure code: Start engine and steer to the right using the joystick steering.		

	Causes		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective joystick steering right EPC solenoid (Internal short circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			L35 (male)	Resistance		
			Between (1) and (2)	5 – 15 Ω		
			Between (1), (2) and chassis ground	Min. 1 MΩ		
	2	Defective joystick steering cut-off relay (L41) (Internal disconnection)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			L41 (male)	Resistance		
			Between (5) and (6)	200 – 400 Ω		
			★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			When joystick steering cut-off relay (L41) is replaced with a relay of the same type, if the condition becomes normal, the joystick steering cut-off relay is defective.			
	3	Grounding fault in wiring harness (Contact with ground circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between L73 (female) (28) – L35 (female) (1) and chassis ground	Resistance	Min. 1 MΩ	
	4	Defective work equipment controller	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			L73 (female)	Resistance		
			Between (28) and (23)	5 – 15 Ω		
			Between (23), (28) and chassis ground	Min. 1 MΩ		

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