SEBM0142A10

SHOP MANUAL

KOMATSU®

D66S-1

MACHINE MODEL SERIAL No.

D66S-1 **1001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require.
  Materials and specifications are subject to change without notice.

- D66S-1 mount the SA6D110-1 engine.
  For details of the engine, see the 110 Series Engine Shop Manual.

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3. Troubleshooting table * This table shows the relation of problem and pricipal causal position, and the number of detection method for causal position.
In case that following problem occurs, please carry out troubleshooting according to number mentioned on the right column.

Category	No.	Problem	Appropriate flow chart No. of troubleshooting: Electronic control	Appropriate flow chart No. of troubleshooting: HST system
Machine does not move	1-1	Machine moves neither Forward nor Reverse(*1)	T-8	H-1
	1-2	Machine moves either Forward or Reverse	T-8	H-2
Machine moves	2-1	Machine moves suddenly	*2	H-3
	2-2	Machine moves when speed control lever is NEUTRAL	*2	H-3
Machine stops	3-1	Machine stops suddenly (*2)		
Machine moves in opposite direction	4-1	Machine moves in opposite direction at all times	T-12	H-20
	4-2	Machine moves at first in opposite direction, and then moves normal	*2	H-7
	4-3	When starting on uphills, moves in opposite direction	*2	H-7
Machine does not move straight	5-1	Machine deviates gradually	*2	H-7
	5-2	Machine deviates sharply	T-12	H-4
	5-3	Machine does not return properly to straight line	T-12	H-5
	5-4	When machine starts, front of machine waves — Acceleration	*2	H-18
	5-5	When machine starts, front of machine waves — Slow down	*2	H-9
	5-6	Tracks counter-circulate	*2	H-18
Machine speed is abnormal	6-1-1	Performance of acceleration — Machine moves suddenly when starting	T-15	H-6
	6-1-2	Performance of acceleration — There is time lag when starting		H-8
	6-1-3	Performance of acceleration — Acceleration is not smooth, and acceleration is poor — Machine speed: 0 - 3 km/h		H-10
	6-1-4	Performance of acceleration — Acceleration is not smooth, and acceleration is poor — Machine speed: 3 - 4 km/h		H-11
	6-2-5	Performance of slow down — Machine does not slow down at all		H-11
	6-2-6	Performance of slow down — Slowing down is not smooth	*2	H-17
	6-2-7	Performance of slow down —	*2	H-17
	6-3-1	Machine can not travel at maximum speed		
	6-3-2	Machine travels excessive speed when going down on slope	T-11	H-21
			*3	H-19
Steering defective	7-1-1	Steering pedal does not act at all (Both R.H and L.H. pedal)		
	7-2-1	Machine slow down or stops, when operating of steering	*2	H-16
	7-3-1	Machine does not turn excessive time lag) when operating of steering	*2	H-16
	7-4-1	Machine oversteers	*2	H-12
	7-5-1	Machine turns only to one side	*2	H-16
Machine (sub) power	8-1-1	Machine lacks power	*2	H-12
	8-2-1	Engine is stalling	*2	H-17
				H-21
			*3	H-22
HST is defective	9-1-1	HST exotic excessive noise		
	9-2-1	HST oil temperature rises too high		H-23
				H-24
Trouble mode	1	Delays of operation (increase of rattle and play, lack etc.)		
	2	Decline of efficiency (oil, more leakage)		
	3	Decline of setting (pressure, output)		
	4	Improper adjustment		
	5	Disconnection, short-connection, defect of connection		
	6	Defect of level (lack or excessive)		
	7	Others (disconnection, break-down, come-off, mis-operation (beginning))		
Trouble detection method	1	Visual check		
	2	Measuring — Electricity — Tester		
	3	Measuring — Hydraulic pressure		
	4	Measuring — Others (engine speed, travel speed and leak, and pump travel)		
	5	Confirmation of difference of operation levers, solenoid valve ON-OFF		
	6	Not directly but only by elimination method trouble can be detected		
	7	Others (noise, confirmation of switch ON-OFF)		
Level of trouble	1	Trouble which customer can check and cope with by himself		
	2	Trouble dependent on KOMATSU or designated service workshop		

Remarks

*1 Machine will not move forward or in reverse.
The machine will not move in the following situation.
1) When warm-up switch is ON
2) When engine is started with not returning speed control lever to N
If the machine will not move forward or in reverse, first check the above two items.

*2 Machine stops suddenly.
The HST electronic control system is designed to stop the machine automatically if abnormalities are detected.
To detect abnormalities, the system is equipped with the following systems.
1) A safety circuit which detects any abnormality in the voltage of the power supply.
2) An automatic self-testing function for the HST control system. This detects the following.
(1) Drop in charge pressure
(2) Trouble in controller (Power cut, CPU error)
(3) Abnormality in F, R switch for speed control potentiometer
(4) Abnormality in steering brake potentiometer
(5) Abnormality in fuel control potentiometer
(6) Abnormality in servo, brake solenoid circuit
(7) Abnormality in equalizer, solenoid circuit
* Generally speaking, if the problem in the table on the left is "The problem occurs occasionally, but irregularly and not repetitively", the problem is probably caused by defective electrical connections. In such cases, clean more the locations indicated in the table and check all the connectors of the electrical circuits related to that part. Make sure that they are all firmly connected.

*3 These abnormalities are displayed by monitor panel.
See "A. In case that self check function on the monitor panel ("HST ELECTRONIC SYSTEM MONITOR 1", "HST ELECTRONIC SYSTEM MONITOR 2", "HST oil pressure monitor", "Warning lamp", "Alarm buzzer") is displayed."

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