KOBELCO

SERVICE MANUAL

HYDRAULIC EXCAVATOR

SK100 V
SK120 V
SK120LC V

Mounting the Breaker and Nibbler & Breaker

Applicable: SK100-2 YW006501~ SK100L-2 LX010101~
Applicable: SK120-2 LP011001~ SK120LC-2 YP002301~

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SK100L-2 SK120LC-2

SK100-2 YW006501~
SK100L-2 LX010101~
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SK120LC-2 YP002301~

SHOP MANUAL

SK100V
SK120V
SK120LCV

LP13

MOUNTING THE BREAKER AND NIBBLER & BREAKER

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(2) When the Breaker is Used

When the breaker is being used, the selector valves (26), (27), (29) are switched to the position shown in Fig. 4.

If the pedal is pressed by the tiptoe, the secondary proportionate pilot pressure coming out of the port (B) of the pilot valve (24) changes over the spool of the control valve (23). At the same time the pressure moves the spool (25-1) of the option valve (25), opens the plunger (25-2), and closes the bypass cut valve (3-1) of the control valve (3).

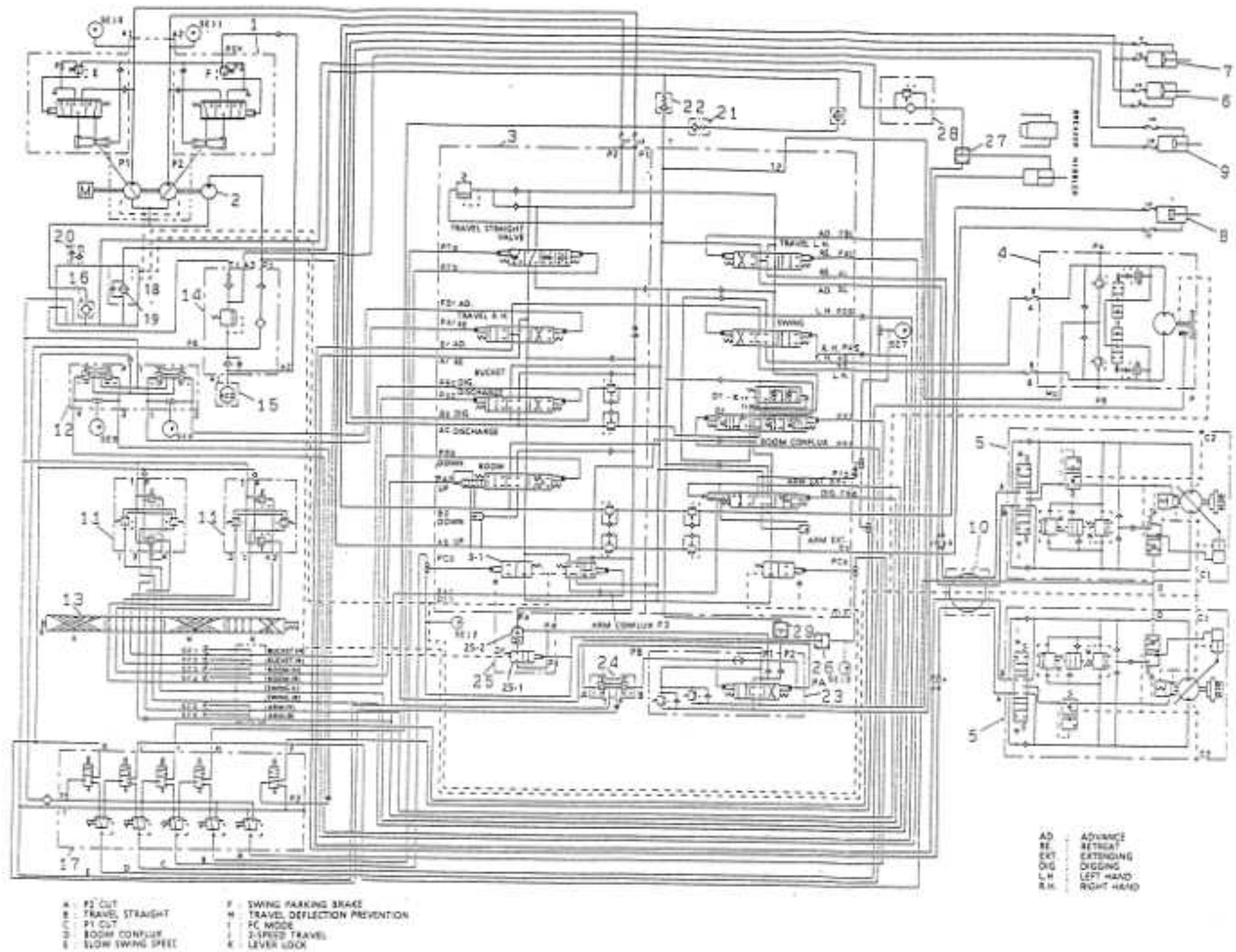
Consequently, the pressure oil discharged by the pump A1 enters port P1 of the control valve (3), passes through the option valve (25), enters port P1 of the control valve (23), and is delivered to the breaker.

The oil which returns from the breaker returns directly to the tank past the line filter (28).

When the breaker and boom raising motions are operated at the same time, part of the secondary proportionate pilot pressure closes the option valve (25). The result is that full flow of the oil discharged by pump P1 is delivered to the boom cylinder and the breaker does not operate.

Meantime, an output voltage signal from the pressure sensor (SE12) is sent to the proportionate valve E of the pump via the controller by which a flow according to pedal action is discharged.

NOTE : ※ mark on the device number represents one used exclusively for the nibbler-attached machines.
☆ mark shows in case of model SK100v.



No.	NAME	TYPE	No.	NAME	TYPE	No.	NAME	TYPE	No.	NAME	TYPE
1	PUMP	K3V63BDT-120R	7	☆BOOM CYLINDER (LH)	CA95X995B36F	13	MULTI CHANGE VALVE	K16ARB-11	21	BY-PASS CHECK	LV08-20
2	GEAR PUMP	KP1009		BOOM CYLINDER (LH)	CA100X1038B38F	14	MANIFOLD BLOCK	TMCD-0398	22	BY-PASS CHECK	LV08-35
3	CONTROL VALVE	KMX13Y / B33001	8	☆ARM CYLINDER	CA110X1120B36F	15	ACCUMULATOR	MU70-300	※23	CONTROL VALVE	KMX19A / 01021
4	☆SWING MOTOR	MFC65-005		ARM CYLINDER	CA115X1150B38F	16	SUCTION STRAINER	Y-429600	※24	OPERATING REMOTE CONTROLLER (N/B)	07037-0000
	SWING MOTOR	MFC65-005A	9	BUCKET CYLINDER	CA95X885B38F	17	PROPORTIONAL VALVE BLOCK	VBY-133A	※25	OPTION VALVE	VBY-108
5	TRAVEL MOTOR	GM17V3	10	SWIVEL JOINT	24100J15939F1	18	RELIEF VALVE	Y-1692	※26	SELECTOR VALVE	
6	☆BOOM CYLINDER (RH)	CA95X995B36F	11	OPERATING REMOTE CONTROLLER	TH40K1154	19	RETURN FILTER	Y-418900	※27	SELECTOR VALVE	
	BOOM CYLINDER (RH)	CA100X1038B38F	12	TRAVELING REMOTE CONTROLLER	06438-00010	20	BREATHER	2446R260F1	※28	LINE FILTER	48227-0000
									※29	SELECTOR VALVE	

Fig. 4 Hydraulic circuit for nibbler & breaker
(In the case of the breaker)

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