PART NO. TAFA-EN-01

HITACHI

Reliable solutions

Technical Manual

ZX
65USB-5A
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual	: Vol. No.TAFA-EN
Workshop Manual	: Vol. No.WAFA-EN
Engine Manual	: Vol. No.ETADB-EN, EWADB-EN

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Group 3 Component Specifications

CYLINDER		Boom	Arm	Bucket
	Rod Diameter	60 mm (2.36")	55 mm (2.17")	50 mm (1.97")
	Cylinder Bore	110 mm (4.33")	90 mm (3.54")	80 mm (3.15")
	Stroke	785 mm (2'6.9")	770 mm (2'6.3")	581 mm (1'10.9")
	Fully Retracted Length	1200 mm (3'11.2")	1197 mm (3'11.1")	908 mm (2'11.7")
	Plating Thickness	30 μm (1.18 μin)	30 μm (1.18 μin)	30 μm (1.18 μin)

CYLINDER		Boom Swing	Blade
	Rod Diameter	55 mm (2.17")	70 mm (2.76")
	Cylinder Bore	95 mm (3.74")	120 mm (4.72")
	Stroke	710 mm (2'4")	135 mm (5.31")
	Fully Retracted Length	1045 mm (3'5.1")	534 mm (1'9")
	Plating Thickness	30 μm (1.18 μin)	30 μm (1.18 μin)

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Fault Code W: 1304

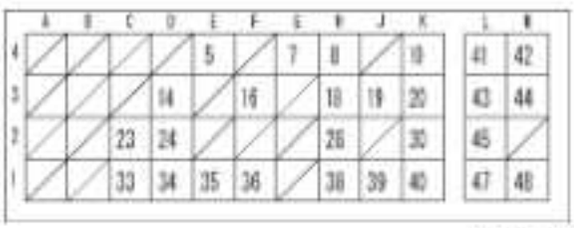
Preparation

- Check the wiring connections first.

Fault Code	Trouble	Inspection Method	Evaluation	Cause
W: 1304	Engine Control Dial Failure (CAN Signal)	Measure resistance between E-ECU#40 and terminal M1-20 in monitor controller.	0/∞ Ω	Faulty CAN (High side) harness between E-ECU and monitor controller
		Measure resistance between E-ECU#39 and monitor controller terminal M1-21.	0/∞ Ω	Faulty CAN (Low side) harness between E-ECU and monitor controller
		-	The check mentioned above is normal.	Faulty monitor controller

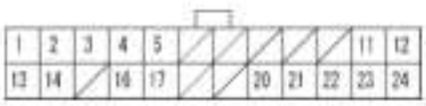
Connector (Harness end)

- E-ECU



TADB-05-03-001

- Monitor Controller M1



TADB-05-03-002

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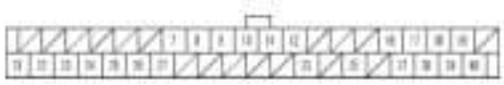
Air vent cannot be shifted.

- Check the wiring connections first.

Procedure	Inspection Method	Condition	Evaluation	Cause (check point)
1	Check if any foreign substance prevents operation of air vent damper servo motor.	-	There is abnormality.	Foreign substance or failure of parts prevents operation.
2	Check continuity in harness between air vent damper servo motor #1 and control panel #9.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #1 and control panel #9
3	Check continuity in harness between air vent damper servo motor #2 and control panel #10.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #2 and control panel #10
4	Check continuity in harness between air vent damper servo motor #4 and control panel #17.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #4 and control panel #17
5	Check continuity in harness between air vent damper servo motor #5 and control panel #19.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #5 and control panel #19
6	Check continuity in harness between air vent damper servo motor #6 and control panel #22.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #6 and control panel #22
7	Check continuity in harness between air vent damper servo motor #7 and control panel #25.	-	∞ Ω	Open circuit in harness between air vent damper servo motor #7 and control panel #25
8	-	-	The check mentioned above is normal.	Faulty control panel or faulty air vent damper servo motor

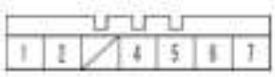
Connector (Harness end)

- Control Panel



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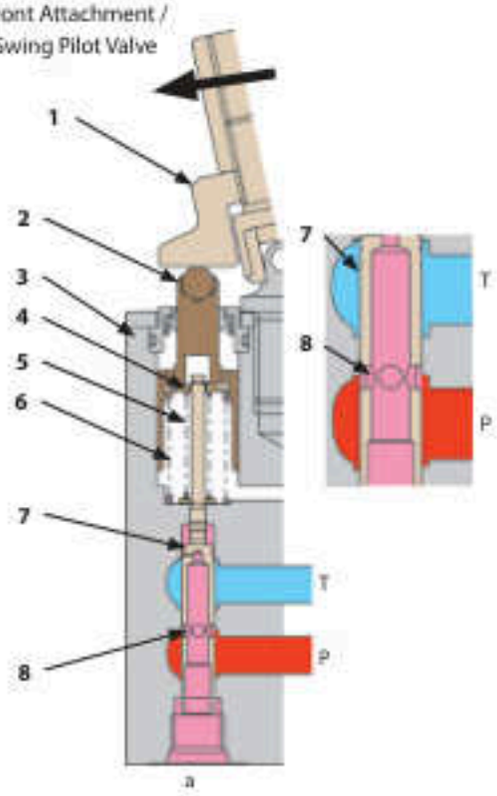
- Air Vent Damper Servo Motor



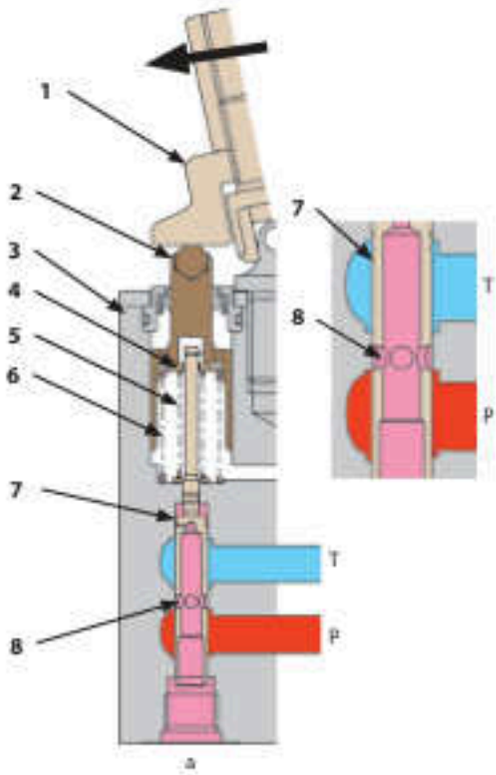
TAFAJ0-05-05-003

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Front Attachment / Swing Pilot Valve

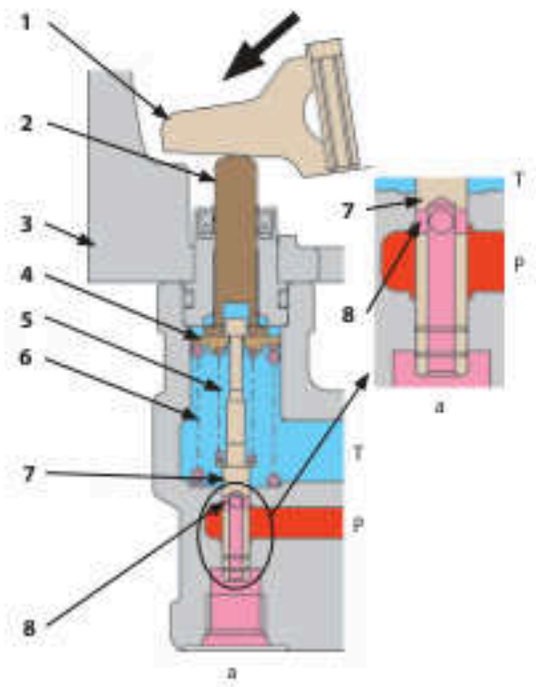


TPPP-03-04-007

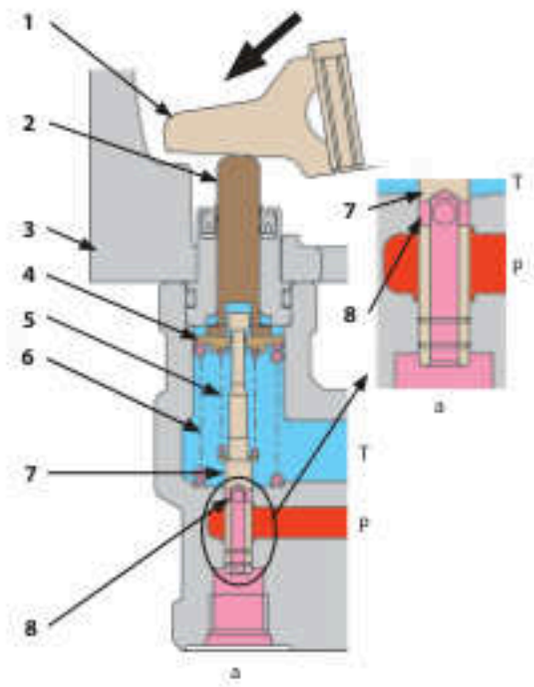


TPPP-03-04-008

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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