PART NO. TAEBJ0-EN-00

HITACHI

Reliable solutions

Technical Manual

ZX55USR-5A

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual	: Vol. No.TAEBJ0-EN
Workshop Manual	: Vol. No.WAEBJ0-EN
Engine Manual	: Vol. No.ETADB-EN, EWADB-EN

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Manual | Publication TAEBJ0-EN-00

Order the manual at mid-west-tech.com >

SECTION 1

GENERAL

CONTENTS

Group 1 Specifications

Std. Specification T1-1-1
Working Ranges T1-1-2

Group 2 Component Layout

Main Component T1-2-1
Electrical System (Overview) T1-2-2
Electrical System (Relays) T1-2-3
Electrical System (Monitor, Switches) T1-2-4
Electrical System (Battery Room) T1-2-5
Engine T1-2-6
Swing Device T1-2-7
Revolution Sensing Valve/Pilot Filter T1-2-7
Travel Device T1-2-7
Control Valve T1-2-8
2-Spool Solenoid Valve T1-2-8

Group 3 Component Specifications

Engine T1-3-1
Engine Accessories T1-3-5
Hydraulic Component T1-3-6
Electrical Component T1-3-10

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Man... Order the manual at mid-west-tech.com >

Group 3 Component Specifications

CYLINDER		Boom	Arm	Bucket
	Rod Diameter	55 mm (2.17")	50 mm (1.97")	45 mm (1.77")
	Cylinder Bore	95 mm (3.74")	80 mm (3.15")	75 mm (2.95")
	Stroke	699±2.0 mm (2'3.5"±0.08")	731±2.0 mm (2'48"±0.08")	551±2.0 mm (1'9.7"±0.08")
	Fully Retracted Length	1083±2.0 mm (3'6.6"±0.08")	1074±2.0 mm (3'6.3"±0.08")	840±2.0 mm (2'9.1"±0.08")
	Plating Thickness	30 µm (1.18 µin)	30 µm (1.18 µin)	30 µm (1.18 µin)

CYLINDER		Blade
	Rod Diameter	50 mm (1.97")
	Cylinder Bore	105 mm (4.13")
	Stroke	140±2.0 mm (5.51"±0.08")
	Fully Retracted Length	503.5±2.0 mm (1'7.8"±0.08")
	Plating Thickness	30 µm (1.18 µin)

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Man... Order the manual at mid-west-tech.com >

Fault Code List

Fault Code	Trouble	Cause	Symptoms in Machine Operation When Trouble Occurs.	Remedy
W: 2304	Fuel Sensor Failure	Faulty fuel float Faulty fuel float harness	Fuel segment blinks. Correct value of fuel gauge is not displayed.	Replace the fuel sensor. Check the harness.
W: 2207	Coolant Temperature Sensor Failure	Faulty coolant temperature sensor	Coolant temperature gauge segment blinks. Correct value of coolant temperature gauge is not displayed.	Replace the coolant temperature sensor.

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Man... Order the manual at mid-west-tech.com >

Blower motor does not rotate.

- Check the wiring connections first.
- If the blower motor is definitely abnormal, check it first.
- Check the display change of blower switches (I), (II), and (III).
- 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 #3 and #2 and between register #3 and #1.	-	∞ 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



TAEBJ0-05-05-001

- Blower Motor



T1M9-05-03-008

- Blower Motor Relay



TADB-05-04-005

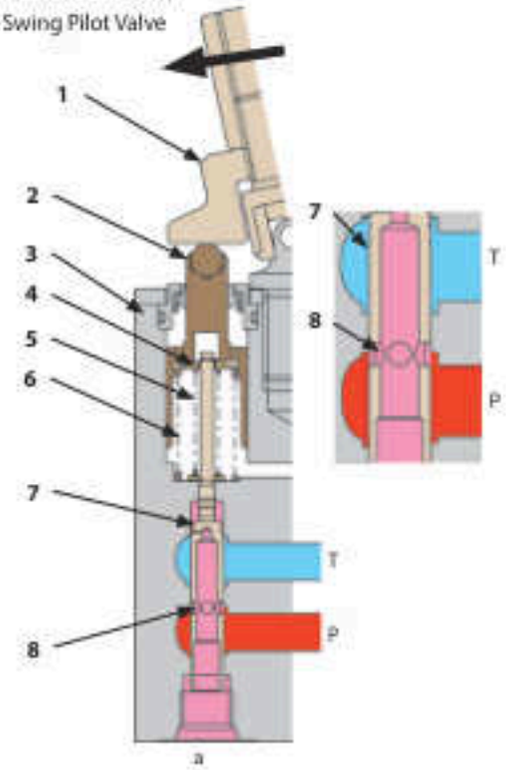
- Register



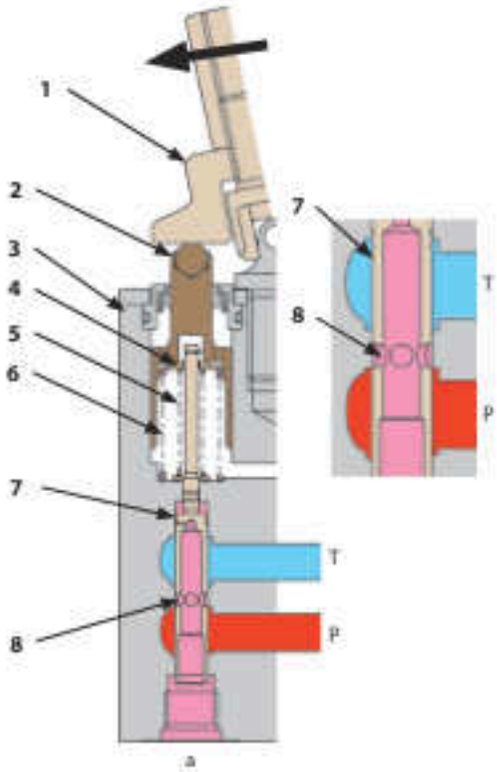
TAEBJ0-05-05-003

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Man... Order the manual at mid-west-tech.com >

Front Attachment / Swing Pilot Valve

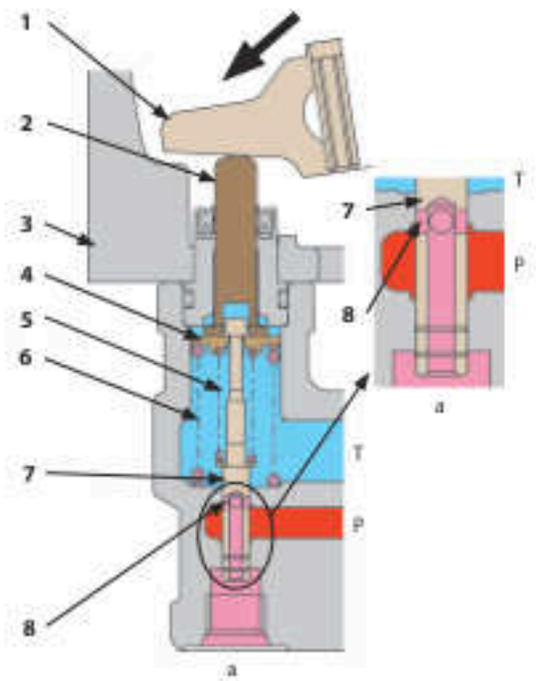


TPPP-03-04-007

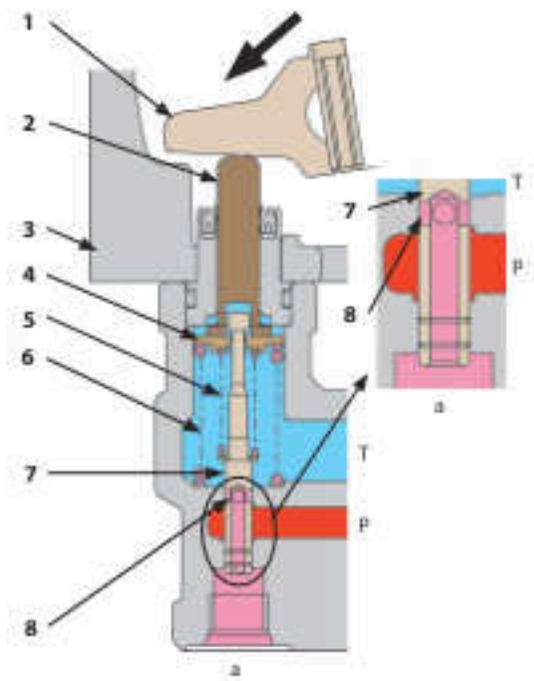


TPPP-03-04-008

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

MidWestTech | Hitachi ZX55USR-5A Excavator Troubleshooting Technical Service Man... Order the manual at mid-west-tech.com >