KOBELCO

SERVICE MANUAL

HYDRAULIC EXCAVATOR

SK220 IV

SK220LC IV

Applicable: SK220 IV LQU0101~
Applicable: SK220LC IV LLU1201~

S5LLU0005E-00 03/04

MidWestTech | Kobelco SK220 IV, SK220LC IV Hydraulic Excavator Service Manual | Publication S5LLU0005E-00

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

線番 WIRE NO	線色 WIRE COLOR	線種・サイズ WIRE SIZE	FROM	接続 CONNECTION	TO	機能 FUNCTION
56A	LO	AVSSO. 75sq	CN-315F		CN-6F	15PAF-J/B → CONTROLLER (4P551)
56B	LO	AVSSO. 75sq	CN-315F		CN-303M	10PAF-J/B → INST PANEL L/B
56C	LO	AVSSO. 75sq	CN-315F		CN-319F	10PAF-J/B → DIODE
57A	LB	AVSSO. 75sq	CN-1F	DOUBLE SPLICE	CN-6F	FLASHER UNIT → CONTROLLER (4P551)
57B	LB	AVSSO. 75sq	CN-1F		CN-309M	FLASHER UNIT → SIDE L
61	G	MVSSO. 75sqSHIELD	CN-7F		CN-301M	CONTROLLER (4P551) → SIDE L
62	B	MVSSO. 75sqSHIELD	CN-7F		CN-301M	CONTROLLER (4P551) → SIDE L
63	R	MVSSO. 75sqSHIELD	CN-7F		CN-301M	CONTROLLER (4P551) → SIDE L
64	W	MVSSO. 75sqSHIELD	CN-7F		CN-301M	CONTROLLER (4P551) → SIDE L
85A	VG	AVSSO. 75sq	CN-326F	DOUBLE SPLICE	CN-6F	FOR CHECK → CONTROLLER (4P551)
85B	VG	AVSSO. 75sq	CN-326F		CN-4F	FOR CHECK → CONTROLLER (CLUSTER GAUGE)
86	PL	AVSSO. 75sq	CN-7F		CN-3F	CONTROLLER (4P551) → CONTROLLER (CLUSTER GAUGE)
87	PG	AVSSO. 75sq	CN-7F		CN-3F	CONTROLLER (4P551) → CONTROLLER (CLUSTER GAUGE)
88	YB	AVSSO. 75sq	CN-7F		CN-201F	CONTROLLER (4P551) → RELEASE SWITCH
89	YL	AVSSO. 75sq	CN-322F		CN-201F	FUSE BOX → RELEASE SWITCH
70	BrB	AVSSO. 75sq	CN-311M		CN-201F	SIDE M → RELEASE SWITCH
71	YG	AVSSO. 75sq	CN-311M		CN-201F	SIDE M → RELEASE SWITCH
72	BW	AVSSO. 75sq	CN-308F		CN-201F	RESISTOR → RELEASE SWITCH
73	BY	AVSSO. 75sq	CN-322F		CN-311M	FUSE BOX → SIDE M
74	BR	AVSSO. 75sq	CN-7F		CN-311M	CONTROLLER (4P551) → SIDE M
75	YG	AVSSO. 75sq	CN-322F		CN-7F	FUSE BOX → CONTROLLER (4P551)
76	BG	AVSSO. 75sq	CN-322F		CN-7F	FUSE BOX → CONTROLLER (4P551)
81	PB	AVSSO. 75sq	CN-4F		CN-302M	CONTROLLER (CLUSTER GAUGE) → INST PANEL L/B
82A	GB	AVSSO. 75sq	CN-315F		CN-3F	15PAF-J/B → CONTROLLER (CLUSTER GAUGE)
82B	GB	AVSSO. 75sq	CN-315F		CN-6F	15PAF-J/B → CONTROLLER (4P551)
82C	GB	AVSSO. 75sq	CN-315F		CN-309M	10PAF-J/B → SIDE L
83	PG	AVSSO. 75sq	CN-3F		CN-309M	CONTROLLER (CLUSTER GAUGE) → SIDE L
84	YB	AVSSO. 75sq	CN-3F		CN-309M	CONTROLLER (CLUSTER GAUGE) → SIDE L
85	YL	AVSSO. 75sq	CN-3F		CN-309M	CONTROLLER (CLUSTER GAUGE) → SIDE L
86	GY	AVSSO. 75sq	CN-3F		CN-311M	CONTROLLER (CLUSTER GAUGE) → SIDE M
87	YR	AVSSO. 75sq	CN-4F		CN-309M	CONTROLLER (CLUSTER GAUGE) → SIDE L
88	YW	AVSO. 85sq	CN-4F		CN-311M	CONTROLLER (CLUSTER GAUGE) → SIDE M
89	YO	AVSO. 85sq	CN-4F		CN-311M	CONTROLLER (CLUSTER GAUGE) → SIDE M
90A	RW	AVSSO. 75sq	CN-316F	DOUBLE SPLICE	CN-3F	TWO SPEED TRAVEL RELAY → CONTROLLER (CLUSTER GAUGE)
90B	RW	AVSSO. 75sq	CN-316F		CN-313M	TWO SPEED TRAVEL RELAY → UNDER THE FLOOR
93A	GrL	AVSSO. 75sq	CN-315F		CN-4F	15PAF-J/B → CONTROLLER (CLUSTER GAUGE)
93B	GrL	AVSSO. 75sq	CN-315F		CN-312M	15PAF-J/B → SIDE M
93C	GrL	AVSSO. 75sq	CN-315F		CN-307F	15PAF-J/B → RELAY ASSY
94A	RY	AVSSO. 75sq	CN-314F		CN-4F	15PAF-J/B → CONTROLLER (CLUSTER GAUGE)
94B	RY	AVSSO. 75sq	CN-314F		CN-307F	15PAF-J/B → RELAY ASSY
94C	RY	AVSSO. 75sq	CN-314F		CN-312M	15PAF-J/B → SIDE M
95	O	AVSSO. 75sq	CN-4F		CN-312M	CONTROLLER (CLUSTER GAUGE) → SIDE M
101	RL	AVSSO. 75sq	CN-307F		CN-201F	RELAY ASSY → RELEASE SWITCH
102C	G	AVSSO. 75sq	CN-303M		CN-313M	INST PANEL L/B → UNDER THE FLOOR
103A	LG	AVSSO. 75sq	CN-314F		CN-313M	15PAF-J/B → UNDER THE FLOOR
103B	LG	AVSSO. 75sq	CN-314F		CN-303M	15PAF-J/B → INST PANEL L/B
103C	LG	AVSSO. 75sq	CN-314F		CN-319F	15PAF-J/B → DIODE
104	LgR	AVSSO. 75sq	CN-302M		CN-1F	INST PANEL L/B → FLASHER UNIT
105A	BrY	AVSSO. 75sq	CN-1F	DOUBLE SPLICE	CN-309M	FLASHER UNIT → SIDE L
105B	BrY	AVSSO. 75sq	CN-1F		CN-312M	FLASHER UNIT → SIDE M
106A	BrR	AVSSO. 75sq	CN-1F	DOUBLE SPLICE	CN-309M	FLASHER UNIT → SIDE L
106B	BrR	AVSSO. 75sq	CN-1F		CN-312M	FLASHER UNIT → SIDE M
107A	VW	AVSSO. 75sq	CN-331F		CN-302M	WORK LIGHT RELAY(OPT) → INST PANEL L/B
108A	VR	AVSSO. 75sq	CN-315F		CN-331F	10PAF-J/B → WORK LIGHT RELAY(OPT)
108B	VR	AVSSO. 75sq	CN-315F		CN-312M	10PAF-J/B → SIDE M
108C	VR	AVSSO. 75sq	CN-315F		CN-306F	10PAF-J/B → TO CAB
109A	BL	AVSSO. 75sq	CN-315F		CN-302M	10PAF-J/B → INST PANEL L/B
109B	BL	AVSSO. 75sq	CN-315F		CN-307F	10PAF-J/B → RELAY ASSY
109C	BL	AVSSO. 75sq	CN-315F		CN-307F	10PAF-J/B → RELAY ASSY

線番 WIRE NO	線色 WIRE COLOR	線種・サイズ WIRE SIZE	FROM	接続 CONNECTION	TO	機能 FUNCTION
110A	Gr	AVSSO. 75sq	CN-315F		CN-302M	10PAF-J/B → INST PANEL L/B
110B	Gr	AVSSO. 75sq	CN-315F		CN-312M	10PAF-J/B → SIDE M
110C	Gr	AVSSO. 75sq	CN-315F		CN-309M	10PAF-J/B → SIDE L
111A	RB	AVSSO. 75sq	CN-314F		CN-307F	15PAF-J/B → RELAY ASSY
111B	RB	AVSSO. 75sq	CN-314F		CN-312M	15PAF-J/B → SIDE M
111C	RB	AVSSO. 75sq	CN-314F		CN-313M	15PAF-J/B → UNDER THE FLOOR
112A	LY	AVSSO. 75sq	CN-312M		CN-307F	SIDE M → RELAY ASSY
113	PG	AVSSO. 75sq	CN-302M		CN-307F	INST PANEL L/B → RELAY ASSY
114	BrR	AVSSO. 75sq	CN-302M		CN-323F	INST PANEL L/B → INTERMIT RELAY
115	Br	AVSSO. 75sq	CN-302M		CN-323F	INST PANEL L/B → INTERMIT RELAY
116	LgB	AVSSO. 75sq	CN-302M		CN-313M	INST PANEL L/B → UNDER THE FLOOR
117	BrW	AVSSO. 75sq	CN-306F		CN-323F	TO CAB → INTERMIT RELAY
118	BrB	AVSSO. 75sq	CN-306F		CN-323F	TO CAB → INTERMIT RELAY
119	O	AVSSO. 75sq	CN-302M		CN-316F	INST PANEL L/B → TWO SPEED TRAVEL RELAY
120A	VY	AVSSO. 75sq	CN-314F		CN-314F	15PAF-J/B → 15PAF-J/B
120D	VY	AVSSO. 75sq	CN-314F		CN-311M	15PAF-J/B → SIDE M
120E	VY	AVSSO. 75sq	CN-314F		CN-319F	15PAF-J/B → DIODE
120F	VY	AVSSO. 75sq	CN-314F		CN-319F	15PAF-J/B → DIODE
120G	VY	AVSSO. 75sq	CN-314F		CN-4F	15PAF-J/B → CONTROLLER (CLUSTER GAUGE)
120H	VY	AVSSO. 75sq	CN-314F		CN-303M	15PAF-J/B → INST PANEL L/B
126	WL	AVSSO. 75sq	CN-302M		CN-333F	INST PANEL L/B → TIMER RELAY (TRAVEL ALARM)
127A	LR	AVSSO. 75sq	CN-333F	DOUBLE SPLICE	CN-313M	TIMER RELAY (TRAVEL ALARM) → UNDER THE FLOOR
127B	LR	AVSSO. 75sq	CN-333F		CN-312M	TIMER RELAY (TRAVEL ALARM) → SIDE M
128	BG	AVSSO. 75sq	CN-312M		CN-333F	SIDE M → TIMER RELAY (TRAVEL ALARM)
130A	OB	AVSSO. 75sq	CN-330F		CN-302M	TO CAB (ROTARY LIGHT) → INST PANEL L/B
132	YV	AVSSO. 75sq	CN-302M		CN-312M	INST PANEL L/B → SIDE M
134A	VG	AVSSO. 75sq	CN-303M	DOUBLE SPLICE	CN-338F	INST PANEL L/B → WARM UP RELAY
134B	VG	AVSSO. 75sq	CN-313M		CN-338F	UNDER THE FLOOR → WARM UP RELAY
135	BrG	AVSSO. 75sq	CN-1F		CN-3F	FLASHER UNIT → CONTROLLER (CLUSTER GAUGE)
136	BW	AVSSO. 75sq	CN-339F		CN-338F	WARM UP RELAY UNIT → WARM UP RELAY
137	WG	AVSSO. 75sq	CN-339F		CN-304M	WARM UP RELAY UNIT → INST PANEL L/B
138A	RG	AVSSO. 75sq	CN-313M	DOUBLE SPLICE	CN-338F	UNDER THE FLOOR → WARM UP RELAY
138B	RG	AVSSO. 75sq	CN-304M		CN-338F	INST PANEL L/B → WARM UP RELAY
139	YG	AVSSO. 75sq	CN-312M		CN-338F	SIDE M → WARM UP RELAY
201	BY	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
202	B	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
203	R	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
204	BG	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
205	O	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
206	BL	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
207	Y	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
208	G	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
209	L	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
210	LR	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
211	V	AVSO. 5sq	CN-303M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
212	VW	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
213	BW	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
214	BR	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
215	GR	AVSO. 5sq	CN-305M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
216	W	AVSO. 5sq	CN-303M		CN-5F	INST PANEL L/B → CONTROLLER (CLUSTER GAUGE)
E0	B	AVSSsq	CN-310M		P-5	TIE-D → BODY EARTH
E1	B	AVSS1. 25sq	CN-324F		CN-303M	11PAF-GND → INST PANEL L/B
E2	B	AVSS1. 25sq	CN-324F		CN-303M	11PAF-GND → INST PANEL L/B
E3	B	AVSSO. 75sq	CN-1F	DOUBLE SPLICE	CN-201F	FLASHER UNIT → RELEASE SWITCH
E4	B	AVSSO. 75sq	CN-320F		CN-201F	J/C-GRAY → RELEASE SWITCH
E5	B	AVSSO. 75sq	CN-320F		CN-307F	J/C-GRAY → RELAY ASSY
E6	B	AVSSO. 75sq	CN-320F		CN-307F	J/C-GRAY → RELAY ASSY
E7	B	AVSSO. 75sq	CN-333F	DOUBLE SPLICE	CN-316F	TIMER RELAY (TRAVEL ALARM) → TWO SPEED TRAVEL RELAY
E8	B	AVSSO. 75sq	CN-320F		CN-316F	J/C-GRAY → TWO SPEED TRAVEL RELAY

ITEM	CAREER	DATE
01	NEW ISSYUED	

線番 WIRE NO	線色 WIRE COLOR	線種・サイズ WIRE SIZE	FROM	接続 CONNECTION	TO	機能 FUNCTION
E9	B	AVSS1. 25sq	CN-324F		CN-316F	11PAF-GND → DIODE
E10	B	AVSSO. 75sq	M-1	DOUBLE SPLICE	F-2	12V POWER SOURCE 15SQAV → CIGARETTE LIGHTER
E11	B	AVSSO. 75sq	CN-320F		F-2	J/C-GRAY → CIGARETTE LIGHTER
E12	B	AVSSO. 75sq	CN-320F		CN-3F	J/C-GRAY → CONTROLLER (CLUSTER GAUGE)
E13	B	AVSSO. 75sq	CN-320F		CN-3F	J/C-GRAY → CONTROLLER (CLUSTER GAUGE)
E14	B	AVSSO. 75sq	CN-320F		CN-2F	J/C-GRAY → CONTROLLER (CLUSTER GAUGE)
E15	B	AVSSO. 75sq	CN-324F		CN-7F	11PAF-GND → CONTROLLER (4P551)
E16	B	AVSSO. 75sq	CN-328M	DOUBLE SPLICE	CN-326F	12V COUPLER → FOR CHECK
E17	B	AVSSO. 75sq	CN-320F		CN-326F	J/C-GRAY → FOR CHECK
E18	B	AVSS1. 25sq	CN-324F		CN-327F	11PAF-GND → 12V POWER SOURCE AND EARTH
E19	B	AVSS1. 25sq	CN-324F		CN-325F	11PAF-GND → KEY SW RELAY
E20	B	AVSSO. 75sq	CN-320F		CN-331F	J/C-GRAY → WORK LIGHT RELAY(OPT)
E22	B	AVSS1. 25sq	CN-324F		P-2	11PAF-GND → SAFETY RELAY
E23	B	AVSS1. 25sq	CN-324F		P-4	11PAF-GND → SAFETY RELAY
E24	B	AVSSO. 75sq	CN-323F	DOUBLE SPLICE	CN-332F	INTERMIT RELAY → TURNER
E25	B	AVSSO. 75sq	CN-320F		CN-332F	J/C-GRAY → TURNER
E26	B	AVSSO. 75sq	CN-320F		CN-306F	J/C-GRAY → TO CAB
E27	B	AVSS1. 25sq	CN-324F		CN-320F	11PAF-GND → J/C-GRAY
E28	B	AVSSO. 75sq	CN-320F		CN-320F	J/C-GRAY → J/C-GRAY
E29	B	AVSS1. 25sq	P-11		CN-324F	DC-DC CONVERTER → 11PAF-GND
E30	B	AVSSO. 75sq	CN-320F	DOUBLE SPLICE	CN-330F	J/C-GRAY → TO CAB (ROTARY LIGHT)
E31	B	AVSSO. 75sq	CN-330F	DOUBLE SPLICE	CN-340F	TO CAB (ROTARY LIGHT) → SURGE ABSORBER
E32	B	AVSSO. 75sq	CN-340F		CN-339F	SURGE ABSORBER → WARM UP RELAY UNIT
SH1	Gr		CN-8F		CN-311M	CONTROLLER (4P551) → SIDE M
SH2	Gr		CN-324F		CN-301M	11PAF-GND → SIDE L

注記 NOTES

1. 使用スル電線ハ特記ナキ限リ0. 75~1. 25$^{mm^2}$ノ AVSS線, 0. 5$^{mm^2}$, 2~5$^{mm^2}$ノAVS線, 他ハAV線トスル.
2. 指示ナキ電線サイズハ0. 75$^{mm^2}$トスル.
3. 端末ノ口出シ長サハ, 30±10mmトシ, 被中ノ端子ニ含ム.
4. 束線ノ処理ハ, 以下ノ通リトスル.
   1): ハーネステープ巻始端, コルゲートチューブラ前端.
   2): ハーネステープ2重巻.
   3): 口出シ.
5. 特記ナキコネクタハ, 別表ニヨルコト.
6. 線番61~64及94番ノ0. 75$^{mm^2}$ MVVSシールド線トスル.
7. 線番51, 52及72番ノ0. 75$^{mm^2}$ MVVSシールド線トスル.
8. ツイストペア組合ワセ, :201-202, 203-204, 205-206, 207-208, 70-71, 73-74
9. 寸法許容差ハ鎔接設計基準K SC41E00E017ニ準ジルコト.
10. P-1, P-2, P-3, P-4, P-5, P-7, P-8, P-9, P-10, P-11ハ丸端子ニ絶縁チューブラ装着ノコト.

COMP. PART NO.	PART NO.	ITEM	NAME OF PART	MATERIAL	NO. OF UNIT	UNIT WT.	REMARKS
2479U2060			ハーネス HARNESS				

NAME	HARNESS
	ハーネス(インパス KAI・EC)

DRAWN	CHECKED	APPROVED	DATE
T. Sano		M. Kimoshita (Assistant Manager)	97-04-25

SCALE	DWG. NO.	SIMILAR TO
-	2479U2060	

KOBELCO CONSTRUCTION MACHINERY(U.S.A.)INC. 2479U2060 (3/3) 01

METRIC

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