PART NO.

HITACHI

Technical Manual



EX1100-3

Hydraulic Excavator

Service Manual consists of the following separate Part No.
Technical Manual (Troubleshooting)
Workshop Manual

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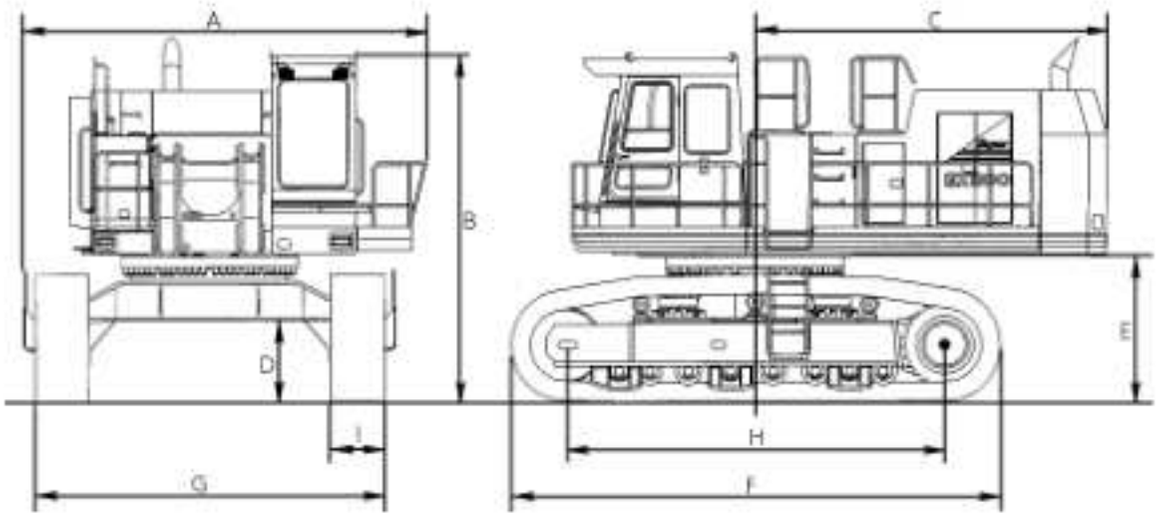
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SPECIFICATIONS

Model	EX1100-3 Hydraulic Excavator	
Type of Front-End Attachment	Backhoe [9.1m (29' 10") boom, 3.4m (11' 2") arm]	Loading Shovel
Bucket Capacity (Heaped)	PCSA 4.6 m^3 (6.0 yd^3), CECE 4.0 m^3 *1 PCSA 5.0 m^3 (6.5 yd^3), CECE 4.4 m^3	PCSA 6.3 m^3 (8.2 yd^3)
Operating Weight	103000 kg (227100 lb)/ *1 105000 kg (231500 lb)	105000 kg (231500 lb)/ *1 108000 kg (238100 lb)
Basic Machine Weight	77170 kg (170100 lb)	77670 kg (171200 lb)/ *1 77600 kg (171000 lb)
Engine	Cummins QSK19-C 448 kW / 1800 min^{-1} (609 PS/1800 rpm)	
A: Overall Width	5320 mm (17 ft 5 in)	5130 mm (16 ft 10 in)
B: Cab Height	4510 mm (14 ft 10 in)/ *1 4460 mm (14 ft 9 in)	*2 5410 mm (17 ft 9 in)/ *1 5360 mm (17 ft 7 in)
C: Rear End Swing Radius	4740 mm (15 ft 7 in)	
D: Minimum Ground Clearance	990 mm (Excluding shoe lug) (39 in)	
E: Counterweight Clearance	1850 mm (6 ft 1 in)	
F: Undercarriage Length	6410 mm (21 ft 0 in)	
G: Undercarriage Width	4610 mm (15 ft 2 in)	
H: Sprocket Center to Idler Center	5000 mm (16 ft 5 in)	
I : Track Shoe Width	710 mm (Grouser shoe) (28 in)	
Ground Pressure	129 kPa (1.32 kgf/cm^2, 18.8 psi) *1 132 kPa (1.35 kgf/cm^2, 19.2 psi)	132 kPa (1.35 kgf/cm^2, 19.2 psi)/ *1 135 kPa (1.38 kgf/cm^2, 19.6 psi)
Swing Speed	5.8 min^{-1} (rpm)	5.8 min^{-1} (rpm)
Travel Speed (fast/slow)	2.6/2.5 km/h (2.2/1.6 mph)	
Gradeability	35 (tanθ = 0.70)	

*1 Serial No. 2123 and later.

*2 The standard specification loading shovel is equipped with an elevated cab.

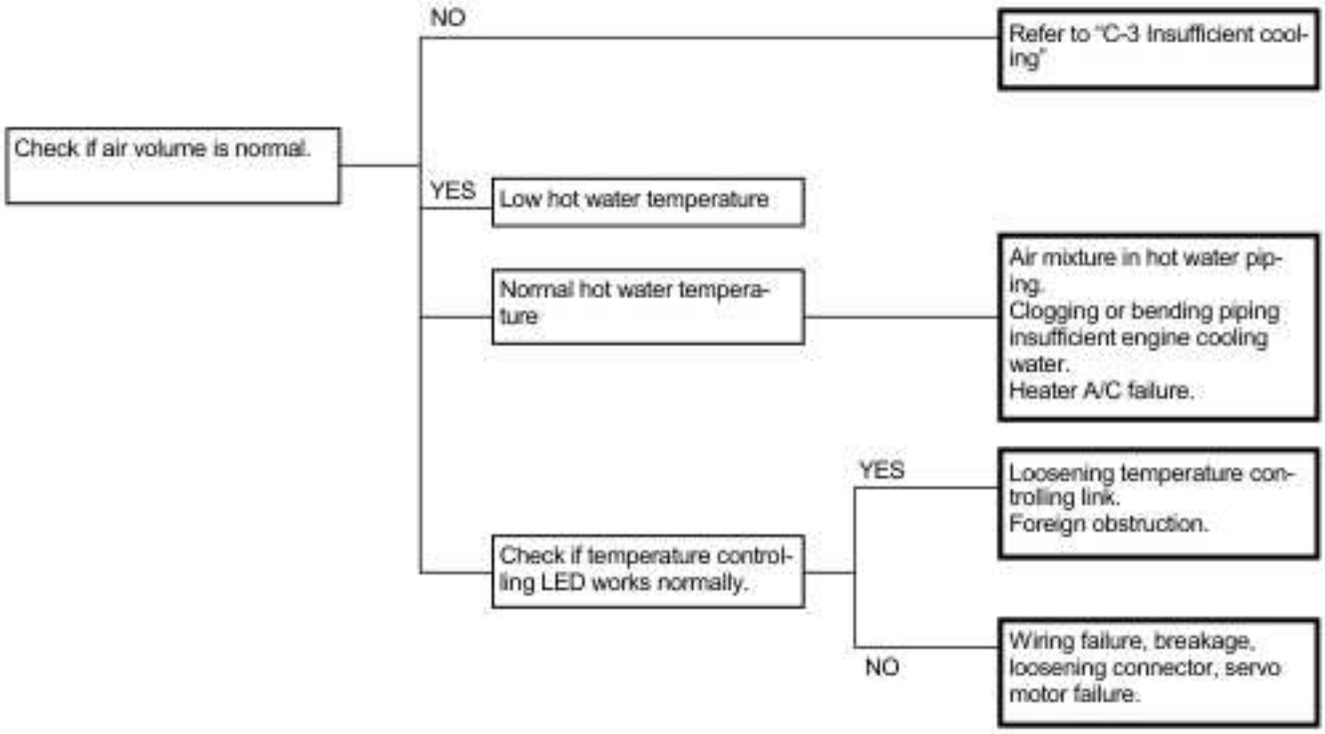


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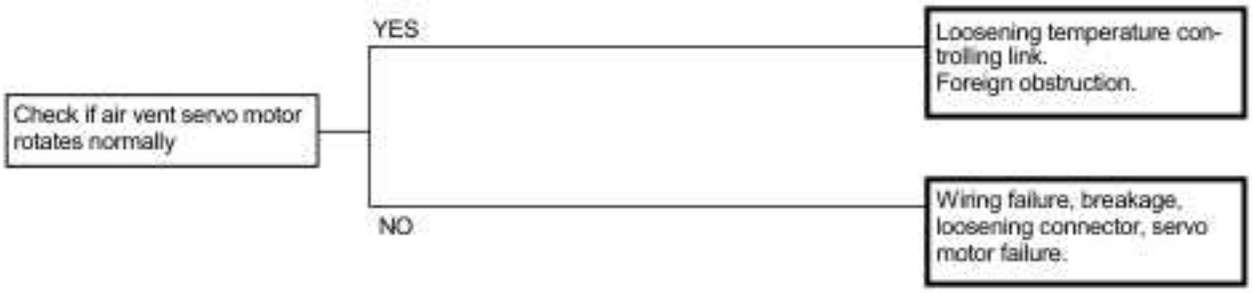
C-2 Insufficient Heating (Serial No. 2123 and later)

- Regarding to serial No.2123 and later, check the all sensors with the self troubleshooting function first.
- Be sure to inspect wiring connectors prior to troubleshooting.



C-3 Changing air vent mode is impossible

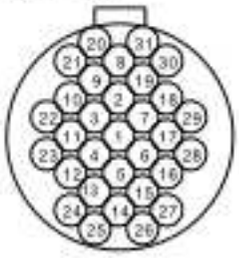
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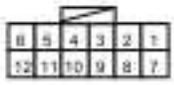
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Connector (harness end connector terminals seen from the open end side)

ECM (31P)



Monitor (12P)



NO

Monitor failure.

Short circuit between monitor and ECM.

YES

YES

ECM failure. Contact CUMMINS.

With harness end 31P connector terminal No. 18 connected to vehicle frame, disconnect 12P connector from monitor. Check if continuity exists between harness end 12P connector terminal No. 1 and vehicle frame.

YES

Monitor failure.

NO

Harness breakage between monitor and ECM.

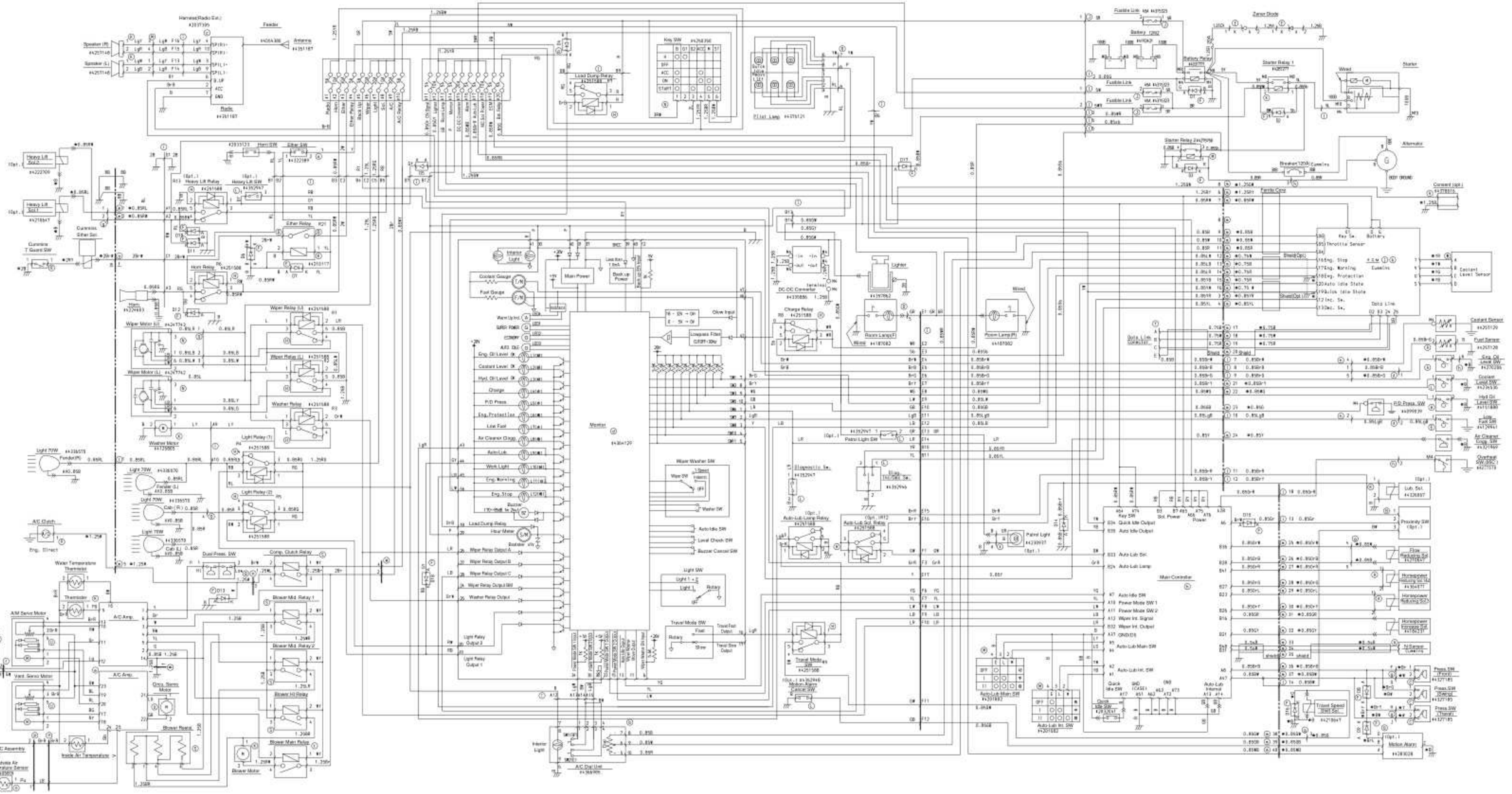
NO

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Attach to Technical Manual, Vol.No. TT142E-02

EX1100-3 ELECTRICAL CIRCUIT DIAGRAM (1) (Serial No.2123 and later)

Parts numbers on the drawing are provided only for reference purpose.
To order parts on the drawing, be sure to consult the Parts Catalog.



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