SEN04357-00

Shop Manual

ENGINE

95E-5 SERIES (KOHAG SPEC.)

KOMATSU®

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Table of contents

00 Index and foreword
Index SEN04359-00
Composition of shop manual 2
Table of contents 3

Foreword and general information SEN04360-00
Safety notice 2
How to read the shop manual 7
Explanation of terms for maintenance standard 9
Handling of electric equipment and hydraulic component 11
Handling of connectors newly used for engines 20
How to read electric wire code 23
Precautions when carrying out operation 26
Method of disassembling and connecting push-pull type coupler 29
Standard tightening torque table 32
Conversion table 36

01 Specification
Specification and technical data SEN04362-00
Outline 2
Specifications 4
General view 6
Weight table 9
Engine performance curves 10

10 Structure, function and maintenance standard
Structure, function and maintenance standard, Part 1 SEN04364-00
General structure 4
Air intake and exhaust system 6
Air intake and exhaust unit 6
Turbocharger 8
Engine unit 12
Cylinder head 12
Cylinder block 14
Cylinder 17
Main moving parts 18
Crankshaft 20
Camshaft 21
Piston, piston ring and piston pin 22
Connecting rod 23
Flywheel and flywheel housing 24
Timing gear 26
Valve system 30
Valve, valve guide 32
Rocker arm shaft, push rod and tappet 33
Structure, function and maintenance standard, Part 2 SEN04365-00
Lubrication system 3
Lubrication system diagram 3
Oil pump 4
Regulator valve 6
Oil filter 7
Fuel system 9
Fuel system diagram 9
Supply pump 10
Fuel injection nozzle 12

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Fuel filter 13
Common rail 14
Various sensor 16
Cooling system 18
Cooling system diagram 18
Water pump 19
Cooling fan drive and thermostat 22
Electrical equipment 26
Starting and charging system electrical circuit diagram 26
Alternator 27
Starting motor 29
Starting aid 30
Engine controller 31

20 Standard value table
Standard service value table SEN04367-00
Standard service value table for testing, adjusting, and troubleshooting 2
Running-in standard and performance test standard 3

30 Testing and adjusting
Testing and adjusting SEN04369-00
Testing and adjusting tools list 3
Measuring intake air pressure 4
Testing exhaust temperature 5
Adjusting valve clearance 6
Testing compression pressure 8
Testing blow-by pressure 10
Testing oil pressure 11
Handling fuel system parts 12
Releasing residual pressure in fuel system 12
Testing fuel pressure 13
Reduced cylinder mode operation 14
No-injection cranking 14
Testing leakage from pressure limiter and return rate from injector 15
Bleeding air from fuel circuit 18
Testing fuel system for leakage 20
Testing and adjusting alternator belt tension 21
Handling controller voltage circuit 22

40 Troubleshooting
General information on troubleshooting SEN04371-00
Points on troubleshooting 2
Error code and failure code table 4
Information in troubleshooting table 6
Troubleshooting of electrical system (E-mode), Part 1 SEN04372-00
E-1 Code [111/CA111] ECM Critical Internal Failure 4
E-2 Code [115/CA115] Eng. Ne and Bkup Speed Sensor Error 7
E-3 Code [122/CA122] Charge Air Press Sensor High Error 8
E-4 Code [123/CA123] Charge Air Press Sensor Low Error 10
E-5 Code [131/CA131] Throttle Sensor High Error 11
E-6 Code [132/CA132] Throttle Sensor Low Error 14
E-7 Code [144/CA144] Coolant Temp. Sensor High Error 15
E-8 Code [145/CA145] Coolant Temp. Sensor Low Error 16
E-9 Code [153/CA153] Charge Air Temp. Sensor High Error 18
E-10 Code [154/CA154] Charge Air Temp. Sensor Low Error 20
E-11 Code [187/CA187] Sensor Sup. 2 Volt. Low Error 21
E-12 Code [221/CA221] Ambient Air Press. Sensor High Error 22

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E-13 Code [222/CA222] Ambient Air Press. Sensor Low Error 24
E-14 Code [227/CA227] Sensor Sup. 2 Volt. High Error 25
E-15 Code [234/CA234] Eng. Overspeed 27
E-16 Code [238/CA238] Ne Speed Sensor Sup. Volt. Error 28
E-17 Code [271/CA271] IMV Short Error 30
E-18 Code [272/CA272] IMV Open Error 32
E-19 Code [322/CA322] Injector #1 (L/B #1) System Open/Short Error 34
E-20 Code [324/CA324] Injector #3 (L/B #3) System Open/Short Error 36
E-21 Code [331/CA331] Injector #2 (L/B #2) System Open/Short Error 38
E-22 Code [332/CA332] Injector #4 (L/B #4) System Open/Short Error 40
E-23 Code [351/CA351] INJ. Drive Circuit Error 42
E-24 Code [352/CA352] Sensor Sup. 1 Volt. Low Error 45
E-25 Code [386/CA386] Sensor Sup. 1 Volt. High Error 46
E-26 Code [431/CA431] Idle Validation SW Low error 48
E-27 Code [432/CA432] Idle Validation Process error 48
E-28 Code [435/CA435] Abnormality in engine oil pressure switch 49
E-29 Code [441/CA441] Battery voltage low error 50
E-30 Code [442/CA442] Battery voltage high error 50
Troubleshooting of electrical system (E-mode), Part 2 SEN04373-00
E-31 Code [449/CA449] Rail Press. Very High Error 3
E-32 Code [451/CA451] Rail Press. Sensor High Error 4
E-33 Code [452/CA452] Rail Press. Sensor Low Error 6
E-34 Code [553/CA553] Rail Press. High Error 7
E-35 Code [559/CA559] Rail Press. Low Error 8
E-36 Code [689/CA689] Eng. Ne Speed Sensor Error 12
E-37 Code [731/CA731] Eng. Bkup Speed Sensor Phase Error 14
E-38 Code [757/CA757] All Persistent Data Lost Error 15
E-39 Code [778/CA778] Eng. Bkup Speed Sensor Error 16
E-40 Code [1633/CA1633] KOMNET Dtalink Timeout Error 18
E-41 Code [2185/CA2185] Throttle Sens. Sup. Volt. High Error 19
E-42 Code [2186/CA2186] Throttle Sens. Sup. Volt. Low Error 22
E-43 Code [2249/CA2249] Rail Press. Very Low Error 23
E-44 Code [2311/CA2311] Abnormality in IMV solenoid 24
E-45 Code [2555/CA2555] Grid Heater Relay Volt. Low Error 26
E-46 Code [2556/CA2556] Grid Heater Relay Volt. High Error 28
E-48 Code [(---)/B@BAZG] Eng. Oil press. Torque Derate 30
E-47 Code [(---)/B@BAZG] Eng. Oil press. Low Speed Derate 30
E-49 Code [(---)/B@BCNS] Eng. Overheat 31
Troubleshooting of mechanical system (S-mode) SEN04374-00
Method of using troubleshooting charts 4
S-1 Starting performance is poor 8
S-2 Engine does not start 9
S-3 Engine does not pick up smoothly 12
S-4 Engine stops during operations 13
S-5 Engine does not rotate smoothly 14
S-6 Engine lacks output (or lacks power) 15
S-7 Exhaust smoke is black (incomplete combustion) 16
S-8 Oil consumption is excessive (or exhaust smoke is blue) 17
S-9 Oil becomes contaminated quickly 18
S-10 Fuel consumption is excessive 19
S-11 Oil is in coolant (or coolant spurts back or coolant level goes down) 20
S-12 Oil pressure drops 21
S-13 Oil level rises (Entry of coolant or fuel) 22
S-14 Coolant temperature becomes too high (overheating) 23
S-15 Abnormal noise is made 24
S-16 Vibration is excessive 25

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Dimensions table

Unit: mm

Engine	Machine model	Dimension of each part								
		A	B	C	D	E	F	G	H	J
SAA4D95LE-5	WA90-6 WA100M-6	707	40	753	278	585	863	403	323	727

★ These dimensions are given for reference when the engine is set on a test bench.

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E-14 Code [227/CA227] Sensor Sup. 2 Volt. High Error

Error code	Failure code	Trouble	Sensor Sup. 2 Volt. High Error
227	CA227		
Contents of trouble	• Signal voltage in sensor power supply 2 (5 V) circuit is abnormally high.		
Action of controller	• Operates Bkup speed sensor with signals of Ne speed sensor. • Sets atmospheric pressure sensor to default value (52.44 kPa {0.53 kg/cm^2}) and continues operation. • Fixes charge pressure sensor value (400 kPa {4.08 kg/cm^2}) and continues operation.		
Problem that appears on machine	• Output drops.		
Related information	• Different machine models may have different connector Nos.		

		Causes	Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective related system	If another failure code is indicated, carry out troubleshooting for it.			
	2	Defective sensor (Internal trouble)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			Disconnect devices at right in order. If error code disappears when a device is disconnected, that device has a defect in it.	Bkup speed sensor	CAM connector	
				Atmospheric pressure sensor	PAMB connector	
				Charge pressure sensor	PTIM connector	
	3	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG1 (female) (36) – each sensor (female)		Resistance	Max. 1 Ω
			Wiring harness between ENG1 (female) (48) – each sensor (female)		Resistance	Max. 1 Ω
	4	Ground fault in wiring harness (Short circuit with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG1 (female) (36) – each sensor (female) and chassis ground		Resistance	Min. 1 MΩ
			Wiring harness between ENG1 (female) (48) – each sensor (female) and chassis ground		Resistance	Min. 1 MΩ
	5	Short circuit in wiring harness (With another wiring harness)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG1 (female) (36) – each sensor (female) and Wiring harness between ENG1 (female) (48) – each sensor (female)		Resistance	Min. 1 MΩ
	6	Defective engine controller	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			ENG1		Voltage	
			Between (36) – (48)		4.75 – 5.25V	

Reference: Bkup speed sensor = Cam speed sensor

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E-22 Code [332/CA332] Injector #4 (L/B #4) System Open/Short Error

Error code	Failure code	Trouble	Injector #4 (L/B #4) System Open/Short Error
332	CA332		
Contents of trouble	• There is disconnection or short circuit in injector #4 circuit.		
Action of controller	• None in particular.		
Problem that appears on machine	• Output drops. • Rotation is unstable.		
Related information	• Different machine models may have different connector Nos.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective injector #4 (Internal trouble)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			CN4 (male)	Resistance		
			Between (1) – (2)	0.4 – 1.1 Ω		
			Between (1), (2) – chassis ground	Min. 1 MΩ		
	2	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG1 (female) (56) – CN4 (female) (1)	Resistance	Max. 1 Ω	
			Wiring harness between ENG1 (female) (51) – CN4 (female) (2)	Resistance	Max. 1 Ω	
	3	Ground fault in wiring harness (Short circuit with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG1 (female) (56) – CN4 (female) (1) and chassis ground	Resistance	Min. 1 MΩ	
			Wiring harness between ENG1 (female) (51) – CN4 (female) (2) and chassis ground	Resistance	Min. 1 MΩ	
	4	Defective injector or wiring harness of another cylinder	If another failure code for injector abnormality is displayed, carry out troubleshooting for it.			
	5	Defective engine controller	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			ENG1 (female)	Resistance		
			Between (56) – (51)	0.4 – 1.1 Ω		
			Between (56), (51) – chassis ground	Min. 1 MΩ		

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