CAT® Lift Trucks

Service Manual

6D16 Diesel Engine

DP80	T32B-00011-up
DP90	T32B-50001-up
DP100	3DP-00001-up
DP115	4DP-00001-up
DP135	5DP-00001-up
DP150	6DP-00011-up

For use with Chassis Service Manual. 99709-68130

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Possible causes \ Symptoms		Overheating (insufficient cooling)	Overcooling	Abnormal noise	Excessive coolant loss	Remarks
V-belt	Loose or damaged	○		○		
	Excessive tension			○		
	Oil on belt	○				
Water pump	Water pump fitted poorly	○			○	
	Gasket defective	○			○	
	Bearing defective	○		○		
	Impeller defective	○				
	Unit seal defective	○			○	
	Loose fit between shaft and flange and/or shaft and impeller	○		○		
Thermostat	Case fitted poorly	○			○	
	Gasket defective	○			○	
	Valve opening temperature too high; valve remains closed	○				
	Valve opening temperature too low; valve remains open		○			
	Water leaking from water temperature sensor	○			○	
Radiator	Space between core and fins clogged	○				
	Core cracked and/or separation of soldered joints	○			○	
	Pressure cap not sufficiently airtight	○				
Cooling fan	Fan shroud fitted poorly	○		○		
Automatic cooling fan coupling	Bearing defective	○		○		
	Bimetal damaged	○				
	Bimetal contaminated with foreign particles	○	○			
	Silicon oil leaking	○		○		
Oil cooler	Oil cooler fitted poorly	○			○	🕮 Gr 12
	Gasket defective	○			○	
Cylinder head	Cylinder head fitted poorly	○			○	🕮 Gr 11
	Gasket defective	○			○	
Coolant quantity insufficient and/or coolant dirty		○				
Coolant passages dirty and/or clogged		○				
Hoses fitted poorly		○			○	
Ambient temperature extremely low			○			

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Turbocharger <6D16-TLE>

Item	Specifications
Type	T04E
Manufacturer	Honeywell

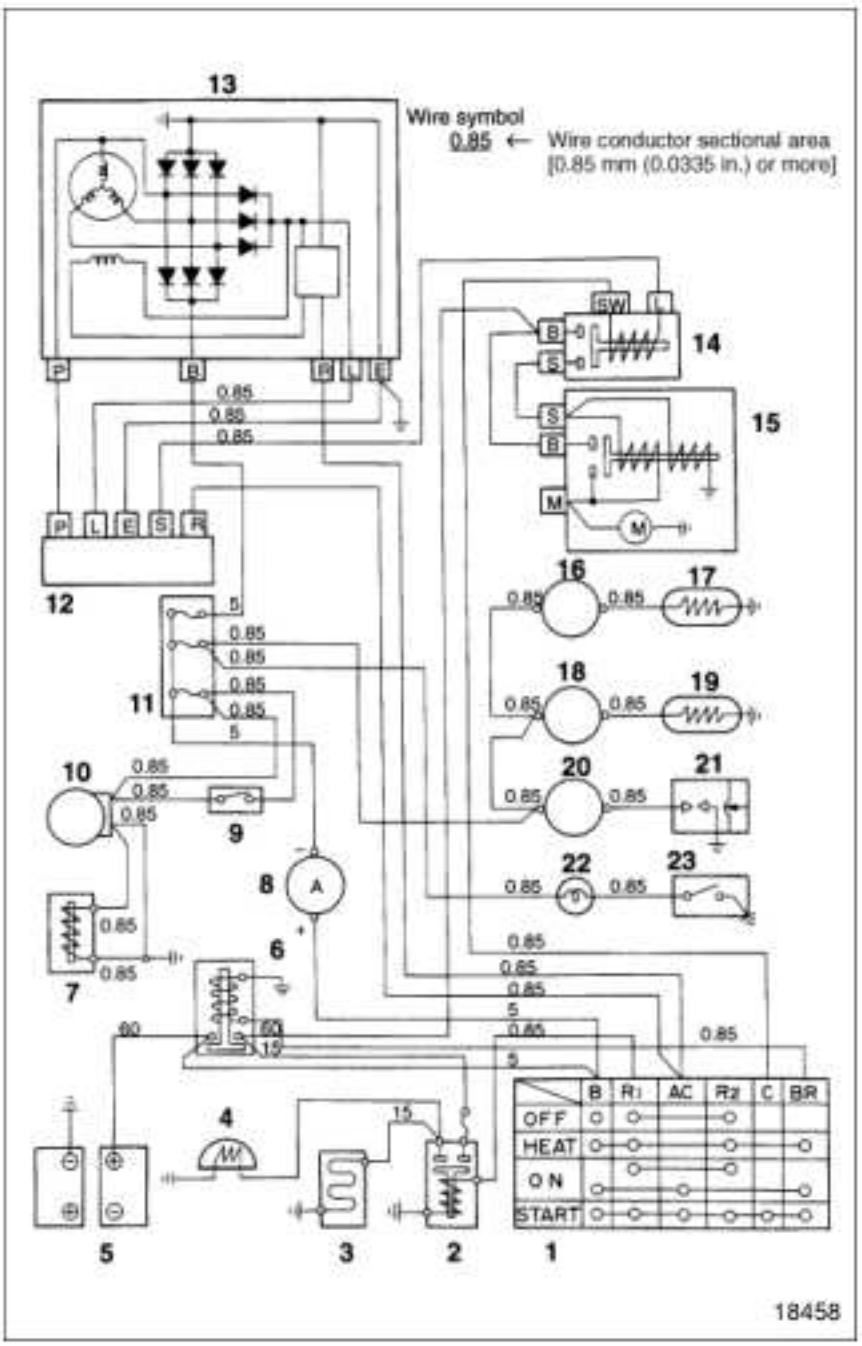
Intercooler

Item	Specifications
Type	Tube & corrugated fin air cooled type

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1. Circuit Diagram

<24V (Air Heater) Specification>



1 Starter switch
2 Heater relay
3 Air heater
4 Heater indicator
5 Battery
6 Battery relay
7 Tachometer sensor
8 Ammeter
9 Lamp switch
10 Tachometer
11 Fuse box
12 Safety relay
13 Alternator
14 Starter relay
15 Starter
16 Thermometer (for oil)
17 Thermo sending unit
18 Thermometer (for coolant)
19 Thermo sending unit
20 Oil pressure gauge
21 Oil pressure gauge unit
22 Warning lamp
23 Oil bypass alarm switch

B: Terminal B
E: Terminal E
L: Terminal L
M: Terminal M
P: Terminal P
R: Terminal R
S: Terminal S
SW: Terminal SW

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