PART NO. TAFD90-EN-00

HITACHI

Reliable solutions

Technical Manual

ZX65USB-5B

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual	: Vol. No.TAFD90-EN
Workshop Manual	: Vol. No.WAFD90-EN
Engine Manual	: Vol. No.ETDEP-EN, EWDEP-EN

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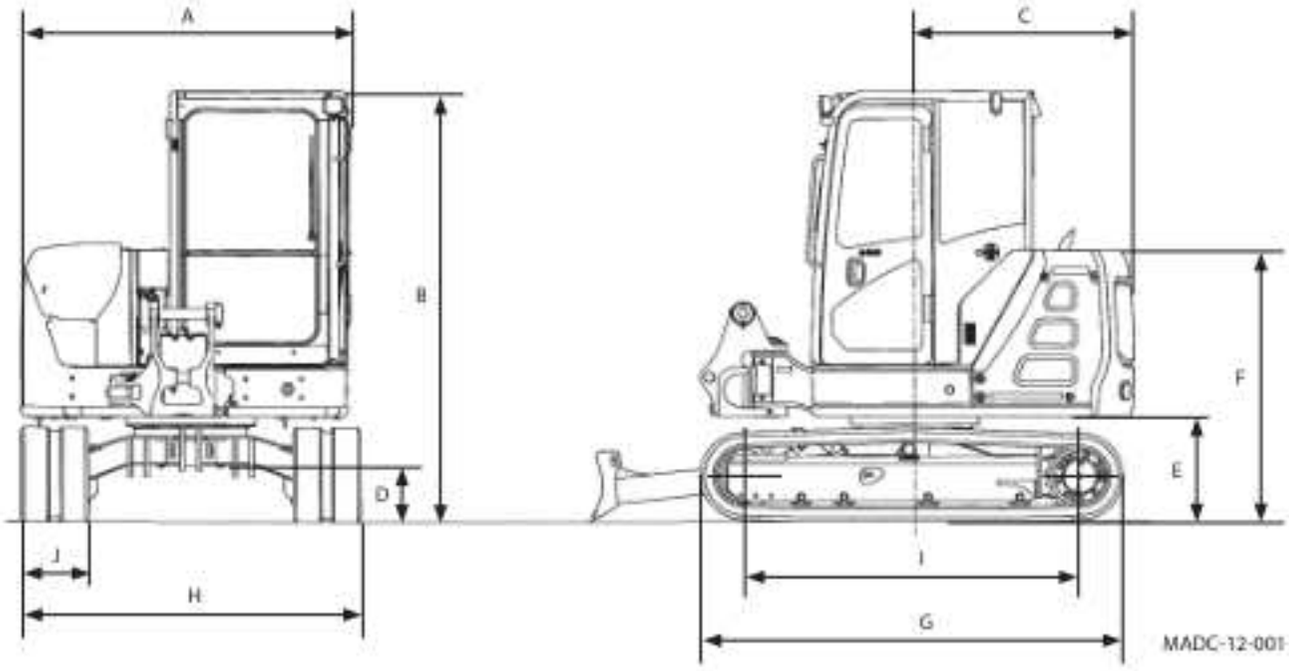
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Std. Specification



Model		ZX65USB-5B
Specification		Cab
Type of Front-End Attachment	-	Boom Swing Type, 1.85 m (4 ft 11 in) Arm
Bucket Capacity (Heaped)	m^3 (yd^3)	0.24 (0.31)
Operating Weight	kg (lb)	6470 (14300)
Base Machine Weight	kg (lb)	4820 (10700)
Engine	kW/min^{-1} (PS/rpm)	4TNV98C 39.6/2000 (53.8/2000)
A: Overall Width	mm (ft-in)	1930 (6' 4")
B: Overall Height	mm (ft-in)	2540 (8' 4")
C: Rear End Swing Radius	mm (ft-in)	1410 (4' 8")
D: Minimum Ground Clearance	mm (ft-in)	330 (1' 1")
E: Counterweight Clearance	mm (ft-in)	615 (2')
F: Engine Cover Height	mm (ft-in)	1600 (5' 3")
G: Undercarriage Length	mm (ft-in)	2480 (8' 2")
H: Undercarriage Width	mm (ft-in)	2000 (6' 7")
I: Sprocket Center to Idler Center	mm (ft-in)	1980 (6' 6")
J: Track Shoe Width	mm (ft-in)	400 (1' 4")
Ground Pressure	kPa (kgf/cm^2, psi)	37 (0.38, 5.4)
Swing Speed	min^{-1} (rpm)	9.5 (9.5)
Travel Speed (fast/slow)	km/h (mph)	4.7/2.8 (2.9/1.7)
Gradeability		30° (tan θ = 0.58)

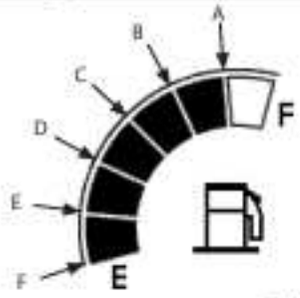
NOTE:

- *The dimensions do not include the height of the shoe lug. The dimensions of the machine equipped with rubber crawlers are shown.*
- *The specifications include additional counterweight and extra attachment lines.*

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Fault Code W: 2304

Fault Code	Trouble	Inspection Method	Evaluation	Cause
W: 2304	Fuel Sensor Failure	Measure resistance between sensor #1 and #2.	The value is not within the specification. (Refer to the table.)	Faulty sensor
		Measure voltage between sensor harness end #2 and the body.	0 V	Open circuit in wire harness #2
		Measure resistance between sensor harness end #1 and the body.	∞ Ω	Open circuit in wire harness #1
		-	The check mentioned above is normal.	Shorted circuit in wire harness #1 and #2

Fuel Gauge	No.	Fuel Level (%)	Fuel Sensor (Ω)
 TADB-05-02-024	A	87	18±1
	B	71	26±1
	C	53	33±1
	D	31	44±2
	E	15	59±2
	F	0 (EMPTY)	84^{0}_{-4}

Connector (Wire harness end)

- Fuel Sensor



TDCD-05-06-010

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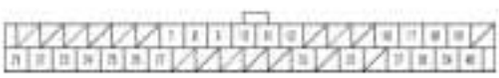
Blower motor does not rotate.

- Check the wiring connections first.
- If the blower motor is definitely abnormal, check it first.
- Check the display of blower switch is changed into four stages.
- Check that the compressor is operated normally.

Procedure	Inspection Method	Condition	Evaluation	Cause (check point)
1	Check continuity in harness between blower motor #1 and #2.	-	∞ Ω	Faulty blower motor
2	Check if any foreign substance prevents rotation of blower fan.	-	There is abnormality.	Stall of blower motor due to foreign substance
3	Check continuity in harness between register #1 and #4 and between register #2 and #3.	-	∞ Ω	Faulty register
4	Switch blower motor relay in failure position with other blower motor relay.	Key Switch: ON Air Conditioner Switch: ON	The symptom disappears.	Faulty blower motor relay
5	Check continuity in harness between harness end #3 of blower motor relay in failure position and register.	-	∞ Ω	Open circuit in harness between blower motor relay and register
6	Check continuity in harness between harness end #2 of blower motor relay in failure position and control panel.	-	∞ Ω	Open circuit in harness between blower motor relay and control panel
7	-	-	The check mentioned above is normal.	Faulty control panel

Connector (Harness end)

- Control Panel



TAFAJ0-05-05-002

- Blower Motor Relay



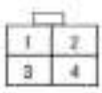
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- Blower Motor



T1M9-05-03-008

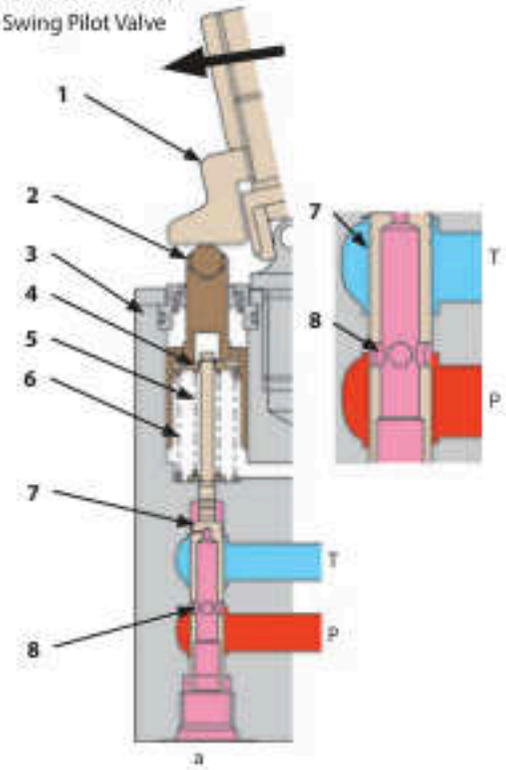
- Register



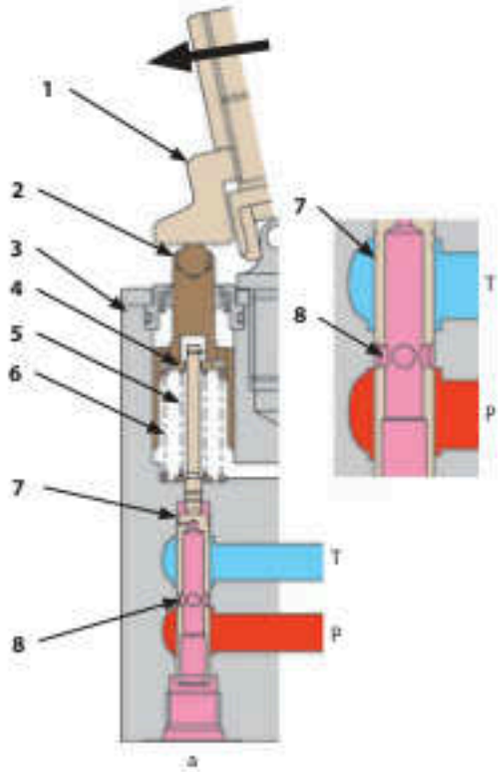
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Front Attachment / Swing Pilot Valve

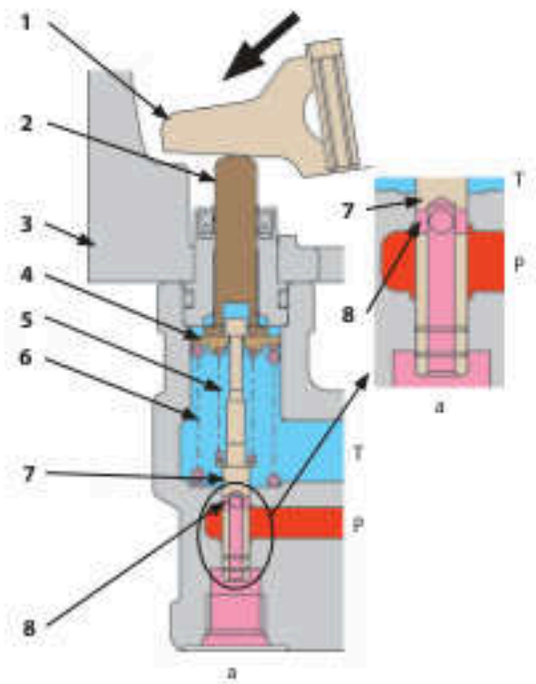


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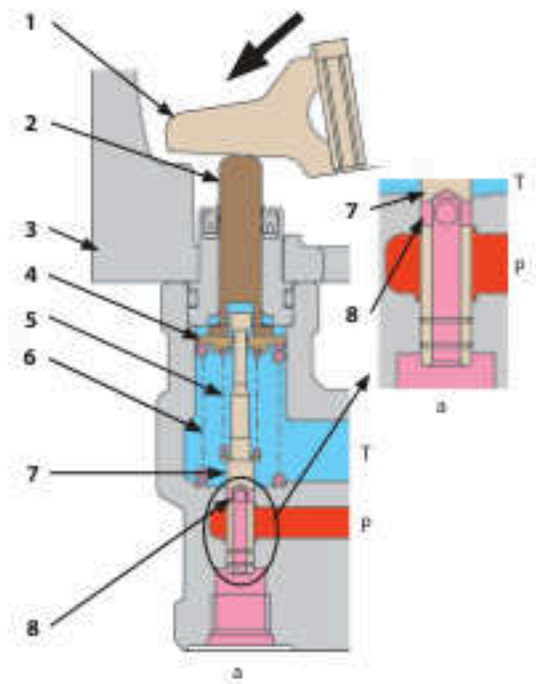


TPPP-03-04-008

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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