PART NO. TODEK-EN-00

HITACHI

Reliable solutions

Technical Manual
Operational Principle

ZX80-GI
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODEK-E
Technical Manual (Troubleshooting)	: Vol. No.TTDEK-E
Workshop Manual	: Vol. No.WDEK-E

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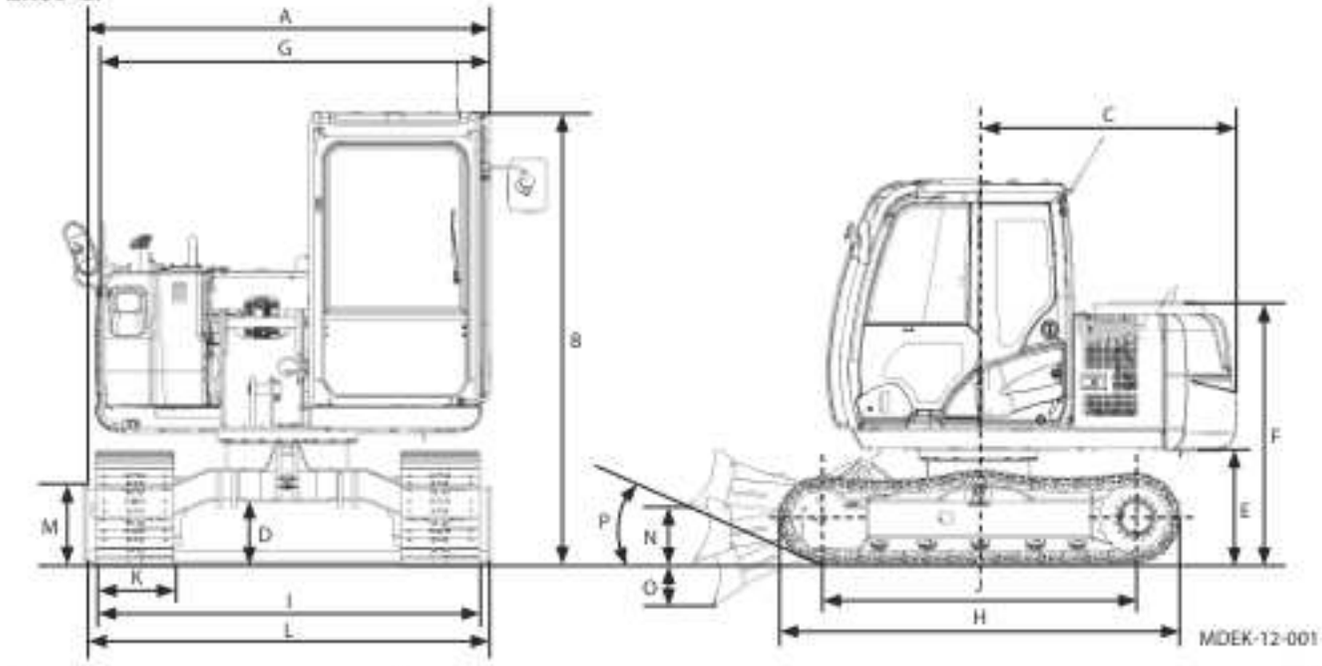
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Specifications

ZX80-GI



Model	ZX80-GI
Front-End Attachment	1.62 m Arm
Standard Bucket Capacity (Heaped)	PCSA 0.30 m^3, CECE 0.26 m^3
Operating Weight	7300 kg
Basic Machine Weight	5650 kg
Engine	MITSUBISHI S4S 40kW/2000 min^{-1} (54 PS/2000 rpm)
A: Overall Width	2260 mm
B: Cab Height	2600 mm
C: Rear End Swing Radius	1750 mm
D: Minimum Ground Clearance	*360 mm
E: Counterweight Clearance	*760 mm
F: Engine Cover Height	*1760 mm
G: Overall Width of Upperstructure	2260 mm
H: Undercarriage Length	2765 mm
I: Undercarriage Width	2150 mm
J: Sprocket Center to Idle Center	2140 mm
K: Track Shoe Width	450 mm (Grouser Shoe)
L: Blade Width	2200 mm
M: Blade Height	435 mm
N: Blade Bottom Highest Position (above ground level)	*400 mm
O: Blade Bottom Lowest Position (above ground level)	*280 mm
P: Maximum Approach Angle	26.2 degree (tan θ=0.49)
Ground Pressure	32 kPa (0.32 kgf/cm^2)
Swing Speed	10.1 min^{-1} (rpm)
Travel Speed	5.0/3.4 km/h
Gradeability	30 degree (58 %)

*NOTE: * The dimensions do not include the height of the shoe lug.*

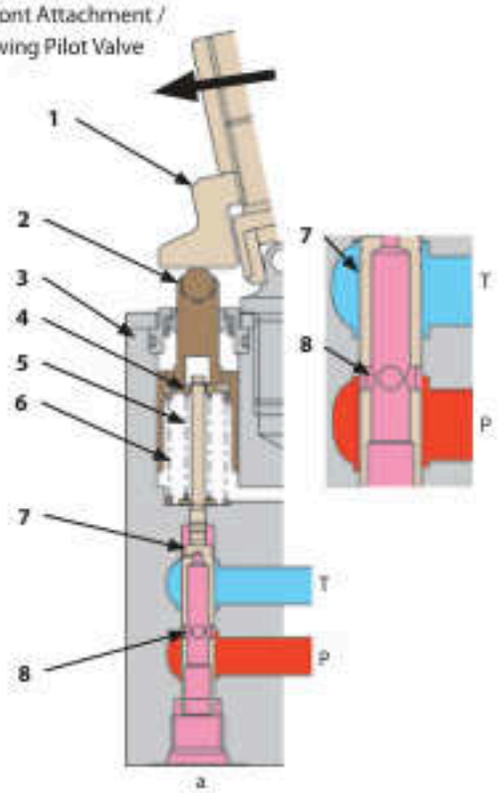
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CAN Circuit

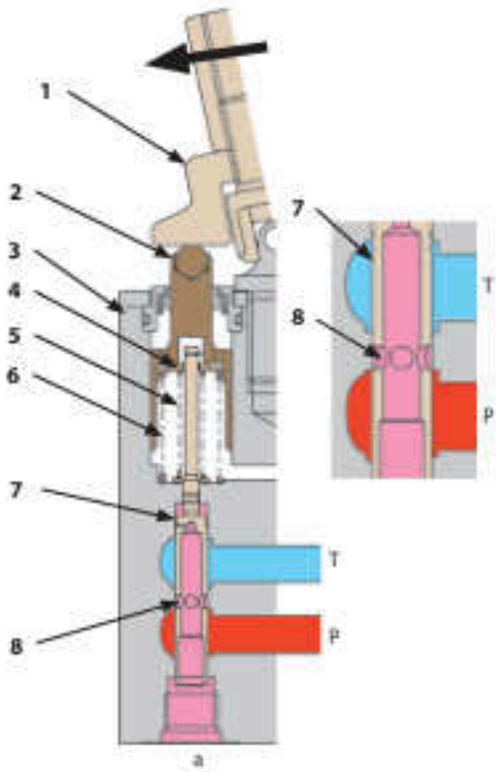
CAN (Controller Area Network) is ISO Standards of the serial communication protocol.
CAN bus (4) consists of two harnesses, CAN-H (High) (2) and CAN-L (Low) (3).
Each controller judges the CAN bus (4) level due to potential difference between CAN-H (High) (2) and CAN-L (Low) (3).
Each controller arranges the CAN bus (4) level and sends the signal and data to other controllers.
In addition, termination resistors (120 Ω) (9) are installed to both ends of CAN bus (4).

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Front Attachment / Swing Pilot Valve

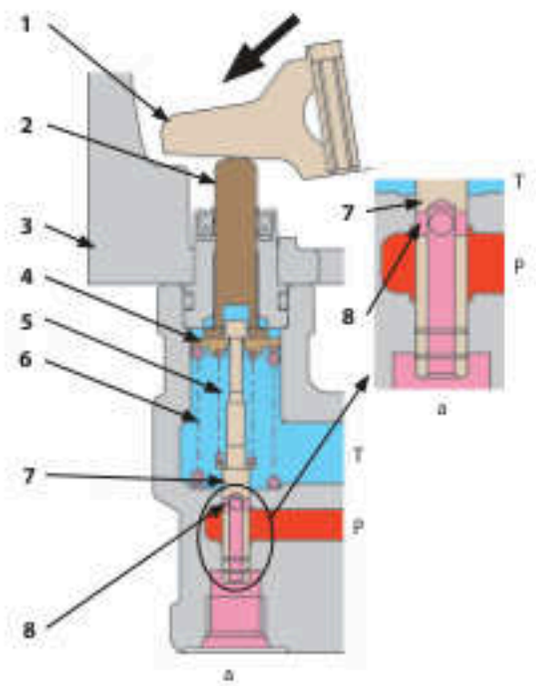


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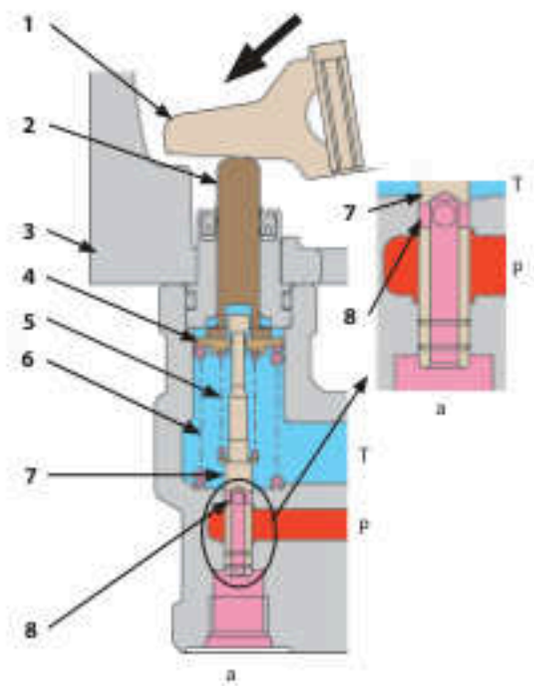


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Travel Pilot Valve



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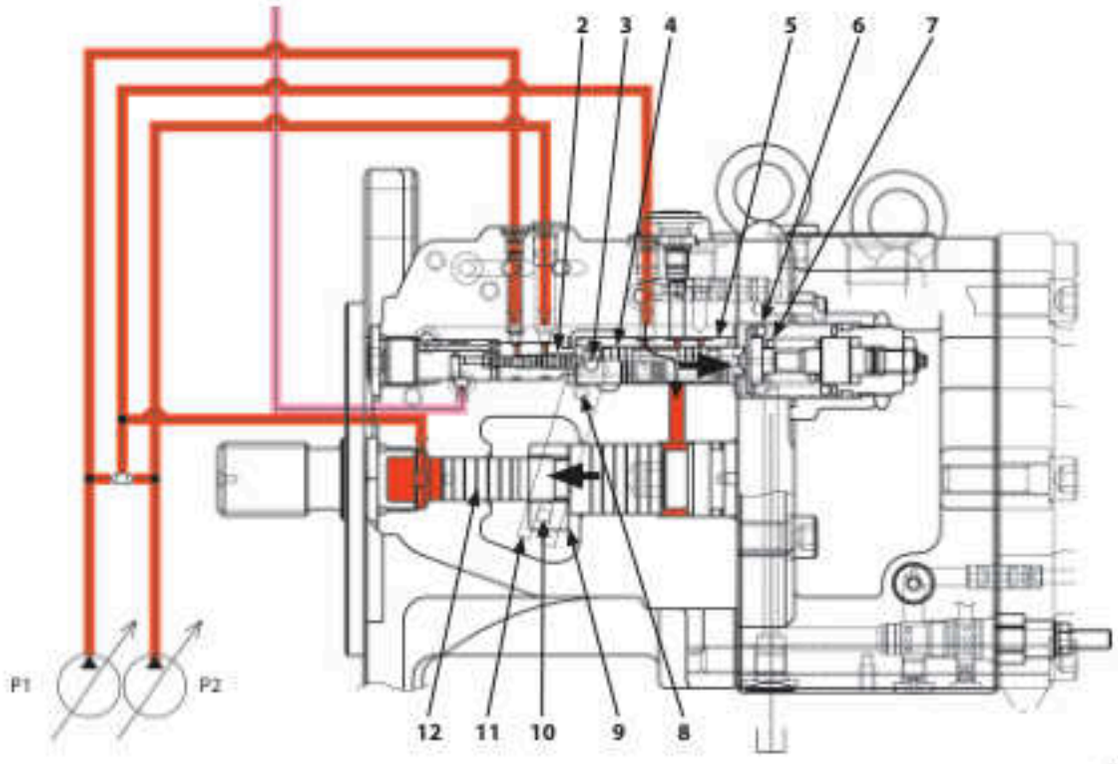


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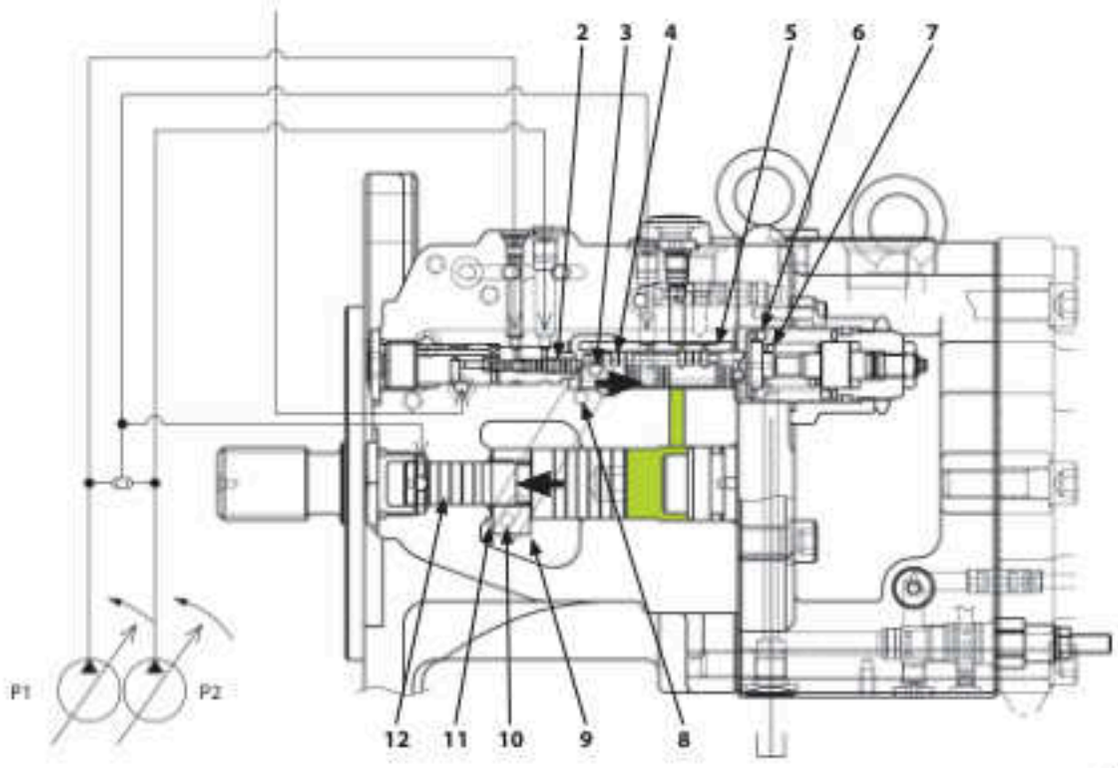
P- Port P
T- Port T
a- Output Port

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

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TDEA-03-01-006



TDEA-03-01-007

P1- Pump 1 Delivery Pressure
P2- Pump 2 Delivery Pressure

2- Compensating Piston
3- Pin
4- Spool
5- Sleeve
6- Outer Spring
7- Inner Spring
8- Pin
9- Tilt Pin
10- Pin
11- Feedback Lever
12- Servo Piston

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