PART NO. TAEJ90-EN-00

HITACHI

Reliable solutions

Technical Manual

ZX55U-5B

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual	: Vol. No.TAEJ90-EN
Workshop Manual	: Vol. No.WAEJ90-EN
Engine Manual	: Vol. No.ETDEP-EN, EWDEP-EN

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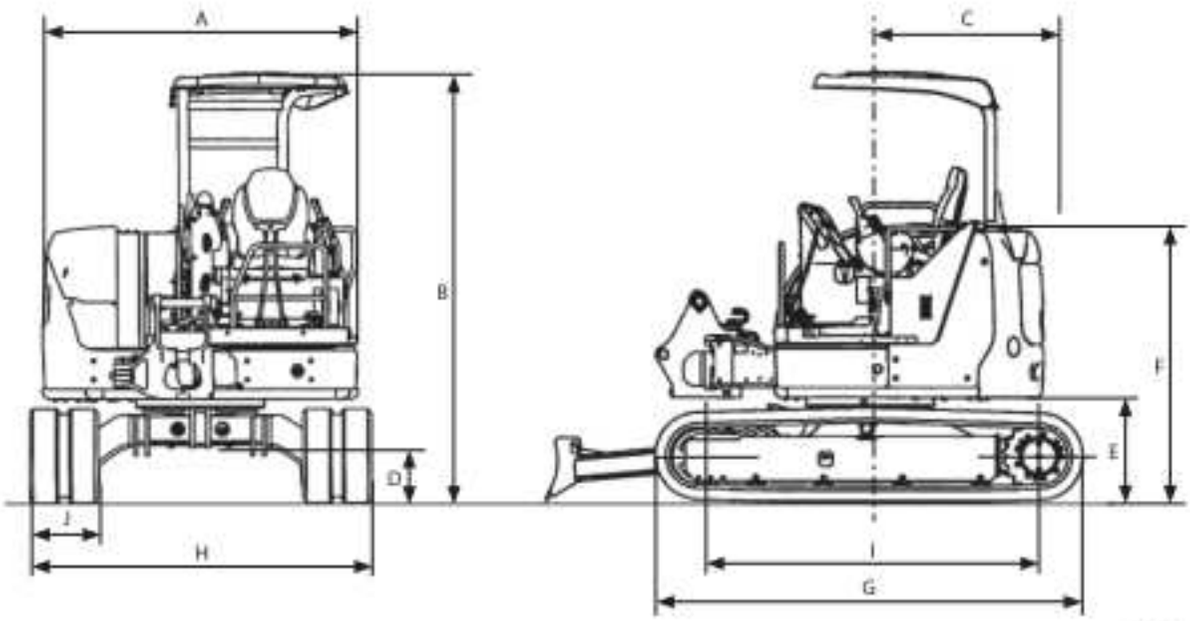
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Std. Specification



MAD8-12-001

Model		ZX55U-5B		
Specification		2-Pillar Canopy	4-Pillar Canopy	Cab
Type of Front-End Attachment	-	Boom Swing Type		
Bucket Capacity (Heaped)	m^3 (yd^3)	0.16 (0.21)		
Operating Weight	kg (lb)	5090 (11300)	5100 (11300)	5230 (11600)
Base Machine Weight	kg (lb)	3930 (8676)	3940 (8696)	4070 (8980)
Engine	kW/min^{-1} (PS/rpm)	4TNV88C 27.1/2400 (36.9/2400)		
A: Overall Width	mm (ft-in)	1850 (6' 1")		
B: Overall Height	mm (ft-in)	2510 (8' 3")		
C: Rear End Swing Radius	mm (ft-in)	1100 (3' 7")		
D: Minimum Ground Clearance	mm (ft-in)	320 (1' 1")		
E: Counterweight Clearance	mm (ft-in)	590 (1')		
F: Engine Cover Height	mm (ft-in)	1570 (5' 2")		
G: Undercarriage Length	mm (ft-in)	2490 (8' 2")		
H: Undercarriage Width	mm (ft-in)	2000 (6' 7")		
I: Sprocket Center to Idler Center	mm (ft-in)	1990 (6' 7")		
J: Track Shoe Width	mm (ft-in)	400 (1' 4")		
Ground Pressure	kPa (kgf/cm^2, psi)	29 (0.30, 4.2)	29 (0.30, 4.2)	30 (0.31, 4.4)
Swing Speed	min^{-1} (rpm)	9.0 (9.0)		
Travel Speed (fast/slow)	km/h (mph)	4.0/2.3 (2.5/1.6)		
Gradeability		30° (tan θ = 0.58)		

NOTE:

- *The dimensions do not include the height of the shoe lug. The dimensions of the machine equipped with rubber crawlers are shown.*

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5. Perform troubleshooting

CAUTION: Do not disconnect wire harnesses or hydraulic lines while the engine is running. The machine may malfunction or pressurized oil may spout, possibly resulting in personal injury. Stop the engine before disconnecting wire harnesses or hydraulic lines.

Perform diagnosis by using the service menu of monitor.
In case any fault code has been displayed by diagnosis by using the service menu of monitor, check the cause of the trouble by referring to Troubleshooting A in this section. In case any fault code has been displayed by diagnosis by using the service menu of monitor, write the fault code. Delete the fault code once and retry self-diagnosis again. If the fault code is displayed again, check the cause of the trouble by referring to Troubleshooting A in this section. After the machine trouble has been corrected, the fault code (displayed by the service menu of monitor) will be deleted.
In case the fault code is not displayed, check operating condition of each component by referring to Troubleshooting B in this section and by using the service menu of monitor.

NOTE: Note that the fault codes displayed do not necessarily indicate machine trouble. The controller stores even temporary electrical malfunctions, such as a drop in battery output voltage or disconnection of the switches, sensors, etc., for inspections. For this reason, the "RETRIAL" is required to erase the accumulated fault codes from the controller memory and to confirm if any fault codes are indicated after the "RETRIAL".

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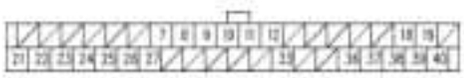
Compressor clutch is not turned ON.

- Check the wiring connections first.
- Check that air conditioner has been charged with refrigerant.
- Check that temperature in the cab is 2 °C or more.

Procedure	Inspection Method	Condition	Evaluation	Cause (check point)
1	Switch compressor relay with blower motor relay (Mid).	Key Switch: ON Blower Switch: Min.	The symptom disappears.	Faulty compressor relay
2	Measure voltage at compressor relay harness end #3.	Key Switch: ON	0 V	Open circuit in harness between compressor relay #3 and fuse #7
3	Measure voltage at compressor relay harness end #1.	Key Switch: ON	0 V	Open circuit in harness between compressor relay #1 and fuse #7
4	Check continuity in harness between compressor relay #2 and control panel #40.	-	☞ Ω	Open circuit in harness between compressor relay #2 and control panel #40.
5	Measure voltage at compressor clutch harness end.	Key Switch: ON Air Conditioner Switch: ON	0 V	Open circuit in harness between compressor relay and compressor clutch or faulty pressure switch
6	Check the thermistor.	-	There is abnormality.	Faulty thermistor
7	-	-	The check mentioned above is normal.	Faulty compressor clutch or faulty control panel

Connector (Harness end)

- Control Panel



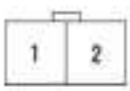
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- Compressor Relay



TADB-05-04-005

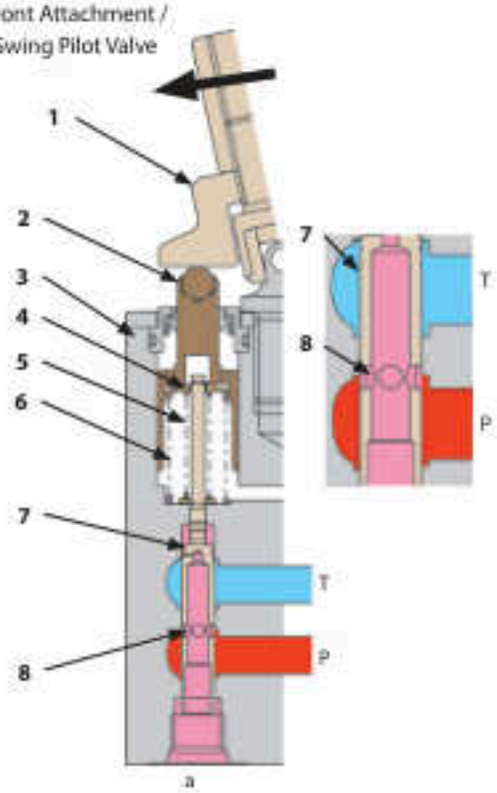
- Pressure Switch



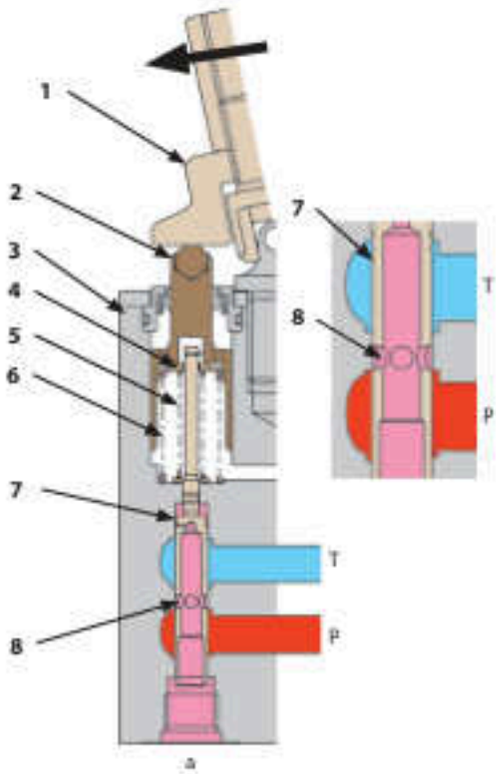
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Front Attachment / Swing Pilot Valve

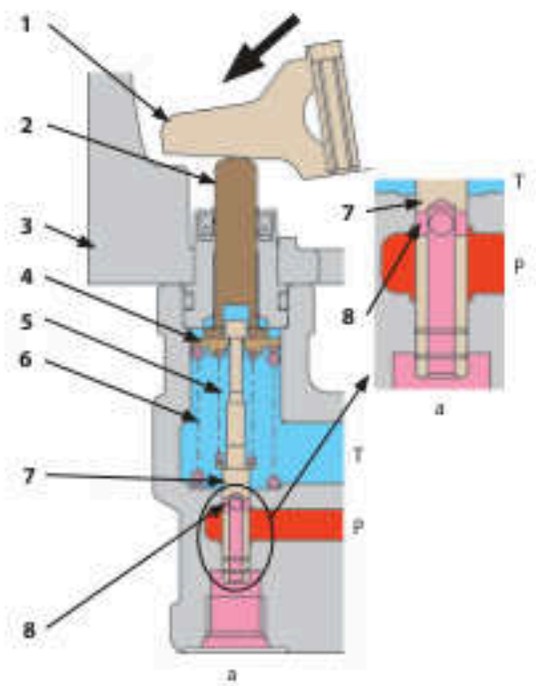


TPPP-03-04-007

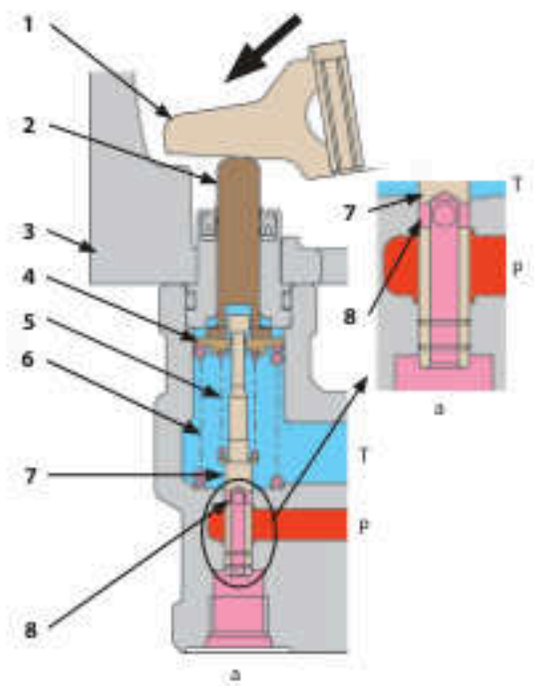


TPPP-03-04-008

Travel Pilot Valve



TPPP-03-04-012



TPPP-03-04-013

P- Port P
T- Port T
a- Output Port

1- Cam
2- Pusher
3- Casing
4- Spring Guide
5- Balance Spring
6- Return Spring
7- Spool
8- Hole

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