SEN05623-09

Shop Manual

ENGINE

107E -2 SERIES

KOMATSU®

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Applicable machines: WA320-7 (ENG107-2110-030-A-09-A)

Engine name			SAA6D107E-2
Number of cylinders – bore x stroke		mm	6 – 107 x 124
Total displacement		ℓ {cc}	6.69 {6,690}
Firing order		–	1–5–3–6–2–4
Dimension	Overall length	mm	1,045
	Overall width	mm	861
	Overall height (excluding exhaust pipe)	mm	1,458
	Overall height (including exhaust pipe)	mm	–
Performance	Rated horsepower (gross)	kW{HP}/min^{-1}{rpm}	127.0 ± 6.4 {170.3 ± 8.5} / 2,100 {2,100}
	Max. torque (gross)	Nm{kgm}/min^{-1}{rpm}	767 ± 38 {78.2 ± 3.9} / 1,400 {1,400}
	Max. speed with no load (High idle speed)	min^{-1} {rpm}	2,250 ± 50 {2,250 ± 50}
	Min. speed with no load (Low idle speed)	min^{-1} {rpm}	825 ± 25 {825 ± 25}
	Fuel consumption ratio at rated point	g/kWh {g/HPh}	220 {164}
Dry weight (Including KDPF and bracket)		kg	680
Fuel injection system		–	High pressure common rail type
Fuel injection system control		–	Electronic control type
Quantity of lubricating oil (Refill capacity)		ℓ	25.4 (23.1)
Quantity of coolant		ℓ	12.4
Alternator		–	24 V, 60 A
Starting motor		–	24 V, 5.5 kW
VGT (turbocharger)		–	HE341Vh

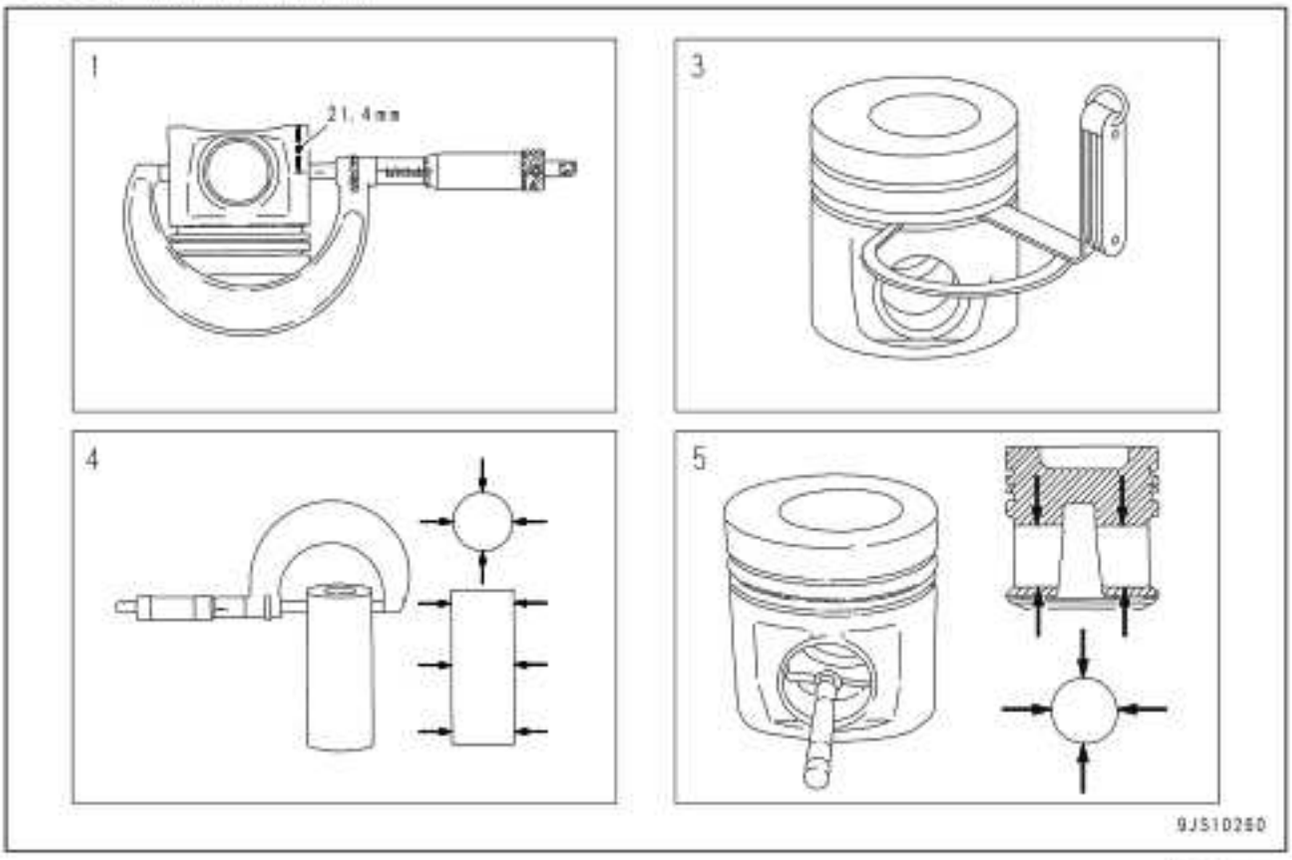
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13. To engine controller
14. To machine wiring harness
15. To Ne (crankshaft) speed sensor
16. To CAN terminating resistor
17. To Bkup (camshaft) speed sensor

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Piston (ENG107-A580-034-K-00-A)



Unit: mm

No.	Item	Criteria		Remedy
1	Outside diameter of piston skirt (at right angles to boss)	106.878 to 106.892		Replace piston
2	Closed gap of piston ring	Top ring	0.30 to 0.46	Replace piston ring or piston
		Second ring	0.52 to 0.88	
		Oil ring	0.22 to 0.58	
3	Clearance of piston ring	Second ring	0.040 to 0.110	
		Oil ring	0.040 to 0.085	
4	Outside diameter of piston pin	39.997 to 40.003		Replace piston or piston pin
5	Inside diameter of piston pin hole	40.006 to 40.012		

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