OPERATION & MAINTENANCE MANUAL

CK1000-II

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TABLE OF CONTENTS

1. SAFE OPERATING PRACTICES FOR MOBILE CRANES 1- 1
- Introduction 1- 1
- Operator's Responsibility 1- 1
- Signalman's Responsibility 1- 2
- Responsibilities of All Crew Members 1- 2
- Management Responsibility 1- 2
- Planning the Job 1- 3
- Operator's Check List 1- 4
- Operating Precautions 1- 4
- Measures for Radio Transmitters 1-16
- Measure for Lighting 1-16
- Measure for Earthquake 1-16
- Influence of Wind 1-17
- Caution of Wind 1-18
- Method of Wind Velocity Measurement 1-18

2. OPERATION 2- 1
- 2.1 Terminology of Machine Each Part 2- 1
- 2.2 Locations and Terms of Operating Controls 2- 2
  - 2.2.1 Handling of Each Switch 2- 7
  - 2.2.2 Gauge Cluster 2-15
  - 2.2.3 Handling the Air Conditioner 2-26
- 2.3 Crane Operation 2-28
  - 2.3.1 Adjusting the Operator's Seat 2-28
  - 2.3.2 Adjusting the Control Lever Direction 2-28
  - 2.3.3 Starting and Stopping the Engine 2-29
  - 2.3.4 Function Lock Lever 2-33
  - 2.3.5 Propelling Operation 2-33
  - 2.3.6 Swinging Operation 2-35
  - 2.3.7 Boom Raising/Lowering Operation 2-37
  - 2.3.8 Hook Raising/Lowering Operation 2-38
- 2.4 Free Fall Operation 2-40
- 2.5 Clamshell Operation 2-42
- 2.6 Handling of Hydraulic Tagline (Optional) 2-44

3. LOAD SAFETY DEVICE 3- 1
- 3.1 Arrangement of Equipments 3- 1
- 3.2 Type and Functions of Equipments 3- 4
- 3.3 Connecting Procedure of Wiring 3- 9
  - 3.3.1 Crane Attachment 3- 9
- 3.4 Function of Controller/Monitor 3-13
- 3.5 Operating Procedure of Controller 3-17
  - 3.5.1 Setting Screen 3-18
  - 3.5.2 Setting of the Crane Configuration 3-23
  - 3.5.3 Selection of Main/Aux Lifting 3-29
  - 3.5.4 Setting of Working Area Limit Value 3-29

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3.5.5 Setting of the Time 3-31
3.6 Warning Alarm and Automatic Stop 3-33
3.6.1 Items of Warning Alarm and Automatic Stop 3-33
3.6.2 Contents of Automatic Stop 3-34
3.6.3 Release of Automatic Stop 3-35
3.7 Inspection 3-39
3.7.1 Inspection Before Raising the Boom After Assembly of Attachment is Completed. 3-39
3.7.2 Inspection After Erecting the Attachment 3-42
3.8 Caution for Handling the Load Safety Device 3-42
3.9 Indication of Errors and Remedy 3-43
3.10 Indication of Message and Alarm 3-44
3.11 Confirmation of Function for Load Safety Device 3-45

4. UNLOADING/LOADING THE BASIC MACHINE 4- 1
4.1 Unloading the Basic Machine From the Trailer 4- 2
4.2 Swing Loading the Machine on a Trailer 4- 2

5. ASSEMBLY/DISASSEMBLY OF BASIC MACHINE 5- 1
5.1 Extending/Retracting the Crawlers 5- 2
5.1.1 Extending the Crawlers 5- 2
5.1.2 Retracting the Crawler 5- 4
5.2 Installing/Removing Axle Extension Adapters 5- 5
5.2.1 Installing Axle Extension Adapters 5- 5
5.2.2 Removing Axle Extension Adapters 5- 6
5.3 Erecting/Lowering the Gantry 5- 7
5.3.1 Erecting the Gantry 5- 7
5.3.2 Lowering the Gantry 5- 8
5.4 Installation, Removal of the Counterweight (When Using the Auxiliary Crane) 5- 9
5.4.1 Installation of the Counterweight 5- 9
5.4.2 Removal of the Counterweight 5-12
5.4.3 Installing/Removing Carbody Weights 5-13
5.5 Installation, Removal of the Counterweight (When Using Self Removal Device) 5-14
5.5.1 Preparations for Operation 5-14
5.5.2 Installation Procedures 5-18
5.5.3 Disassembly Procedures 5-25
5.5.4 Operation of Cylinder When Setting Low Gantry Position (Fixation of Tension Bar Connection) 5-29

6. ASSEMBLY/DISASSEMBLY OF CRANE ATTACHMENT
6.1 Assembling the Attachment 6- 3
6.1.1 Arrangement of Boom/Jib/Guy Line 6- 3
6.1.2 Installing the Backstops 6-10
6.1.3 Installing the Boom Base 6-11
6.1.4 Installing the Backstops to the Revolving Frame 6-12
6.1.5 Installing the Upper Spreader 6-12
6.1.6 Reeving the Wire Rope into the Upper and Lower Spreader 6-13
6.1.7 Installing the Boom Tip 6-14
6.1.8 Installation of the Basic Guy Line 6-15

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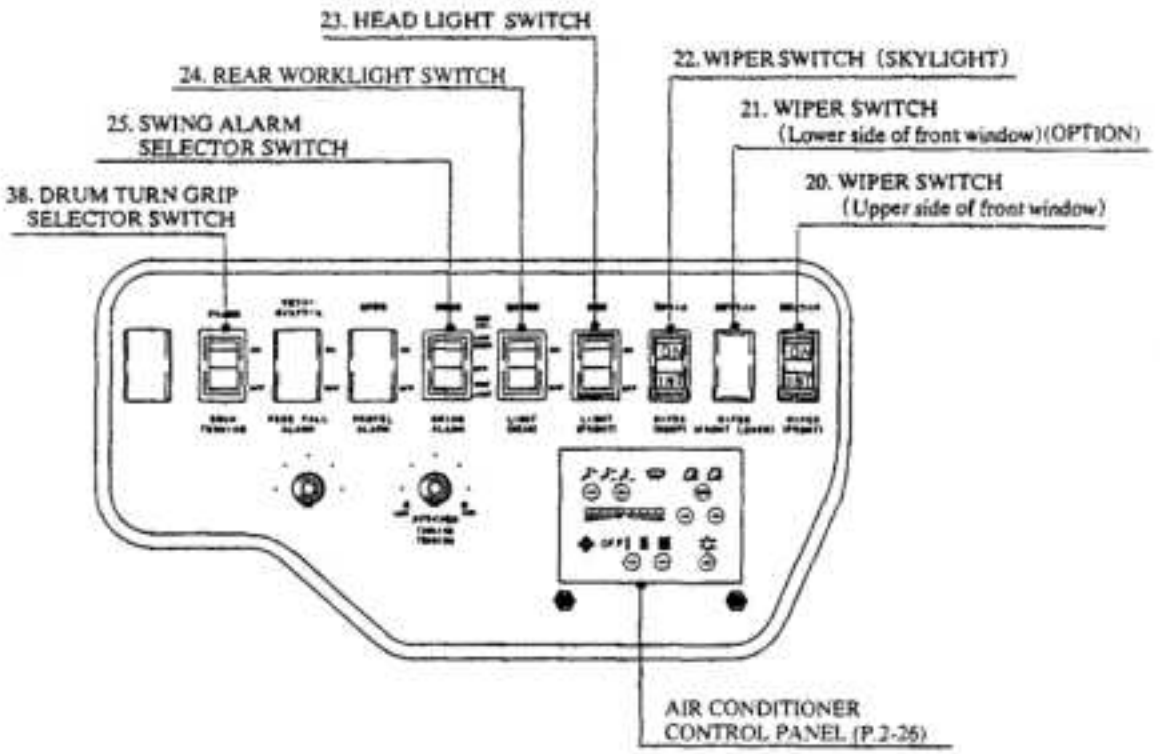
6.1.9 Main Hoist Wire Rope Reeving 6-16
6.1.10 Connecting the Insert Booms 6-18
6.1.11 Installing the Cable Rollers 6-24
6.1.12 Connecting the Boom Guy Lines 6-24
6.1.13 Caution for Cantilever 6-26
6.1.14 Assembling the Jib 6-27
6.1.15 Reeving of Rear Drum Wire Rope 6-30
6.1.16 Installing the Auxiliary Sheave 6-32
6.1.17 Reeving the Rear Drum Wire Rope to the Auxiliary Sheave 6-33
6.2 Erecting the Attachment 6-34
6.2.1 Confirmation Before Erecting the Attachment 6-34
6.2.2 Erecting the Attachment 6-35
6.3 Lowering the Attachment 6-37
6.3.1 Lowering the Attachment 6-37
6.4 Disassembling the Attachment 6-38
6.4.1 Treatment of Overhoist Limit Switch Wiring 6-38
6.4.2 Winding Up the Front Drum/Rear Drum Wire Ropes 6-38
6.4.3 Disassembling the Jib 6-39
6.4.4 Removing the Boom Guy Line 6-40
6.4.5 Disassembling the Boom 6-41
6.4.6 Removing the Base Boom 6-42
6.4.7 Removal of the Counterweight 6-43
6.4.8 Lowering the Gantry 6-43
6.5 Caution When Transporting Boom 6-44

7. WIRE ROPE 7- 1
7.1 Handling of Wire Rope 7- 1
7.1.1 Unreeling Method of Wire Rope 7- 1
7.1.2 Winding Wire Rope onto the Drum 7- 1
7.1.3 Installing the Rope Socket 7- 2
7.1.4 Specification of Wire Rope 7- 2
7.1.5 Wire Rope Length 7- 3

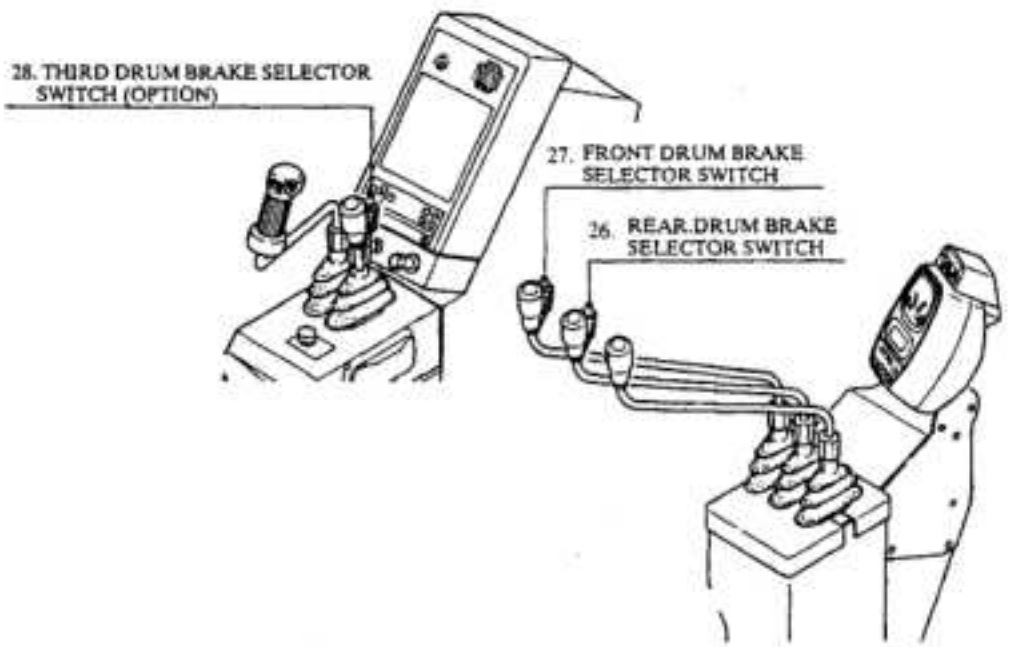
8. MAINTENANCE 8- 1
8.1 Checks 8- 6
8.1.1 Checks of the Upper 8- 6
8.1.2 Check of Lower 8-16
8.1.3 Check of Attachment 8-22
8.2 Oil/Grease Supply and Water Service 8-29
8.2.1 Upper Lubrication (Incl. Water Supply) 8-32
8.2.2 Lower Lubrication 8-34
8.2.3 Attachment Lubrication 8-36
8.2.4 Grease 8-38
8.2.5 Engine Oil 8-41
8.2.6 Fuel 8-42
8.2.7 Coolant 8-43
8.2.8 Hydraulic Oil 8-45
8.2.9 Gear Oil 8-47

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LEFT SIDE PANEL



BRAKE SELECTOR SWITCH



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5.4.3 INSTALLING/REMOVING CARBODY WEIGHTS

Always install the carbody weights (2 pcs., front and rear) during operation.

Carbody weight: 3,340 kg (7,365 lbs)

⚠ DANGER

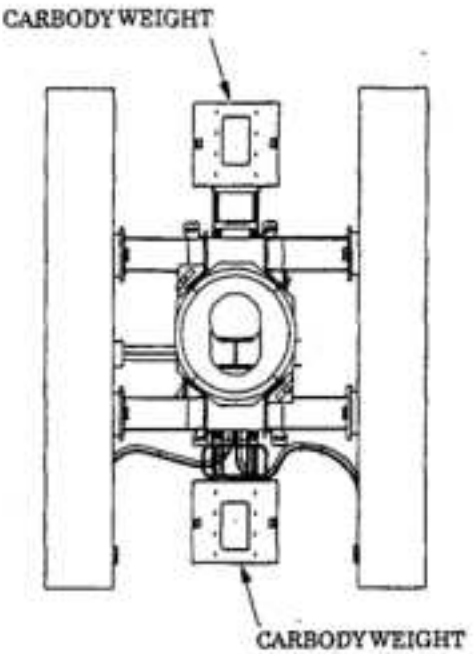
Do not stand under lifted counterweight or between counterweight and the basic machine to avoid accident of drop or being caught.
Failure to observe this precaution may result in serious injury or loss of life.

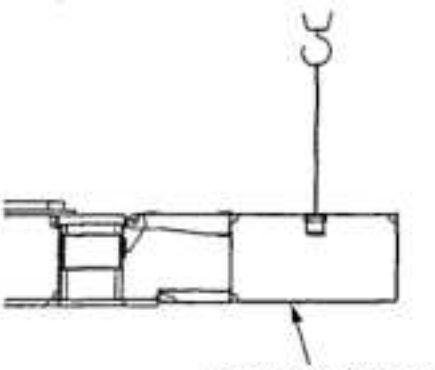
Lift the carbody weights with the assisting crane, and install them by hooking them with the carbody brackets.

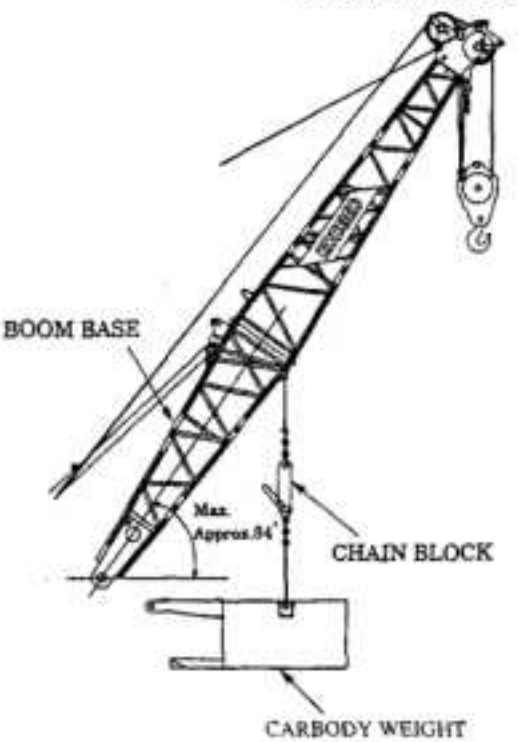
When removing them, lift them with the assisting crane in a similar manner.

⚠ WARNING

If the assisting crane cannot be prepared, the carbody weights can be installed by setting the nylon sling and the chain block to the lug on the top of boom base.
In such a case, be extremely careful of the chain block operation.
Failure to observe this precaution may result in serious injury or loss of life.



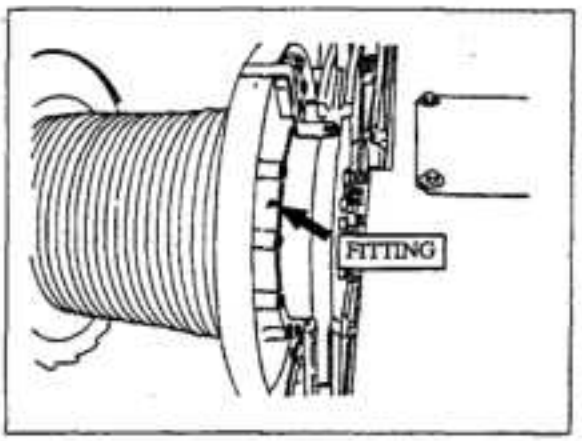




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4. DRUMSHAFT BEARING

Grease through the grease fittings provided on the side stand and drumshaft bearing retainer.



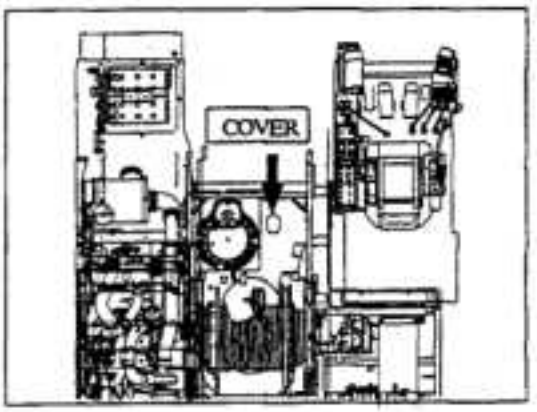
5. SLEWING RING BEARING

Grease through the grease fitting provided on the slewing ring bearing.



6. SLEWING RING GEAR

Removing the swing motor cover, turn the upper little by little, and grease so that grease goes around the entire ring gear.



WARNING

To avoid injury, do not apply grease to slewing ring gear directly by hand.

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SWITCH

SW-No.	LINE No.	USE	PAGE	PART No.
SW- 1	11 — 51, 52, 53, 54	ENG. KEY SWITCH	1	EZ50S00016P1
SW- 2	202 — 205	Fr. DRUM SELECT	1	GG50E00004F1
SW- 3	204 — 210	Re. DRUM SELECT	1	GG50E00004F1
SW- 4	206 — 207	3rd. DRUM SELECT	1	GG50E00004F1
SW- 8	15 — 231	PROPEL SPEED SELECT	1	JJ50S00014P1
SW- 9	15 — 239	INCHING SPEED SELECT	1	(GG50M01832F1)
SW-11	234 — 235	SWING PARKING BRAKE	1	(GB20E00001F2)
SW-12	16 — 236, 237	GANTRY CONTROL	1	2479Z293
SW-13	134 — 110	HOOK OVERHOIST RELEASE	3	GB50S00040P1
SW-14	134 — 112	BOOM OVERHOIST RELEASE	3	GB50S00040P1
SW-15	134 — 114	M/L RELEASE	3	GB50S00040P1
SW-16	E — 134, 177	RELEASE SWITCH MASTER KEY	3	JJ50S00015P1
SW-17	19 — 601, 602, 605	WIPER (FRONT UPPER)	6	EZ50S00015P1
SW-18	19 — 606, 607, 610	WIPER (FRONT LOWER)	6	EZ50S00015P1
SW-19	19 — 611, 612, 615	WIPER (ROOF)	6	EZ50S00015P1
SW-20	11 — E, 502	ROOM LIGHT	6	2456R315
SW-21	11 — 511, 111 — E	HEAD LIGHT	6	GB50S00007D1
SW-22	24 — 521	REAR WORK LIGHT	6	GB50S00007D1
SW-23	24 — 522, 523, 524	SWING ALARM SELECT	6	GB50S00008D1
SW-24	532 — E	HORN	5	(GB20E00001F2)
SW-30	194 — E	TOWER ANGLE FIX	3	GB50S00045P1
SW-33	E — 413	DRUM TURN DETECT GRIP	5	2479Z1813
SW-35	27 — 551	CHECK	2	2479Z348
SW-36	140 — 144	M/L REDUNDANCY (LUF)	3	79Z1657
SW-37	140 — 128, 159	M/L REDUNDANCY (TW / CR)	3	79Z1657
SW-38	27 — 480	T/C REDUNDANCY	4	2479Z2872

SWITCH

SW-No.	LINE No.	USE	PAGE	PART No.
SW-41	414 — E	MODE SELECT	5	2479Z2872
SW-45	234 — 208	FREE LOCK	1	GG50S00005P1
SW-50	18 — 170	SIMULTANEOUS CONTROL POSSIBLE	2	JJ50S00005P1
SW-51	18 — 171, 172	DRUM SELECT	2	GB50S00038P1
SW-56	E — 481	Fr. DRUM FREE FALL SPEED ACCELERATION	5	2479Z2872
SW-57	E — 482	Re. DRUM FREE FALL SPEED ACCELERATION	5	2479Z2872
SW-58	E — 483	3rd. DRUM FREE FALL SPEED ACCELERATION	5	2479Z2872
SW-59	18 — 269	HYDRAULIC OIL TEMP. HEAT	1	FY50E00007P1

LIMIT SWITCH

LS-No.	TYPE	LINE No.	USE	PAGE	PART No.
LS- 1	N. O.	18 — 234	FUNCTION LOCK	1	JJ50S00006P1
LS- 2	N. C.	103 — 102	MAIN HOOK OVERHOIST	2	24100N6192F5
LS- 3	N. C.	103 — 105	AUX. HOOK OVERHOIST	2	24100N6192F5
LS- 4	N. C.	102 — 101	3rd. HOOK OVERHOIST	2	24100N6192F5
LS- 6	N. C.	105 — 104	LUFFING JIB AUX. SHEAVE HOOK OVERHOIST	2	24100N6192F5
LS- 7	N. C.	103 — 108	CRANE BOOM OVERHOIST	2	GG50S00004P1
LS-13	N. O.	22 — 338	STEPPING MOTOR START POINT	4	-
LS-14	N. O.	502 — E	ROOM LIGHT	8	2479R838
LS-15	N. O.	461 — E	ENG. OIL FILTER ALARM	5	-
LS-19	N. O.	467 — E	HYD. OIL TEMP.	5	2479U285
LS-20	N. O.	468 — E	BRAKE COOLING OIL TEMP. (Fr. DRUM)	5	GG50S00002D1
LS-21	N. O.	470 — E	BRAKE COOLING OIL TEMP. (Re. DRUM)	5	GG50S00002D1
LS-22	N. O.	471 — E	LINE FILTER ALARM	5	(GG50V00001F1)
LS-26	N. C.	18 — 184	Fr. DRUM OVER PAY OUT (CEN)	2	GG50S00013P1
LS-27	N. C.	18 — 185	Re. DRUM OVER PAY OUT (CEN)	2	GG50S00013P1
LS-28	N. C.	18 — 186	3rd. DRUM OVER PAY OUT (CEN)	2	GG50S00013P1
LS-30	N. O.	18 — 268	HYD. OIL TEMP.	1	-
LS-31	N. O.	415 — E	Fr. DRUM FOOT BRAKE	5	GB52S00002P1
LS-32	N. O.	416 — E	Re. DRUM FOOT BRAKE	5	GB52S00002P1
LS-33	N. O.	417 — E	3rd. DRUM FOOT BRAKE	5	GB52S00002P1
LS-35	N. O.	25 — 725	AIR CLEANER ALARM	6	-

FUSE

F-NO.	RATED	LINE No.	USE	PAGE	PART No.
F- 1	20A	1 — 11	ELECTRIC POWER SOURCE	1	24100R21552
F- 2	5A	1 — 12	BACK-UP	1	24100R21554
F- 3	5A	54 — 13	ENGINE START	1	24100R21554
F- 4	5A	5 — 14	HOUR METER	1	24100R21554
F- 5	10A	2 — 15	WINCH	1	24100R21553
F- 6	10A	2 — 16	EACH SOLENOID	1	24100R21553
F- 7	5A	2 — 17	M/L CONTROL POWER SOURCE	2	24100R21554
F- 8	5A	2 — 18	M/L OUT PUT POWER SOURCE	2	24100R21554
F- 9	20A	2 — 19	WIPER	6	24100R21552
F-10	20A	2 — 20	AIR CONDITIONER	6	24100R21552
F-11	10A	52 — 21	ONE-WAY RADIO	6	24100R21553
F-12	30A	2 — 22	TOTAL CONTROLLER	4	24100R21551
F-13	10A	2 — 23	GAUGE CLUSTER	7	24100R21553
F-14	10A	2 — 24	SWING FLASHER	6	24100R21553
F-15	10A	2 — 25	FUEL PUMP FUN	6	24100R21553
F-16	10A	2 — 28	COUNTER WEIGHT SELF REMOVAL CONTROL BOX	7	24100R21553
F-17	10A	2 — 27	REDUNDANCY CIRCUIT	7	24100R21553
F-18	10A	2 — 28	LEVINV REGURATOR + SELECT UNIT	7	24100R21553
F-19	10A	2 — 29	ELECTRONIC TIMER CONTROL UNIT	8	24100R21553
F-20	10A	2 — 30	SPARE	7	24100R21553
F-21	1A	18 — 103	OVERHOIST	2	-

PILOT LAMP

PL-NO.	LINE No.	USE	PAGE	PART No.
PL-1	254 — E	Fr. DRUM FREE FALL	5	GG80S00003F1
PL-2	259 — E	Re. DRUM FREE FALL	5	GG80S00003F1
PL-3	264 — E	3rd. DRUM FREE FALL	5	GG80S00004F1
PL-6	725 — E	AIR CLEANER ALARM	6	JJ80S00006D2
PL-7	53 — 69	DIAG. LAMP-1	8	JJ80S00006D2
PL-8	53 — 80	DIAG. LAMP-2	8	JJ80S00006D1

PRESSURE SENSOR

PT-NO.	LINE No.	USE	PAGE	PART No.
PT- 1	351 — 350, 349	SWING PUMP PRESSURE SENSOR	4	LC52S00002P2
PT- 3	382 — 384, 383	Fr. DRUM HOISTING PRESSURE SENSOR	4	LC52S00001P3
PT- 4	385 — 384, 386	Fr. DRUM LOWERING PRESSURE SENSOR	4	LC52S00001P3
PT- 5	387 — 389, 388	Re. DRUM HOISTING PRESSURE SENSOR	4	LC52S00001P3
PT- 6	390 — 389, 391	Re. DRUM LOWERING PRESSURE SENSOR	4	LC52S00001P3
PT- 7	353 — 355, 354	3rd. (JIB) DRUM HOISTING PRESSURE SENSOR	4	LC52S00001P3
PT- 8	356 — 355, 357	3rd. (JIB) DRUM LOWERING PRESSURE SENSOR	4	LC52S00001P3
PT- 9	454 — 456, 455	Fr. DRUM CLUTCH PRESSURE SENSOR	4	GG52S00004P1
PT-10	457 — 456, 458	Re. DRUM CLUTCH PRESSURE SENSOR	4	GG52S00004P1
PT-11	459 — 472, 460	3rd. DRUM CLUTCH PRESSURE SENSOR	4	GG52S00004P1
PT-12	343 — 345, 344	BOOM RAISE PRESSURE SENSOR	4	LC52S00001P3
PT-13	369 — 345, 370	BOOM LOWER PRESSURE SENSOR	4	LC52S00001P3

PRESSURE SWITCH

PSW-NO.	RATED	LINE No.	USE	PAGE	PART No.
PSW- 1	N. O.	15 — E, 205	Fr.DRUM FOOT BRAKE PRESSURE SW.	1	GG50S00006P1
PSW- 2	N. O.	15 — E, 210	Re.DRUM FOOT BRAKE PRESSURE SW.	1	GG50S00006P1
PSW- 3	N. O.	15 — E, 207	3rd.DRUM FOOT BRAKE PRESSURE SW.	1	GG50S00006P1
PSW- 4	N. O.	16 — 243	SWING CONTROL DETECT SW. (R.H.)	1	GG50S00007F1
PSW- 5	N. O.	16 — 243	SWING CONTROL DETECT SW. (L.H.)	1	GG50S00007F1
PSW- 6	N. O.	16 — E, 209	CONTROL PRIMARY PRESSURE DETECT SW.	1	GG50S00006P1
PSW- 7	N. O.	16 — 242	PROPEL CONTROL DETECT SW. (R.H.)	1	GG50S00007F1
PSW- 8	N. C.	381 — E	ENGINE OIL PRESSURE SW.	5	-
PSW-10	N. O.	16 — 242	PROPEL CONTROL DETECT SW. (L.H.)	1	GG50S00007F1

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