PART NO.

HITACHI

Technical Manual

Troubleshooting

EX

EX1200-5C

Hydraulic Excavator

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

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SECTION 4

OPERATIONAL PERFORMANCE TEST



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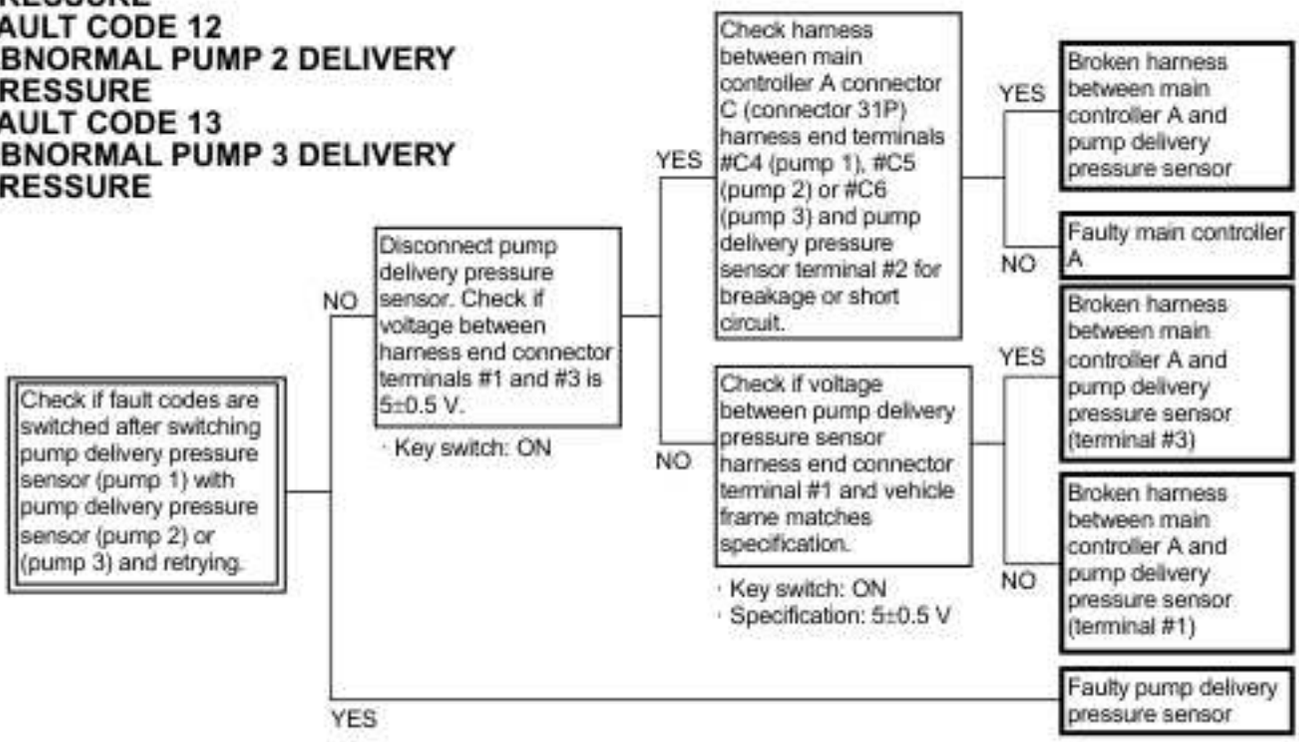
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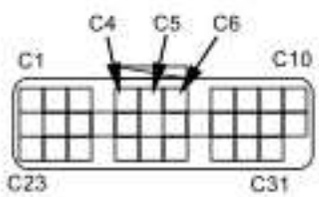
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FAULT CODE 11
ABNORMAL PUMP 1 DELIVERY PRESSURE
FAULT CODE 12
ABNORMAL PUMP 2 DELIVERY PRESSURE
FAULT CODE 13
ABNORMAL PUMP 3 DELIVERY PRESSURE

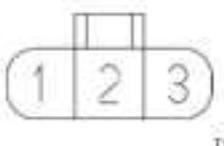


Connector (Harness End Connector Viewed from the Open End Side)

Main Controller A
Connector C



Pump Delivery Pressure Sensor



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YES → Faulty main controller A.

NO → Broken harness between oil cooler fan control solenoid valve and main controller A.

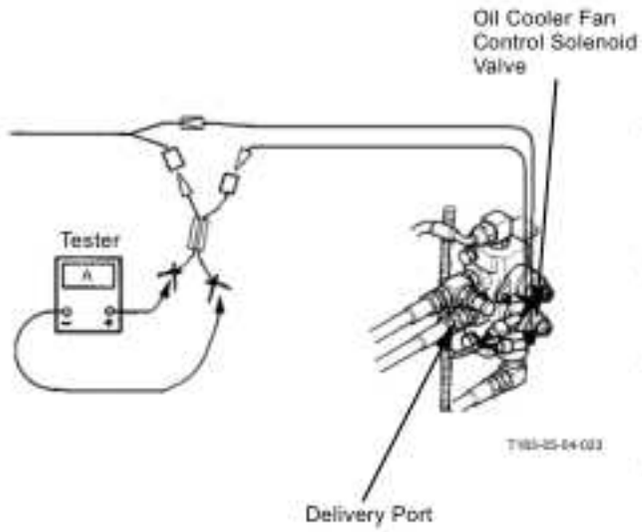


Table 1: Relationship between Hydraulic Oil Temperature and Hydraulic Oil Temperature Sensor 2 (Oil Cooler Fan Motor Speed Control) Resistance

Hydraulic Oil Temperature		Resistance (kΩ)
(°C)	(°F)	
-30	-22	28.6
-20	-4	16.2±1.6
-10	14	9.56
0	32	5.88
10	50	3.73
20	68	2.45±0.24
30	86	1.65
40	104	1.14
50	122	0.808
60	140	0.534
70	158	0.430
80	176	0.322±0.032
90	194	0.245
100	212	0.189
110	230	0.148
120	248	0.117

Table 2: Relationship between Temperature and Oil Cooler Fan Motor Speed

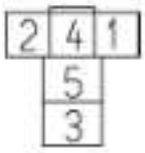
Oil Cooler Fan Motor Speed	Hydraulic Oil Temperature	Pilot Pressure from Oil Cooler Fan Control Solenoid Valve [Current from MC]
800→ 1100 min^{-1}	70 °C (157 °F)	0.99 MPa (10 kgf/cm^2, 142 psi) [285 mA]
1100→ 1400±50 min^{-1}	80 °C (176 °F)	0 MPa (0 kgf/cm^2, 0 psi) [200 mA]
1100→ 800 min^{-1}	65 °C (149 °F)	1.36 MPa (14 kgf/cm^2, 199 psi) [309 mA]
1400±50→ 1100 min^{-1}	75 °C (167 °F)	0.99 MPa (10 kgf/cm^2, 142 psi) [285 mA]

NOTE: The above oil cooler fan motor speed shows the motor speed at rated engine speed (1650 min^{-1}).

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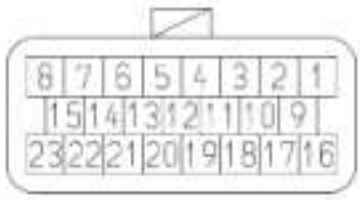
Connector

Engine Stop Indicator Relay



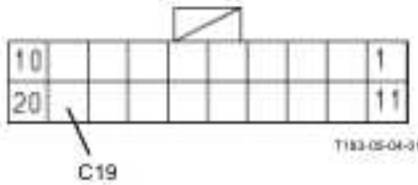
T183-05-04-003

ECM J2

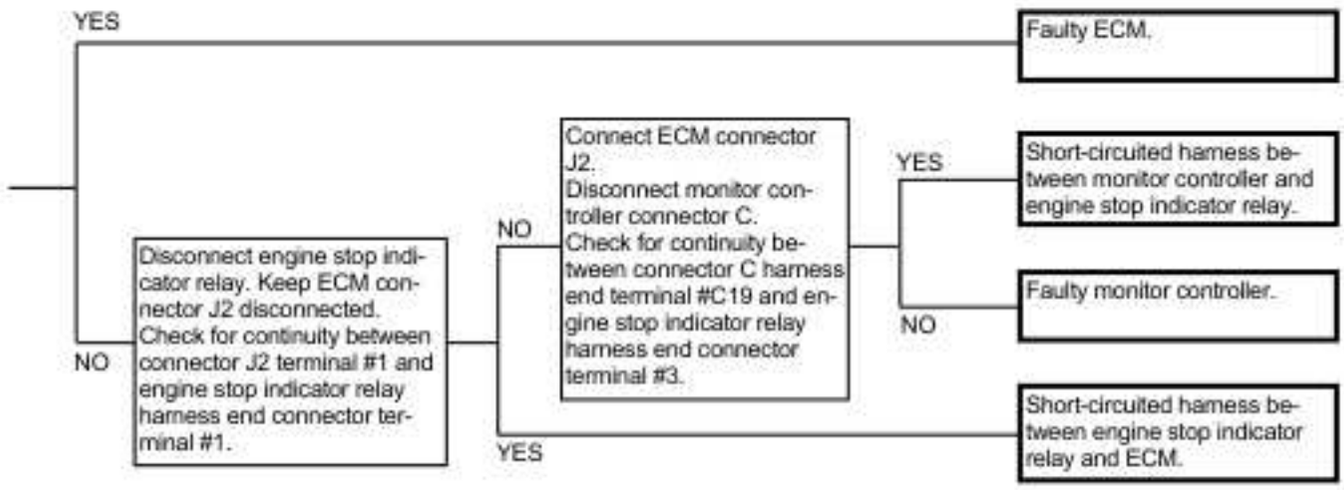


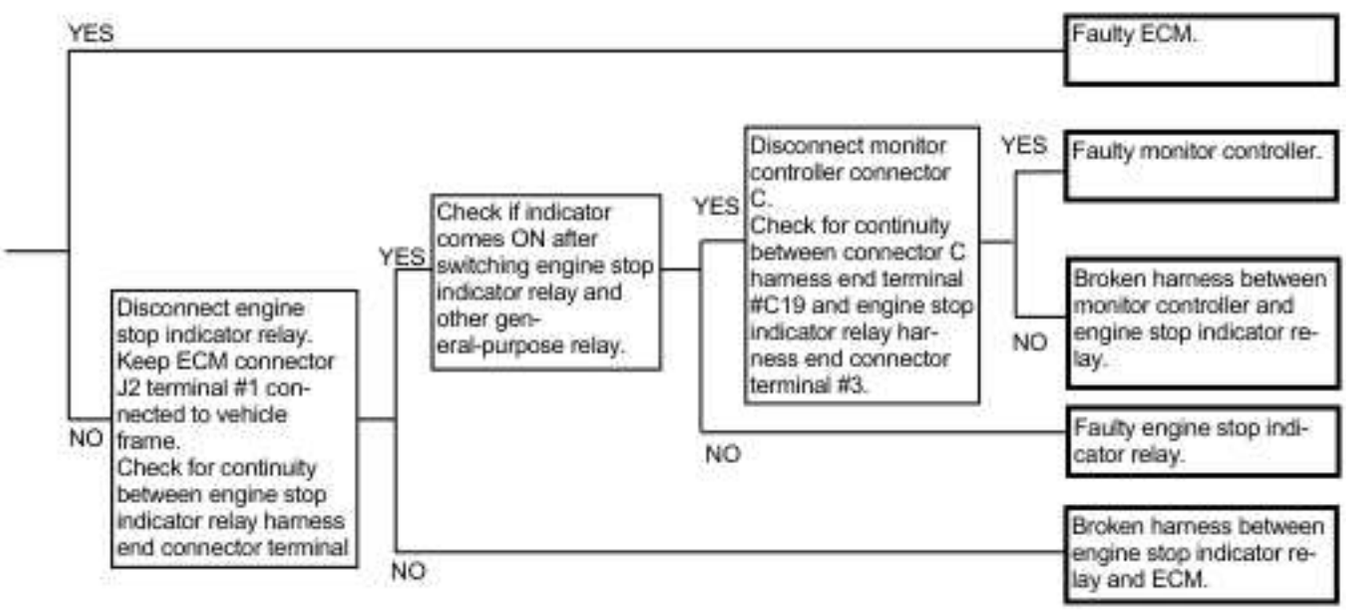
T148-05-03-004

Monitor Controller
Connector C



T183-05-04-314





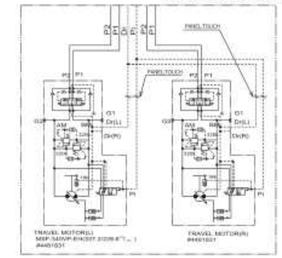
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Attach to Vol. No. : TT18EE-00

EX1200-5C HYDRAULIC CIRCUIT DIAGRAM (BACKHOE)

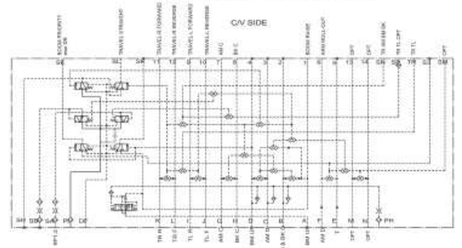
Authorized Hitachi Dealer Use Only
Parts numbers on the drawing are provided only for reference purpose.
To order parts on the drawing, be sure to consult the Parts Catalog.

IMPORTANT:
The numbers (001) to (048) indicate the No. in the cross reference table.
((002), (004), (008) and (009) are absent.)
Refer to the cross reference table in T5-2 group.



DETAIL XI

TRAVEL MOTOR



DETAIL XA

SIGNAL CONTROL VALVE

NOTE:Refer to the perrformance standard table in the Technical Manual for the set pressure of each relief valve.

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