KOBELCO

SERVICE MANUAL

HYDRAULIC EXCAVATOR

SK230(LC)-6E

SK250(LC)-6E(S)

SK250NLC-6ES

S5LQ0013E

APPLICABLE:
LQ11-05201~
LL11-04001~

Issued: November, 2004

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Excavator Service Manual | Publication S5LQ0013E_gb

Order the manual at mid-west-tech.com >

KOBELCO

Book Code No. S5LQ0213E

SHOP MANUAL

SK230(LC)-6E
SK250(LC)-6E(S)
SK250NLC-6ES

LQ02

SPECIFICATIONS

TABLE OF CONTENTS

1. NAME OF COMPONENTS 1-1
2. GENERAL DIMENSIONS 1-2
3. WEIGHT OF COMPONENTS 1-4
4. TRANSPORTATION 1-5
5. SPECIFICATIONS & PERFORMANCE 1-8
6. TYPE OF CRAWLER 1-9
7. TYPE OF BUCKET 1-10
8. COMBINATIONS OF ATTACHMENT 1-10
9. ENGINE SPECIFICATIONS 1-11

KOBELCO CONSTRUCTION MACHINERY CO., LTD.

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Ex... Order the manual at mid-west-tech.com >

KOBELCO

Book Code No. S5LQ0313E

SHOP MANUAL

SK230(LC)-6E
SK250(LC)-6E(S)
SK250NLC-6ES

LQ03

ATTACHMENT DIMENSIONS

TABLE OF CONTENTS

1. BOOM
   - 1.1 Boom dimensional drawing 1-1
   - 1.2 Boom maintenance standard 1-2
2. ARM
   - 2.1 Arm dimensional drawing 1-4
   - 2.2 Arm maintenance standard 1-5
3. BUCKET
   - 3.1 Bucket dimensional drawing 1-7
   - 3.2 Bucket dimensional table 1-7
   - 3.3 Detail dimensional drawing of lug section 1-8
   - 3.4 Detail dimensional drawing of boss section 1-9

KOBELCO CONSTRUCTION MACHINERY CO., LTD.

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Ex... Order the manual at mid-west-tech.com >

KOBELCO

Book Code No. S5LQ1113E

SHOP MANUAL

SK230(LC)-6E
SK250(LC)-6E(S)
SK250NLC-6ES

LQ11

TOOLS

TABLE OF CONTENTS

1. TIGHTENING TORQUES FOR CAPSCREWS AND NUTS 1-1
2. SCREW SIZE 1-2
3. TIGHTENING TORQUES FOR NUTS AND SLEEVES 1-3
4. PLUG 1-4
5. SPECIAL SPANNER FOR TUBE 1-7
6. SPECIAL TOOLS 1-8
7. APPLICATION OF SCREW LOCKING COMPOUND AND SEALING COMPOUND 1-10
8. SUCTION STOPPER 1-11
9. COUNTER WEIGHT LIFTING JIG 1-12
10. UPPER FRAME LIFTING JIG 1-13
11. ENGINE MOUNTING PEDESTAL 1-14
12. TRACK SPRING SET JIG 1-14

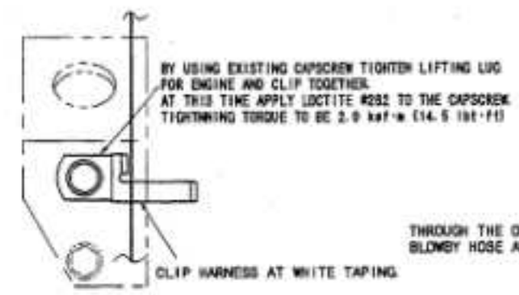
KOBELCO CONSTRUCTION MACHINERY CO., LTD.

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Ex... Order the manual at mid-west-tech.com >

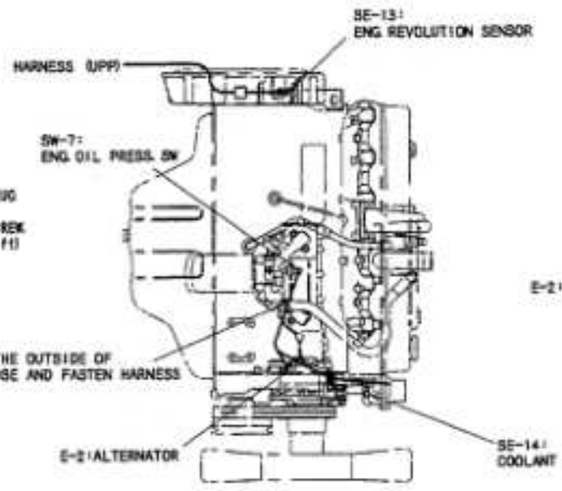
3.8 ENGINE HARNESS ASSY

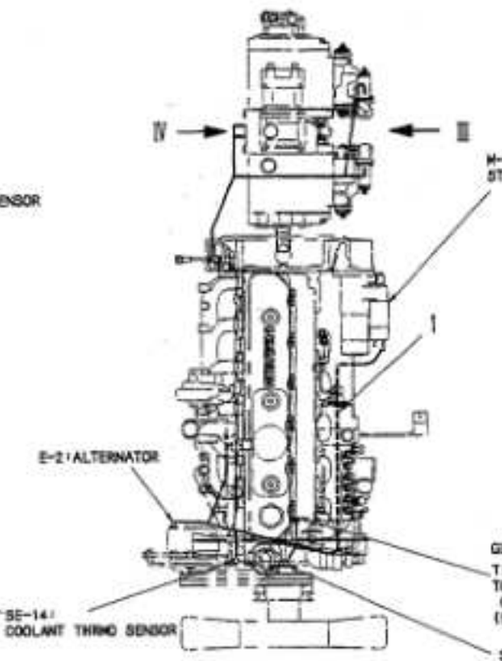
ENGINE HARNESS ASSY		LQ16E00008F1		
Item	Part Name	Part No.	Q'ty	Remarks
1	HARNESS	YN16E01021P1	1	

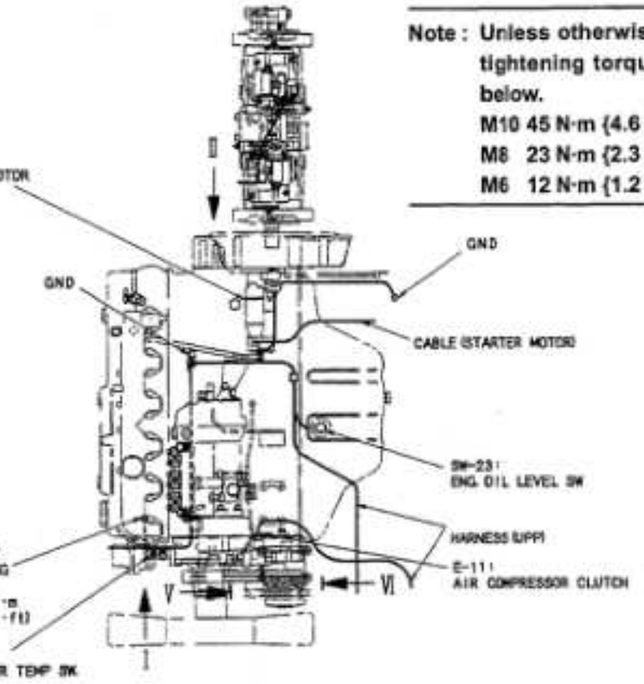
Note : Unless otherwise specified tightening torque is shown below.
M10 45 N·m {4.6 kgf·m}
M8 23 N·m {2.3 kgf·m}
M6 12 N·m {1.2 kgf·m}

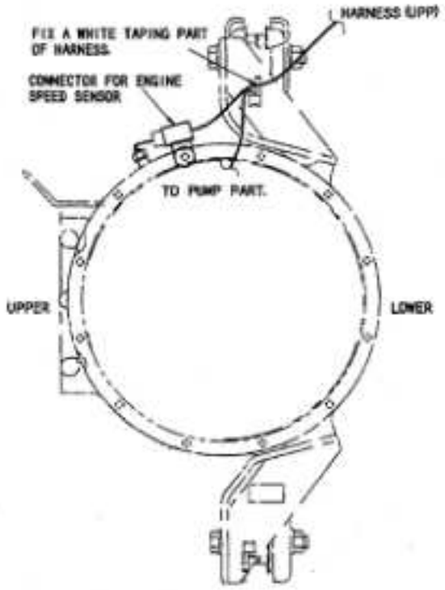


VIEW I
(DETAIL OF LIFTING LUG FOR ENGINE)

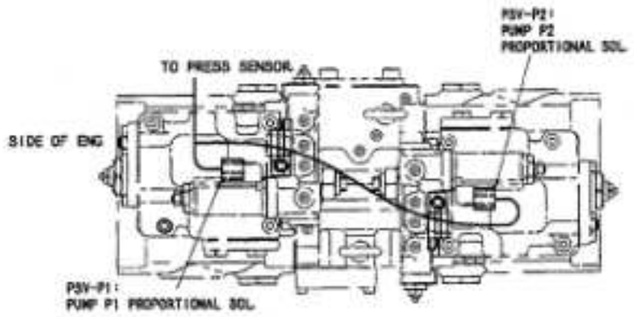




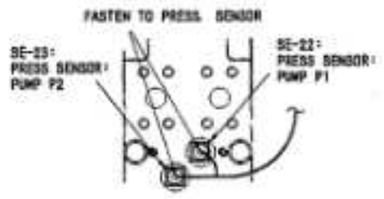




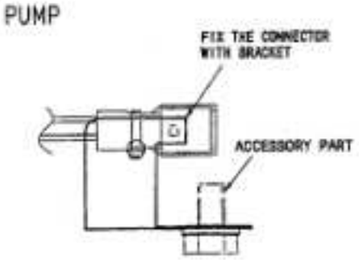
VIEW II



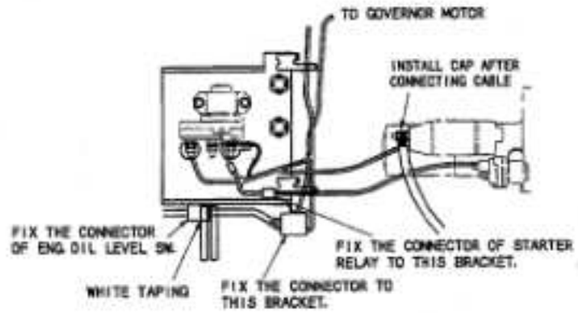
VIEW III
DETAIL OF PUMP



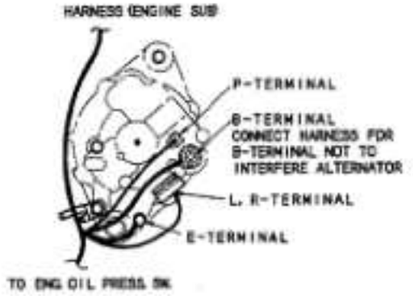
VIEW IV



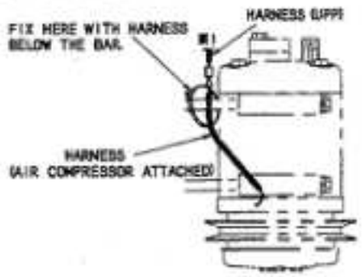
DETAIL OF ENG. SPEED SENSOR CONNECTOR



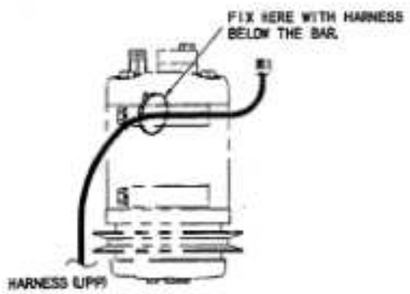
DETAIL OF GLOW RELAY AND STARTER MOTOR



DETAIL OF ALTERNATOR



VIEW V

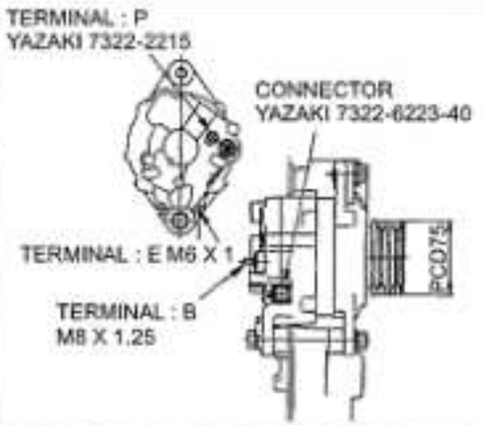
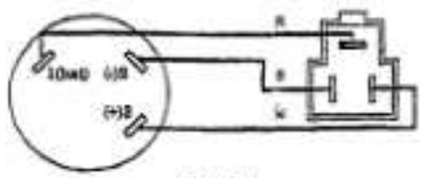
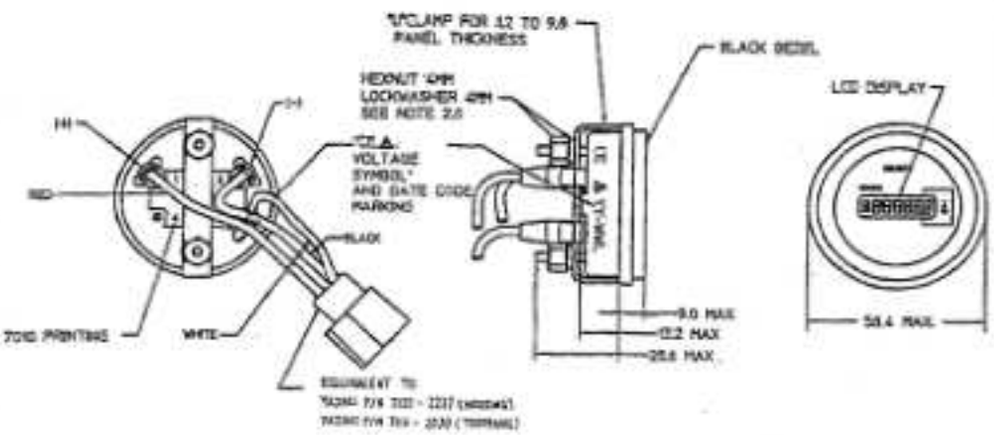


VIEW VI

DETAIL OF AIR COMPRESSOR

Fig. 17 Engine harness assy

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Excavator Service Manual | Publication S5LQ0013E_gb
Order the manual at mid-west-tech.com >

Code No. Parts Name Parts No. Use Applicable Machine	Specifications	Description
E-1 Battery 2484U173 ASIA 2484U175 KCMA Power LQ09-04801~ LL09-03501~ LQ10-04915~ LL10-03666~ LQ11-05201~ LL10-04001~	Type: 115F51-N120 Voltage: 12V Capacity (Ah) 5HR: 96Ah Capacity (Ah) 20HR: 120Ah Weight: 32kg (71 lbs) Type: 170F51 N250-12 Voltage: 12V Capacity (Ah) 5HR: 120Ah Capacity (Ah) 20HR: 150Ah Weight: 37kg (82 lbs)	 502L X 180W X 255H
E-2 Alternator ME017614 Generator LQ11-05201~ LL11-04001~	Type: 3-phase AC method Voltage: 24V Output: 35A(900W) Drive: A-Belt drive by pulley	 TERMINAL : P YAZAKI 7322-2215 CONNECTOR YAZAKI 7322-6223-40 TERMINAL : E M6 X 1 TERMINAL : B M8 X 1.25
E-3 Hour meter YN58S00006P1 Service meter LQ09-04801~ LL09-03501~ LQ10-04915~ LL10-03666~ LQ11-05201~ LL11-04001~	Maker: Curtis Instruments Type: 701QN	 DIAGRAM 

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Ex... Order the manual at mid-west-tech.com >

KOBELCO

Book Code No. S5LQ4113E

SHOP MANUAL SK230(LC)-6E SK250(LC)-6E(S) SK250NLC-6ES

TROUBLESHOOTING
(MECHATRO CONTROL)

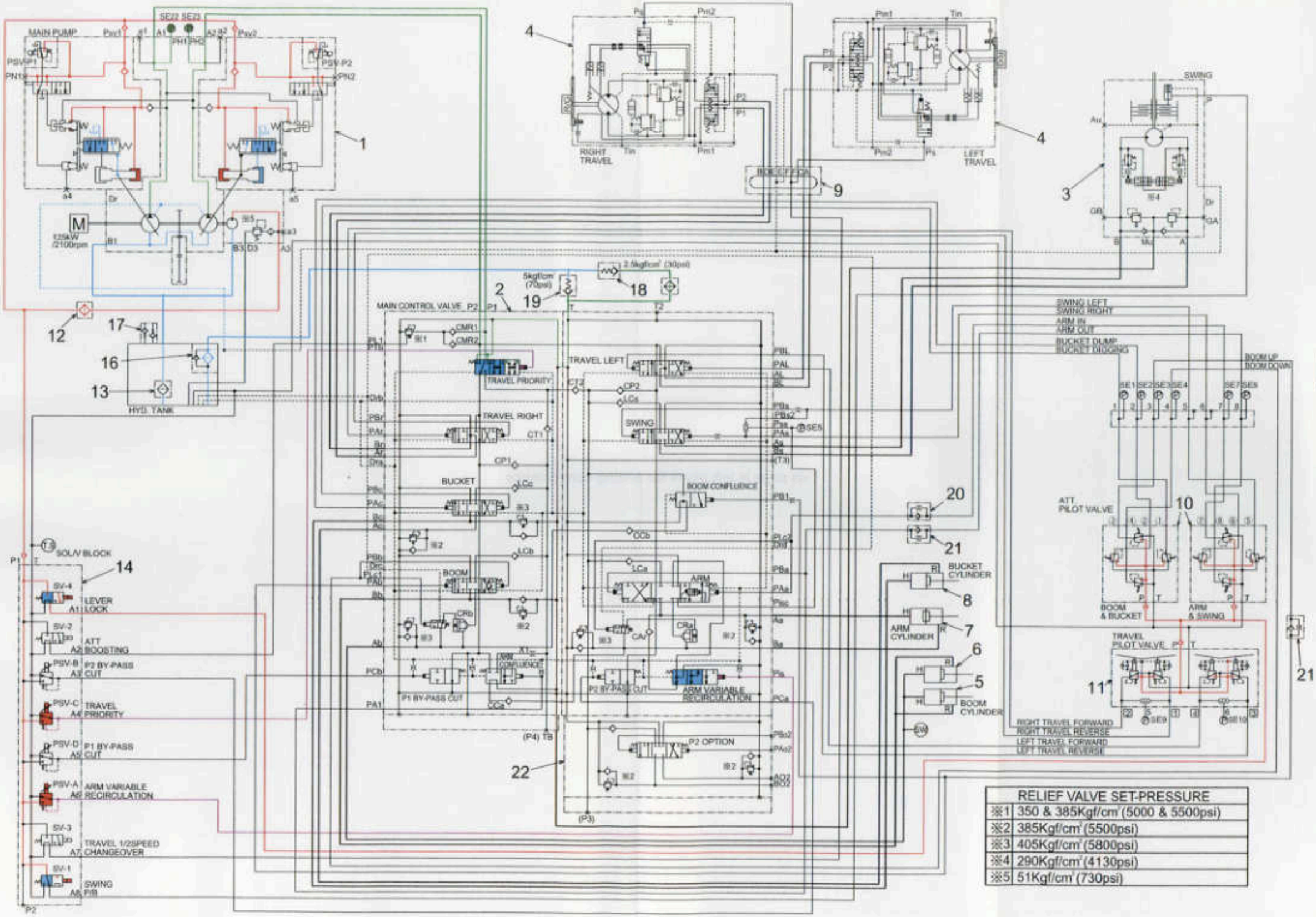
TABLE OF CONTENTS

1. OUTLINE 1-1
2. TROUBLESHOOTING 1-3
3. OUTLINE : MECHATRO CONTROL 1-4
4. CHECK POINT FOR MECHATRO SYSTEM 1-5

LQ41

KOBELCO CONSTRUCTION MACHINERY CO., LTD.

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Ex... Order the manual at mid-west-tech.com >



RELIEF VALVE SET-PRESSURE	
※1	350 & 385Kgf/cm² (5000 & 5500psi)
※2	385Kgf/cm² (5500psi)
※3	405Kgf/cm² (5800psi)
※4	290Kgf/cm² (4130psi)
※5	51Kgf/cm² (730psi)

PRESSURE DRAIN RELEASING CIRCUIT

MidWestTech | Kobelco SK230(LC)-6E, SK250(LC)-6E(S), SK250NLC-6ES Hydraulic Excavator Service Manual | Publication S5LQ0013E_gb

Order the manual at mid-west-tech.com >