

PREPARATION WORK FOR TROUBLESHOOTING FOR ELECTRIC SYSTEM

★ When carrying out troubleshooting for an electric circuit related to the monitor panel and governor and pump controller, expose the related connectors according to the following procedure.

1. Monitor panel

1) Remove cover (1)

- ★ The cover is fixed with 2 clips at the top and bottom. Just pull it up to remove it.
- ★ If the daylight sensor of the air conditioner is installed, disconnect connector P15 on the back side of the cover.



2) Remove the 3 mounting screws, and then remove monitor panel (2) from the mount.

- ★ Take care not to drop the mounting screws into the console.

3) Insert or connect testing T-adapters in or to connectors P01 and P02 of the monitor panel.

- ★ Connector P70 clamped near the above connectors is not used.



2. Governor and pump controller

★ The governor and pump controller is installed in the cover at the rear of the operator's seat.

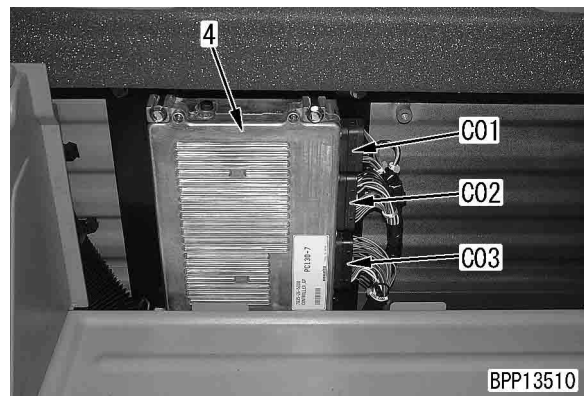
1) Remove the 3 mounting bolts and cover (3).



2) Insert or connect testing T-adapters in or to connectors C01, C02, and C03 of governor and pump controller (4).

- ★ Since the connectors are secured with screws, loosen those screws before disconnecting.
- ★ When connecting the connectors again, tighten their screws to the specified torque.

 Screw: **2.82 Nm {0.288 kgm}**





Pm-Clinic Service

Model	Serial No.	Service meter
PC130-7		h

User's name	Date of inspection	Inspector
	/ /	

Specifications		
Main parts	Attachments	Shoe width
Boom <input type="checkbox"/> Standard <input type="checkbox"/> () Arm <input type="checkbox"/> Standard <input type="checkbox"/> () Bucket <input type="checkbox"/> Standard <input type="checkbox"/> ()	<input type="checkbox"/> 1 att. <input type="checkbox"/> () <input type="checkbox"/> Blade <input type="checkbox"/> () <input type="checkbox"/> 2-piece boom	<input type="checkbox"/> 500 mm <input type="checkbox"/> () <input type="checkbox"/> 600 mm <input type="checkbox"/> 700 mm

Check of oil and coolant levels		
<input type="checkbox"/> Radiator coolant <input type="checkbox"/> Engine oil <input type="checkbox"/> Hydraulic oil	When necessary <input type="checkbox"/> Damper case oil <input type="checkbox"/> Machinery case oil	<input type="checkbox"/> Final drive case oil <input type="checkbox"/> ()
Max. range of engine coolant temperature	Max. range of hydraulic oil temperature	Ambient temperature
(Up) □□□□□□□□□□ (Down)	°C	°C
		Altitude
		m

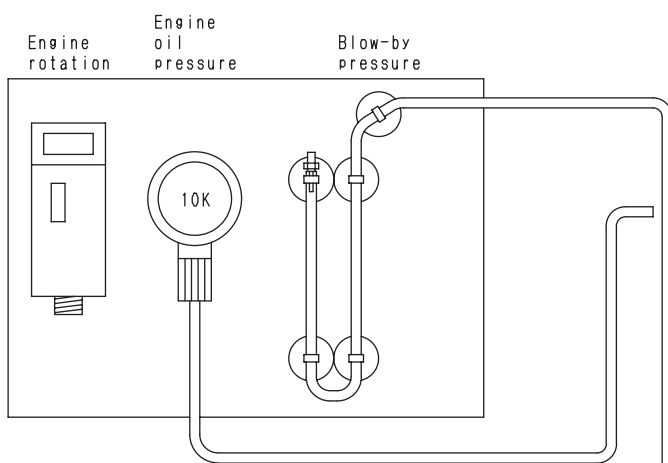
Operator's opinion

Visual inspection result

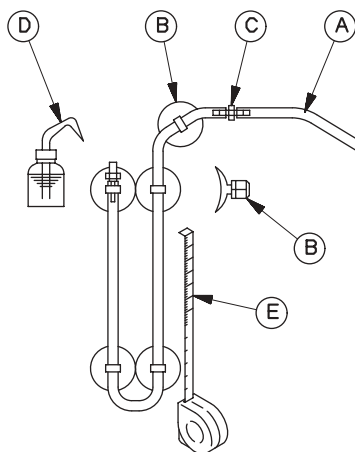
Error code history
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____

Memo

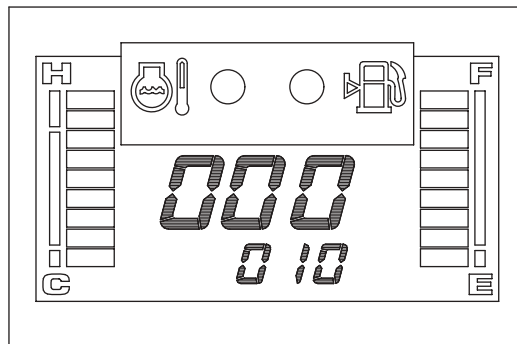
Items related to engine



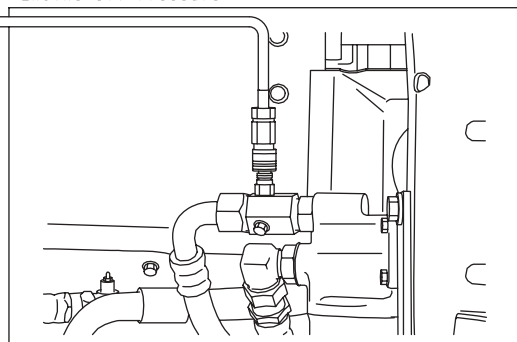
	Part Name	Q'ty
A	Vinyl hose (4m)	1
	Vinyl hose (1m)	1
B	Suction cup	5
C	Joint	2
D	Feeder	1
E	Tape measure	1



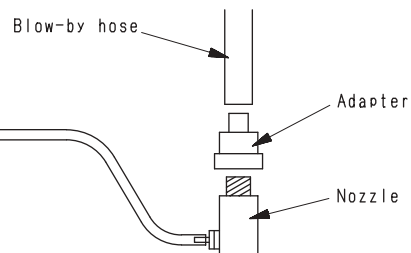
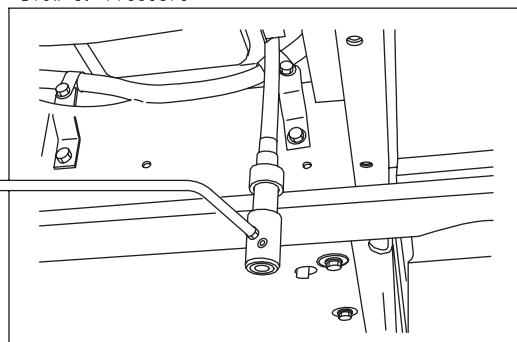
Engine Speed (monitoring: 010)



Engine oil pressure

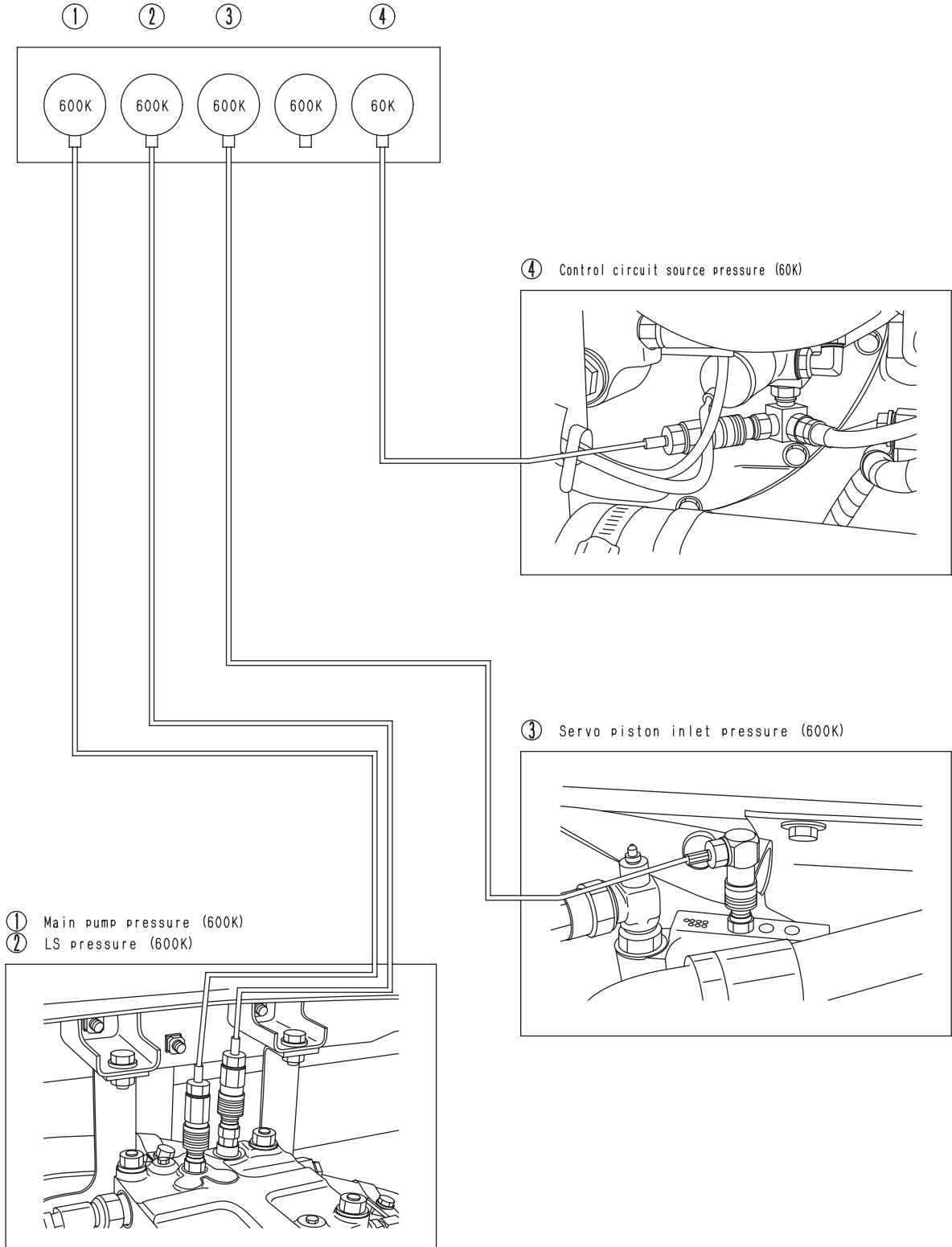


Blow-by pressure



BJP13511

Items related to hydraulic equipment



BJP13512

Model	Serial No.	Service meter	User's name	Date of inspection	Inspector

1. Engine

No.	Condition				Measured item	Unit	Standard value		Measured value	Judgment
	Fuel control dial	Working mode	Auto decelerator	One-touch power max. switch			Standard value for new machine	Service limit value		
1	Full (MAX)	A	OFF	OFF	Engine speed	rpm	2,250 – 2,450	2,250 – 2,450		Good/Bad
2	Full (MAX)	A	OFF	OFF	Engine oil pressure	MPa{kg/cm ² }	0.34–0.54{3.5–5.5}	0.25 {2.5}		Good/Bad
3	Low (MIN)	A	OFF	OFF	Engine speed	rpm	1,050 – 1,150	1,050 – 1,150		Good/Bad
4	Low (MIN)	A	OFF	OFF	Engine oil pressure	MPa{kg/cm ² }	Min. 0.18{Min. 1.8}	0.15 {1.5}		
5	Full (MAX)	A	OFF	ON	Engine speed	rpm	2,080 – 2,280	2,080 – 2,280		
6	Full (MAX)	A	OFF	ON	Blow-by pressure	kPa{mmH ₂ O}	Max. 0.49{Max. 50}	0.98 {100}		
7	Full (MAX)	A	ON	OFF	Engine speed	rpm	1,300 – 1,500	1,300 – 1,500		

2. Work equipment, switch, and travel speed

Hydraulic oil temperature: 45 – 55 °C

No.	Condition		Measured item	Unit	Standard value		Measured value	Judgment
	Fuel control dial	Working mode			Standard value for new machine	Service limit value		
1	Full (MAX)	A	Max. reach, no load	Boom RAISE (*1)	sec	3.3 – 4.1	Max. 4.3	
2	Full (MAX)	A	Boom top on level, no load	Arm OUT (*1)	sec	2.8 – 3.4	Max. 3.7	
3	Full (MAX)	A	Boom top on level, no load	Arm IN (*1)	sec	2.8 – 3.6	Max. 4.4	
4	Full (MAX)	E	Boom top on level, no load	Arm IN (*1)	sec	3.0 – 3.8	Max. 4.6	
5	Full (MAX)	L	Boom top on level, no load	Arm IN (*1)	sec	3.7 – 5.1	Max. 5.4	
6	Full (MAX)	A	Arm top and boom foot on level, no load	Bucket CURL	sec	2.6 – 3.2	Max. 3.7	
7	Full (MAX)	A	Max. reach	Swing (5 turns)	Right	23.8 – 33.4	22.8 – 34.4	
					Left	23.8 – 33.4	22.8 – 34.4	
8	Full (MAX)	A	Push up track shoe 1 side by 1	Travel (5 turns)	Lo	36.9 – 55.3	36.9 – 55.3	
					Left	36.9 – 55.3	36.9 – 55.3	
				Hi	Right	19.7 – 24.1	20.1 – 26.1	
					Left	19.7 – 24.1	20.1 – 26.1	

*1: Until cylinder cushion starts working