KOBELCO

SERVICE MANUAL

HYDRAULIC EXCAVATOR

SK60V

APPLICABLE: LE-17701~

S5LE0006E 09/03

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SK060
SK70
SK60

List of General Section in Manual

Class	Name	Book code No. / Distribution date		
LE01	SPECIFICATION	S5LE0106E 1994－07		
－	OPERATION	S2LE1016E Refer to Operators manual		
LE03	EQUIPMENT LAYOUT AND WEIGHT	S5LE0306E 1994－07		
LE04	MAINTENANCE STANDARDS AND TEST PROCEDURES	S5LE0407E 1994－07		
－	PREVENTIVE MAINTENANCE	S2LE1016E Refer to Operators manual		
LE07	WORK STANDARD	S5LE0703E 1994－07		
LE08	STANDARD FLAT RATE TABLE	S5LE0803E 1994－07		
	Applicable Machine	LE－17701～		

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SHOP MANUAL model SK60V

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1. SPECIFICATION LE01
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7. WORK STANDARD LE07
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- How to index sections in this manual
  The general section in this manual is composed of 7 chapters as shown above, and every chapter can be indexed easily using the marks on the edge. This is useful for rapid reference.



⚠ WARNING

The proper and safe lubrication and maintenance for this machine, recommended by KOBELCO are outlined in the OPERATORS MANUAL for this machine.
Improper performance of lubrication or maintenance procedures is dangerous and could result in injury or death. Read and understand the OPERATORS MANUAL before performing any lubrication or maintenance.

⚠ WARNING

Do not operate this machine unless you have read and understand the instructions in the OPERATORS MANUAL. Improper machine operation is dangerous and could result in injury or death.

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GENERAL

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3.8 Arm Operation Circuit

Arm operation circuit has the following functions.

Swing parking brake releasing at digging

Return oil recirculation on cylinder R side at light load digging

Arm natural drop prevention

3.8.1 Light Load Operation Circuit for Arm in Operation

(1) Pilot circuit

1) Left operating pilot valve (10)

Arm in operation delivers the proportional secondary pressure PA3.

The pressure PA3 is exerted on the shuttle valve (14).

2) Shuttle valve (14)

The proportional secondary pressure branched into two ways from the shuttle valve is exerted on the reducing valve (501) and control valve (3).

3) Reducing valve (501)

The oil selected at high pressure in the proportional secondary pressure flows to SH port, and switches valve. The pilot primary pressure from solenoid valve (12), which reaches to PG port, is exerted on release cylinder of swing parking brake to release the brake.

4) Control valve (3)

The proportional secondary pressure PA3 discharged from the shuttle valve (14) switches the spool of arm valve. And the pilot primary pressure discharged from solenoid valve (12) goes to PO port, and releases main circuit lock through lock valve (411).

(2) Main circuit

1) Supply circuit to cylinder

The oil discharged from P1 port of the variable delivery pump (1) flows to the control valve (3) P2U port, is discharged from B6 port through arm cylinder (7) H side, and operates arm in.

2) Return circuit for cylinder

The return oil from the arm cylinder R side flows to the control valve A6 port, and returns to the tank through the lock valve (411) and arm valve.

The throttling effect of arm valve raises the pressure of the return oil discharged from arm cylinder (7), and a part of the pressure pushes and opens check valve leading to the supply circuit, and recirculates to use.

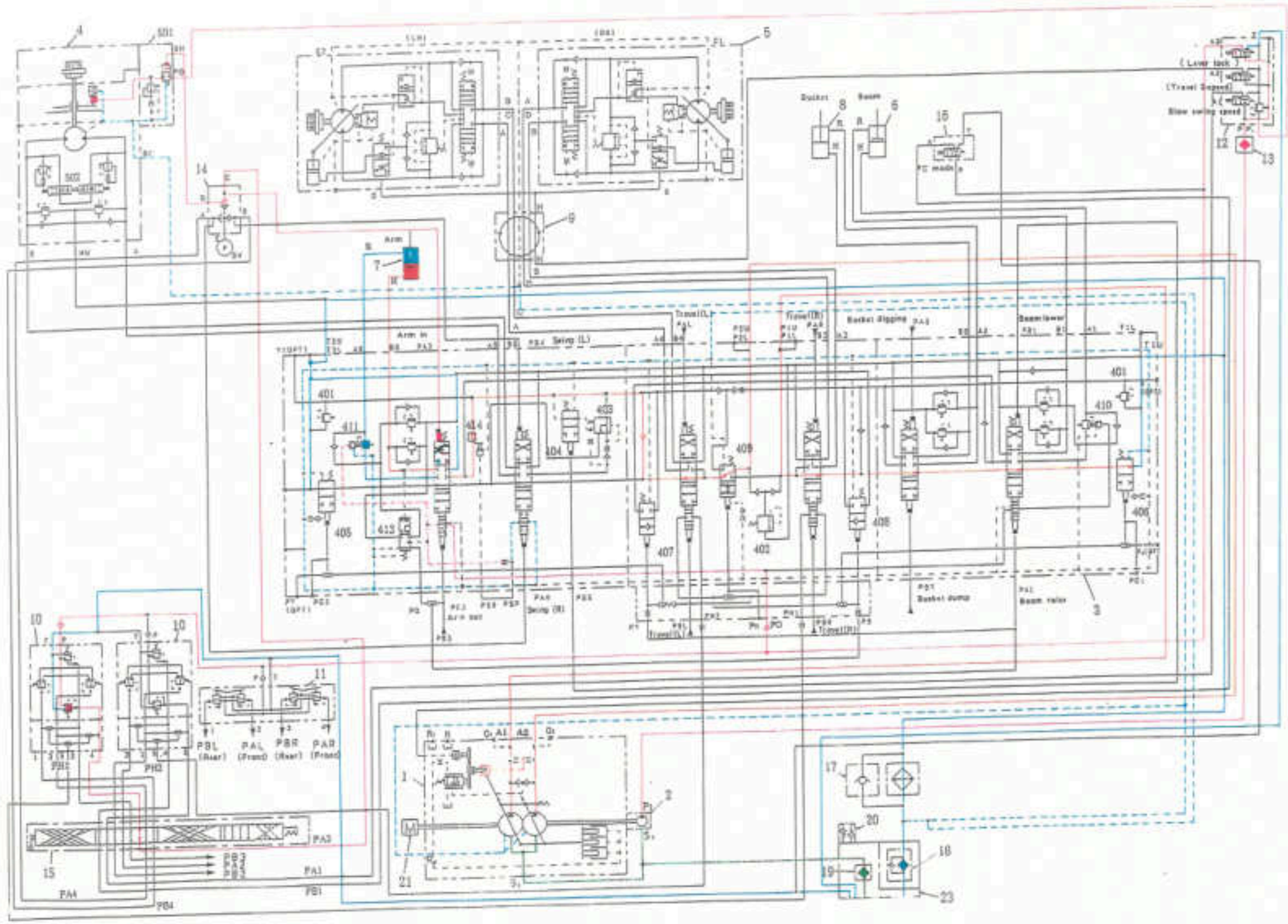


Fig. 7 Light load operation circuit for arm in

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