SERVICE MANUAL

E30B
Tier 3
Compact Hydraulic Excavator

PIN NETN31001 and above

Part number S5HW0040E01
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NEW HOLLAND CONSTRUCTION

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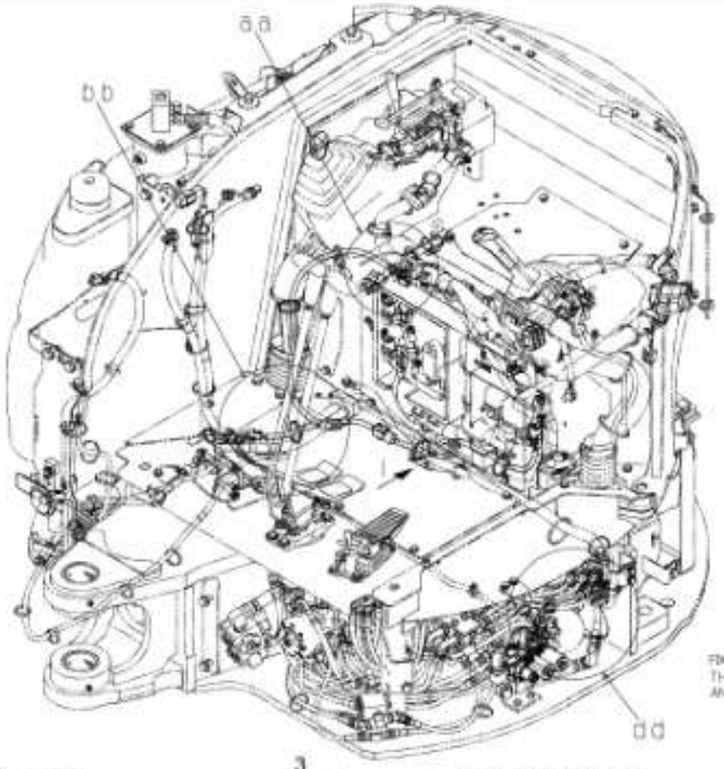
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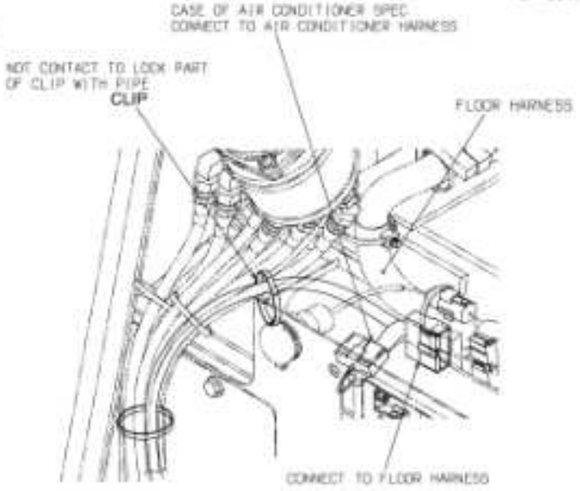
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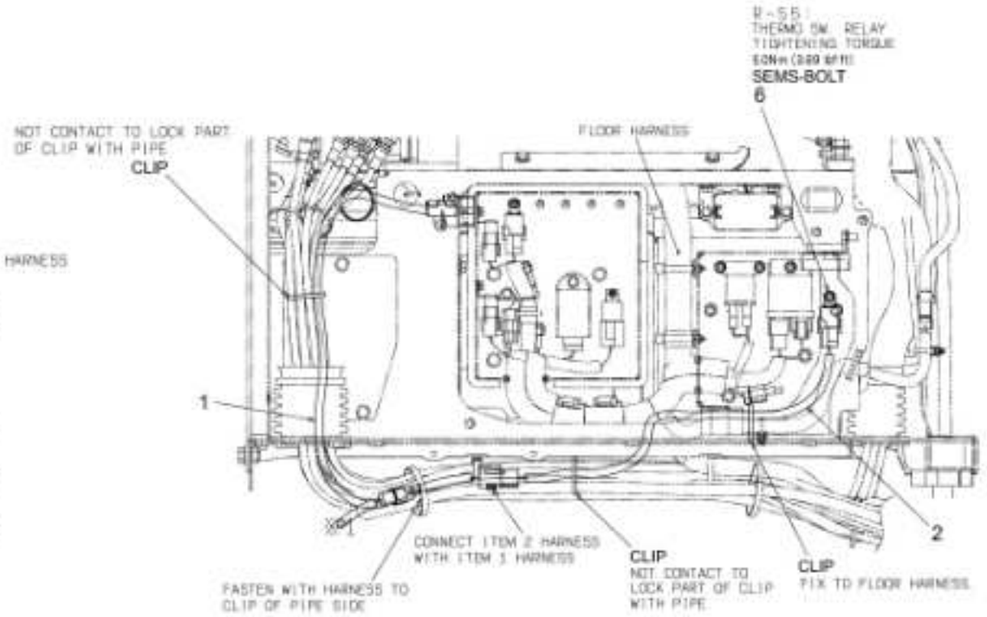
23.3.15 HARNESS ASSY (THERMO SWITCH)

HARNESS ASSY (THERMO SWITCH)		PX11E00030F1	(02)	
ITEM	PART NAME	PARTS No.	QTY	REMARKS
1	HARNESS	PX11E01123P1	1	
2	HARNESS	PX11E01125P1	1	
3	HARNESS	PX11E01126P1	1	
6	RELAY	PA24E01001P1	1	

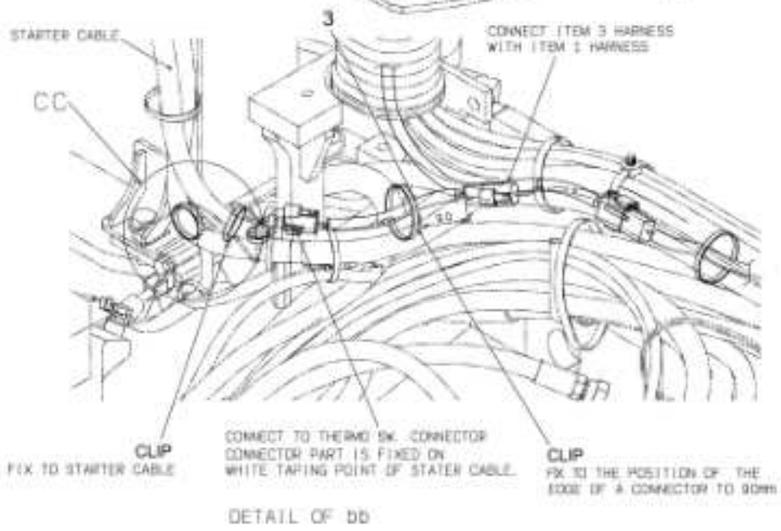




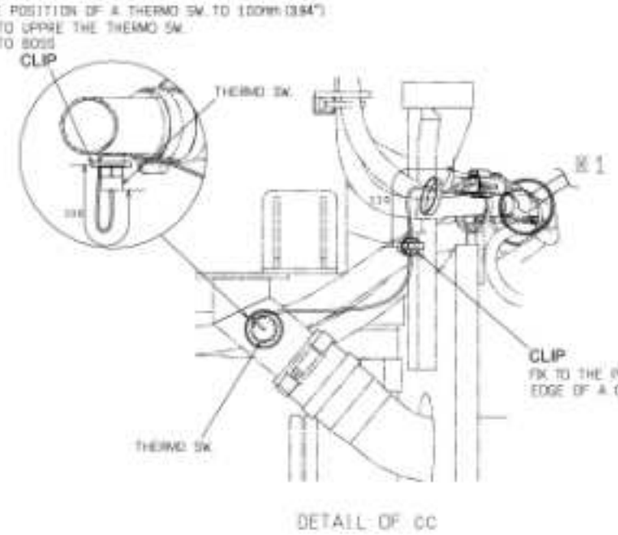
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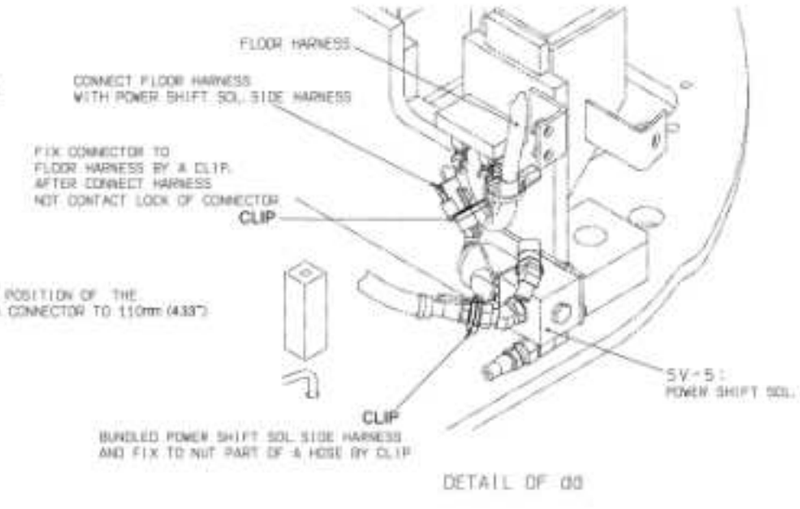
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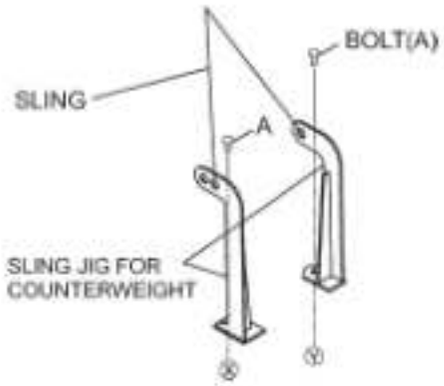
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33.1.6 COUNTERWEIGHT

33.1.6.1 PREPARATION FOR REMOVAL

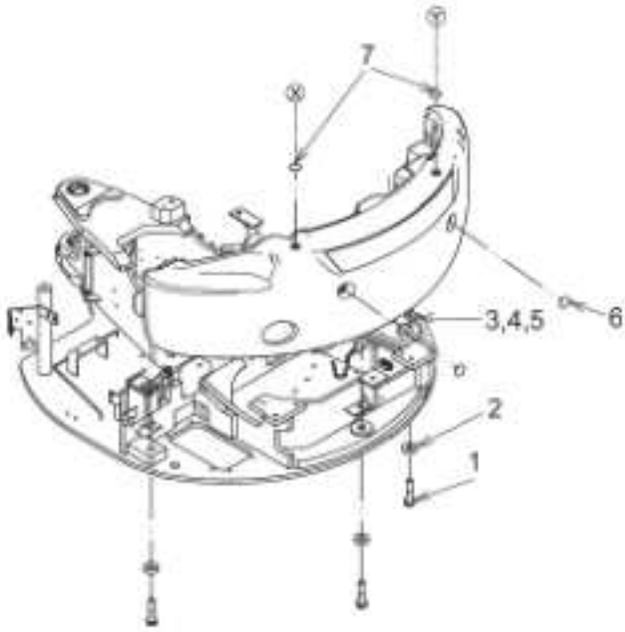
(1) Remove bonnet assembly (B3).
(2) Remove cover assembly (B1).
(See 33.1.3.1)
(3) Preparation of sling jigs
Attach counterweight sling jigs.
· Counterweight sling jig (refer to TOOLS)
· Bolt (A) M20, 2 pieces
· Wire rope



Lifting counterweight

33.1.6.2 REMOVAL

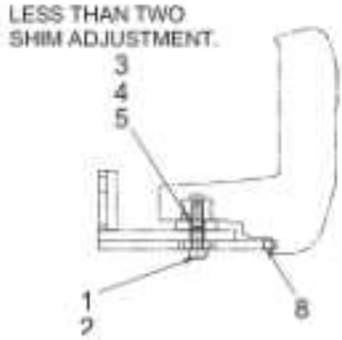
(1) Temporary lifting of counterweight
Attach a wire rope and temporarily lift the counterweight to the degree that the wire rope is not slacked.
Counterweight mass: Approximately 325kg (717 lbs)
Wire of 6 diameter or more: 1.5m x 2
(2) Removing counterweight
1.
Remove three bolts (1) M20 x 90.
Tools: Socket: 30mm
2.
Remove shims (3), (4) and (5). (selection)
3.
Remove counterweight (C1).



Removal/installation of counterweight

33.1.6.3 INSTALLATION

(1) Install the counterweight in the reverse procedures of removal.
(2) Reattach shims (3), (4) and (5).
(3) Apply Loctite #262 to bolt (1) and tighten it with washer (2).
Tools: Socket: 30mm
Tightening torque: 373 N-m (275 lbf-ft)
(4) Remove the sling jig and attach plate (7).



In stalling counterweight and tightening bolt

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Error code	H093		
Description of failure	Fuel sensor, disconnection failure		
Judged by	Input voltage from the fuel sensor is more than or equal to 4.7 V.		
Symptom	The remaining fuel warning is displayed.		
Control at failure	The fuel level set to 0 %.		
Return in normal condition	Returned automatically when in normal condition.		
Confirmation screen for service diagnosis	Screen No.	2	Fuel level
	Screen No.		
	Screen No.		

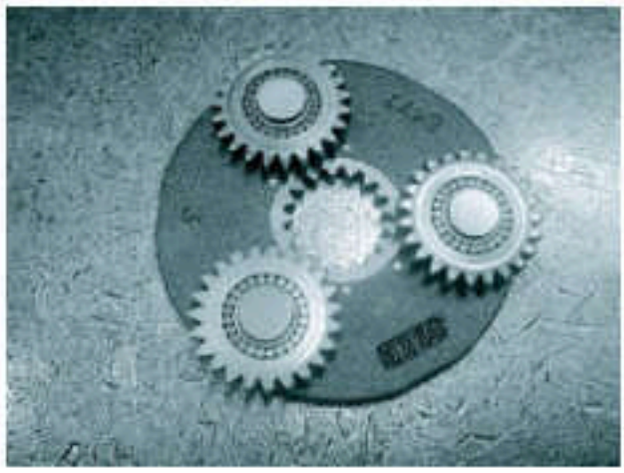
	To be inspected	Inspection and action
1	-Fuel sensor SE-1	Operate the fuel sensor to measure resistance between terminals. EMPTY 90Ω - FULL 10Ω
2	-Wiring between fuel sensor and controller CN-101F CN-500F	Inspect and repair according to wiring check procedure.
3	-Mechatro controller	Replace the controller and check if the failure goes away.

Error code	I111		
Description of failure	CAN1 communication receive failure. (passive error)		
Judged by	Failed in receiving data from the engine controller.		
Symptom	Almost no effect.		
Control at failure	The state is kept at the same state in which the last data was received.		
Return in normal condition	Returned automatically when in normal condition.		
Confirmation screen for service diagnosis	Screen No.		
	Screen No.		
	Screen No.		

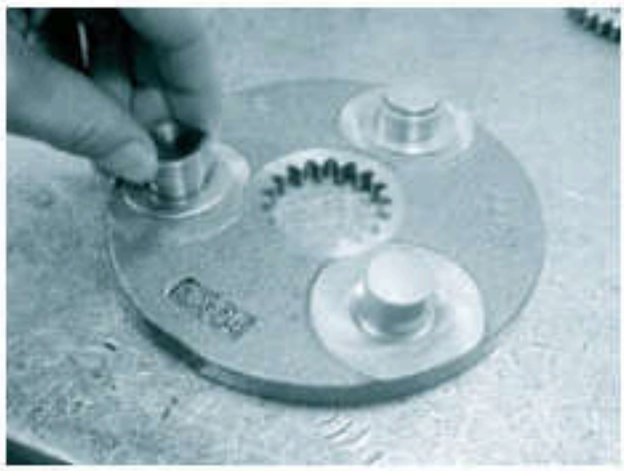
	To be inspected	Inspection and action
1	-Wiring between cluster and controller CN-349F CN-501F	Inspect and repair according to wiring check procedure. (Quasi-disconnection is highly possible.)
2	-Mechatro controller	Replace the controller and check if the failure goes away.

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9. Take out the B2 gears (107) and the needles 2 (112) from the carrier 2 kit.

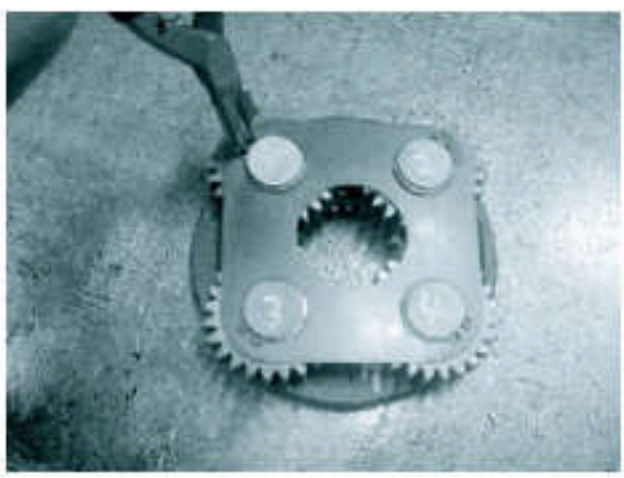


10. Take out the rings 2 (130) and thrust washers 2 (118) from the carrier 2 kit.



11. Take out the thrust plate 1 (115) from the carrier 1 kit.

    Tools: Snap ring plier: 22 dia. For shaft



12. Take out the b1 gears (116) and needles 1 (111) from the carrier 1 kit.



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(5) Color Multi-Display Display Details

The screen for the operator is displayed on the multi-display following the logo mark display, after the key is turned on. The multi-display has the following functions.

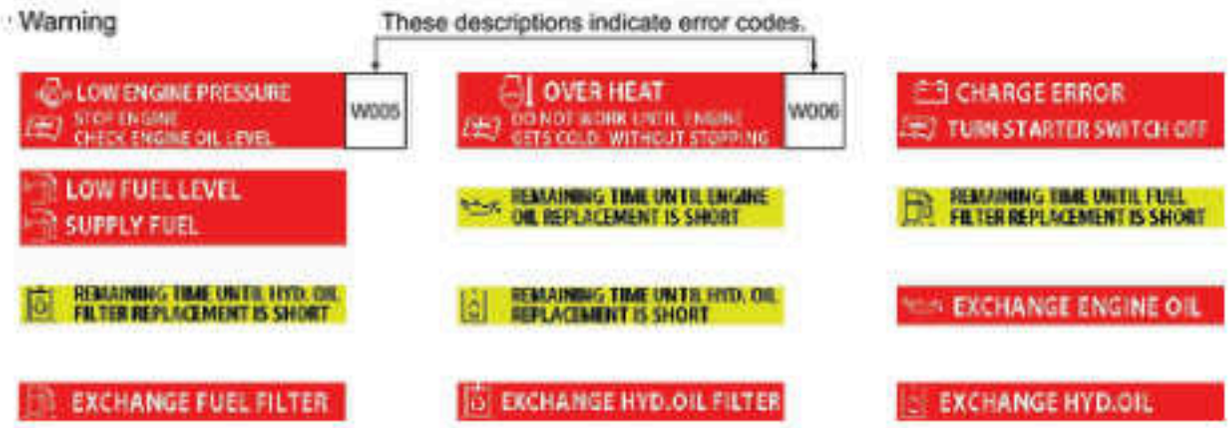


1. Display function for operator·····Normally, this is displayed during operation.

1.1 Time display····Displays the current time.

1.2 Self-diagnosis display·····If a failure is detected in the mechatronic system such as a sensor, the machine status and error code are displayed on the upper part, and the instruction is displayed on the lower part.

1.3 Warning display·····When the machine is in an unsafe condition or a failure occurs, the warning information is displayed with the symbol and text.



Notice

Error codes are stored as a failure history, and are displayed by the failure history display function on the multi-display.

1.4 Shovel status display·····Displays the shovel operating status.

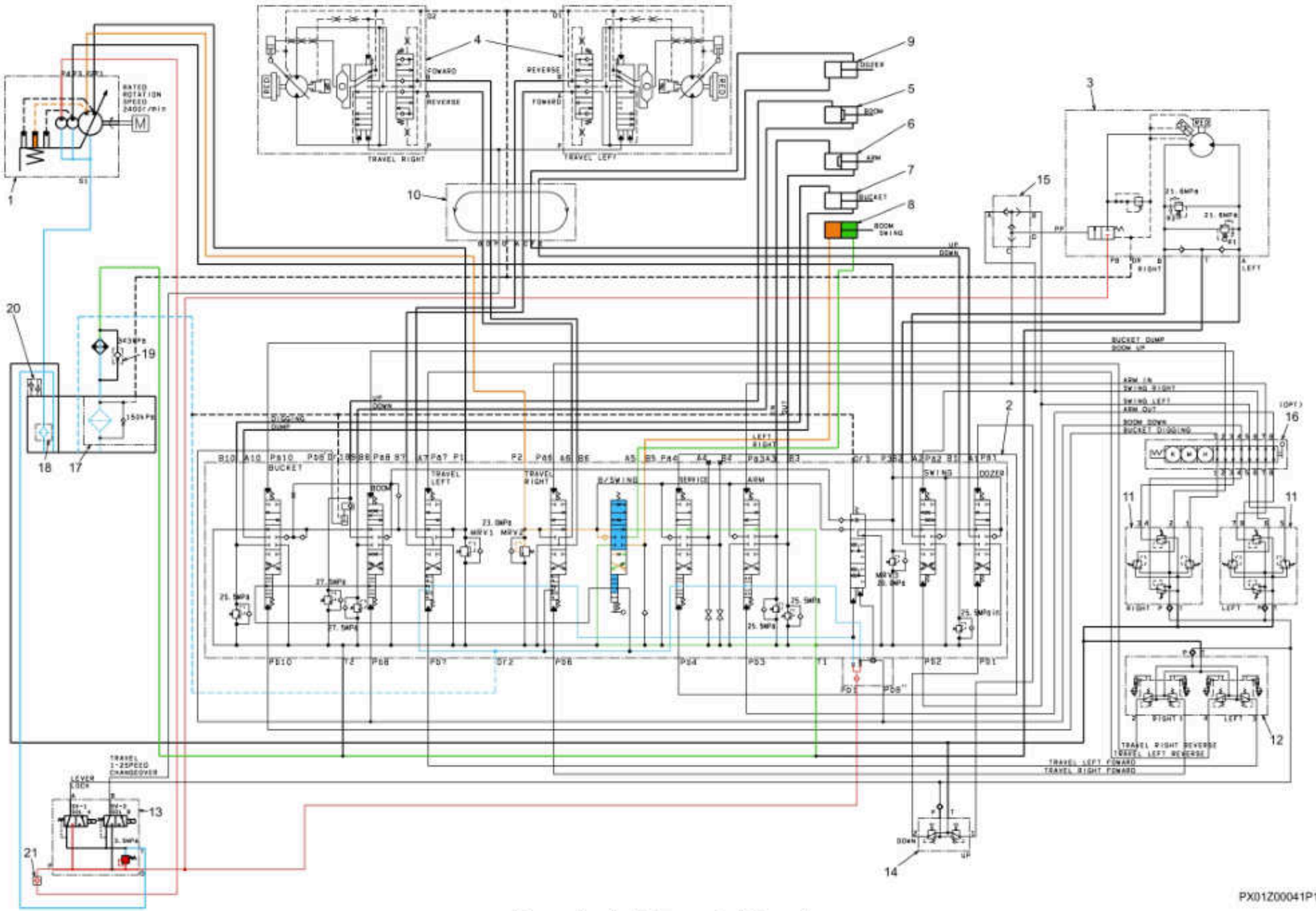
2. Maintenance display function·····The remaining time to the replacement time of the following maintenance items is displayed by pressing the menu switch and selecting "MAINTENANCE" from the user menu.

(1) Engine oil (2) Fuel filter (3) Hydraulic oil filter (4) Hydraulic oil

3. Failure history display·····Displays the stored past failures of mechatro system in the reverse chronological order by operating the starter key switch and buzzer stop switch.

4. Service diagnosis display·····Displays information from the mechatro controller such as a value detected with the pressure sensor by operating the starter key switch and buzzer stop switch.

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PX01Z00041P1 03

Boom swing circuit: Boom swing left operation

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