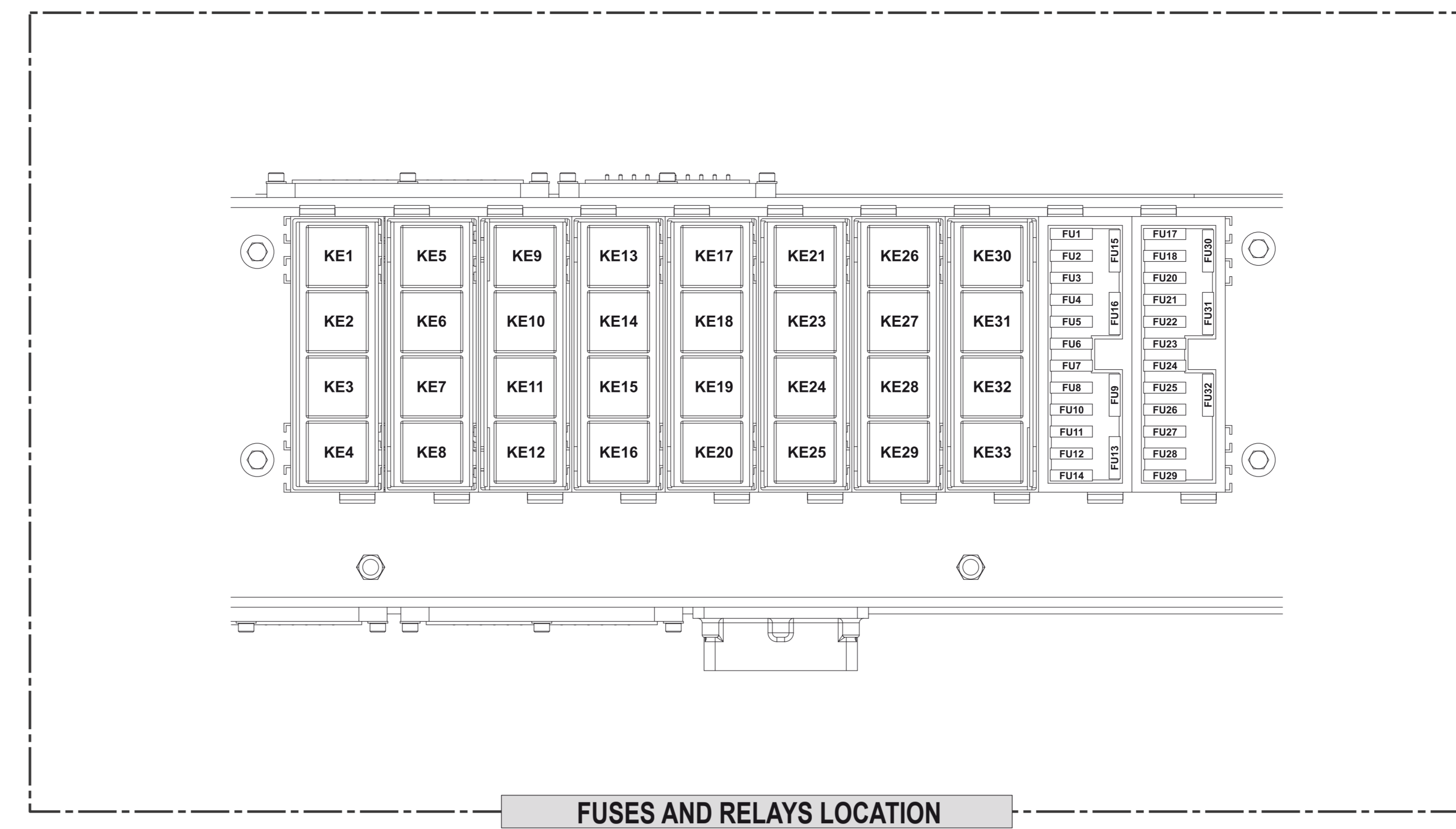


LEVELLING DEVICES



FUSES AND RELAYS LOCATION

Schematic

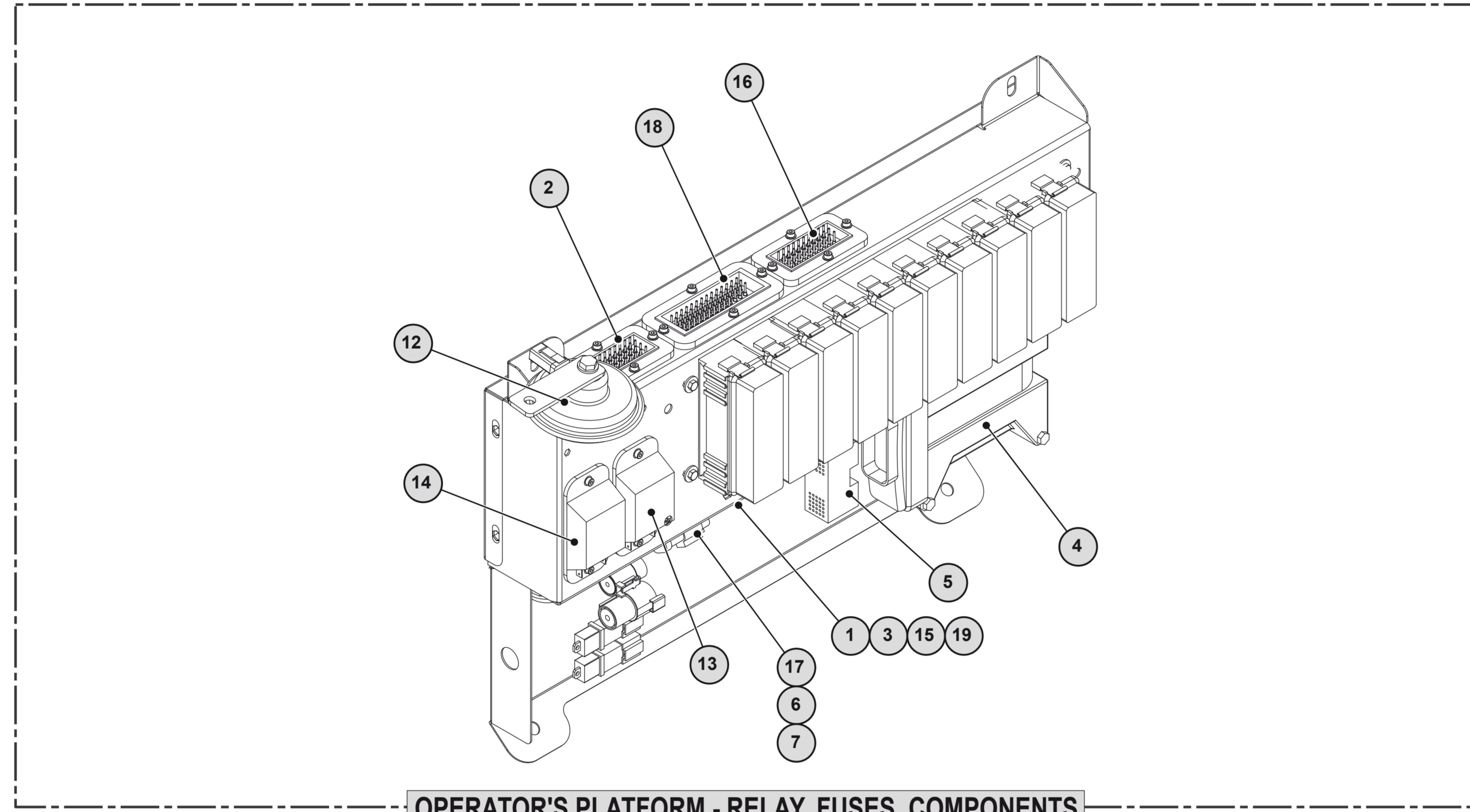
PM102 Cold Planer Electrical System

Z2X250 Up (Machine)

Volume 1 of 3

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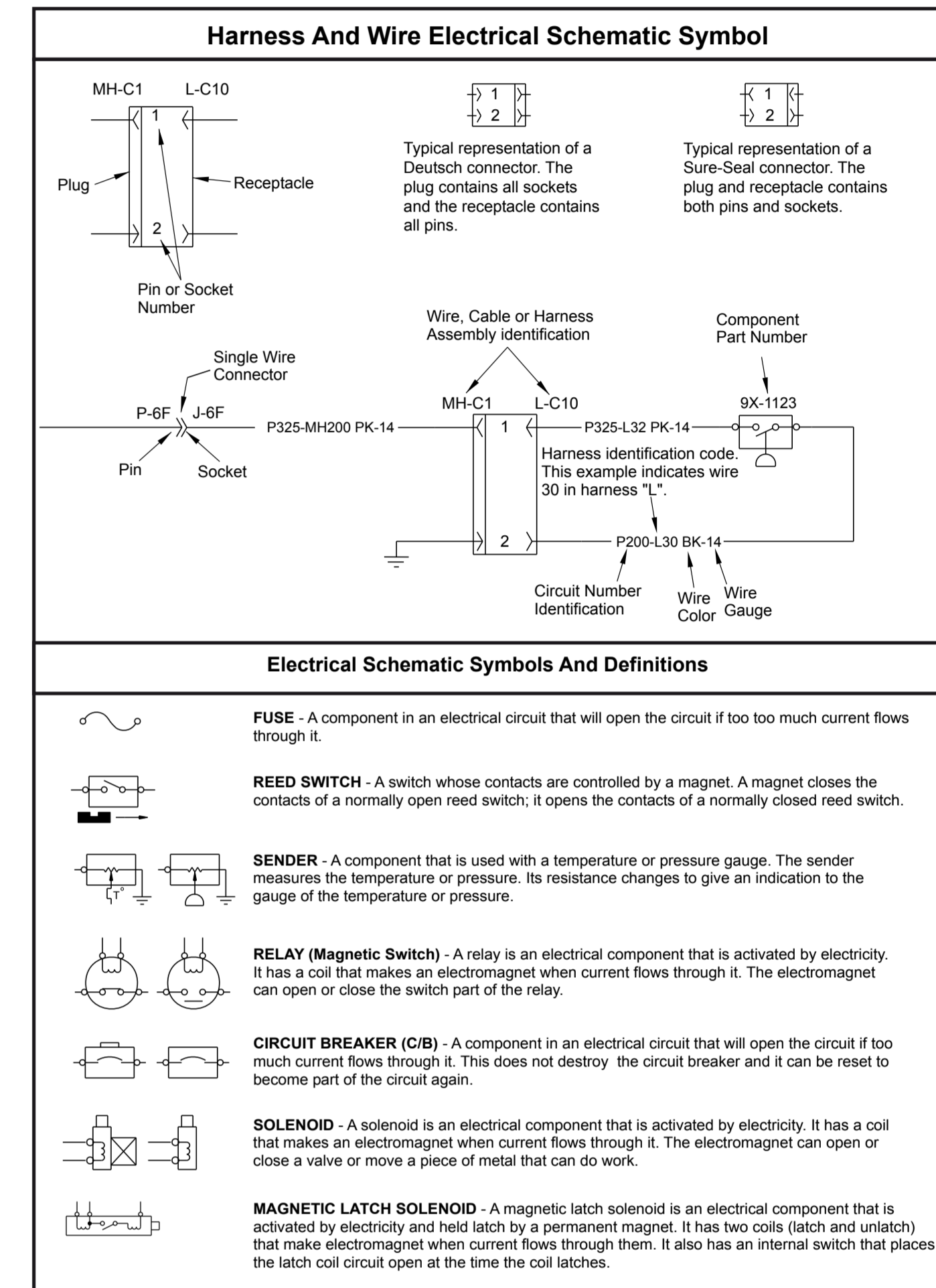
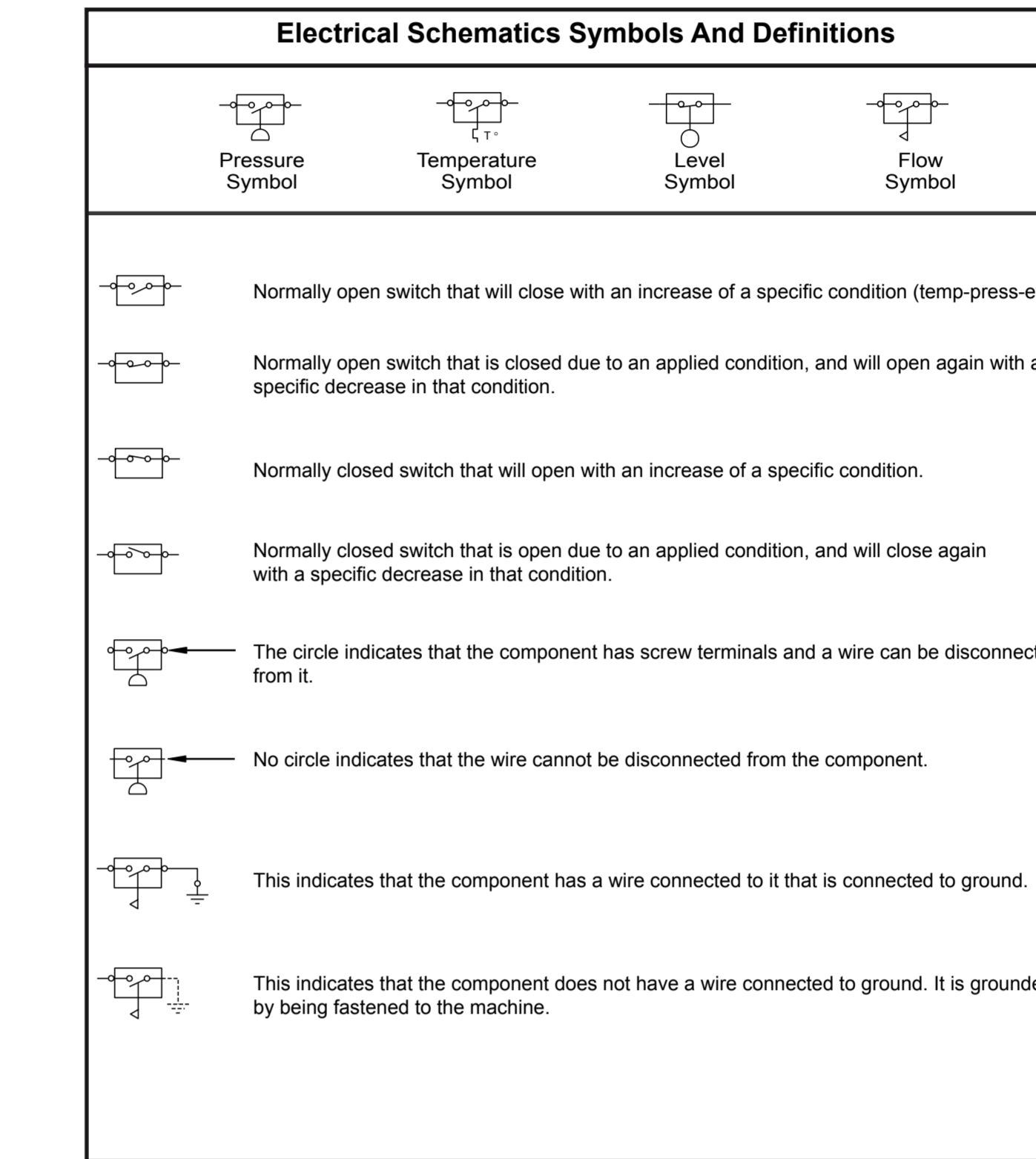


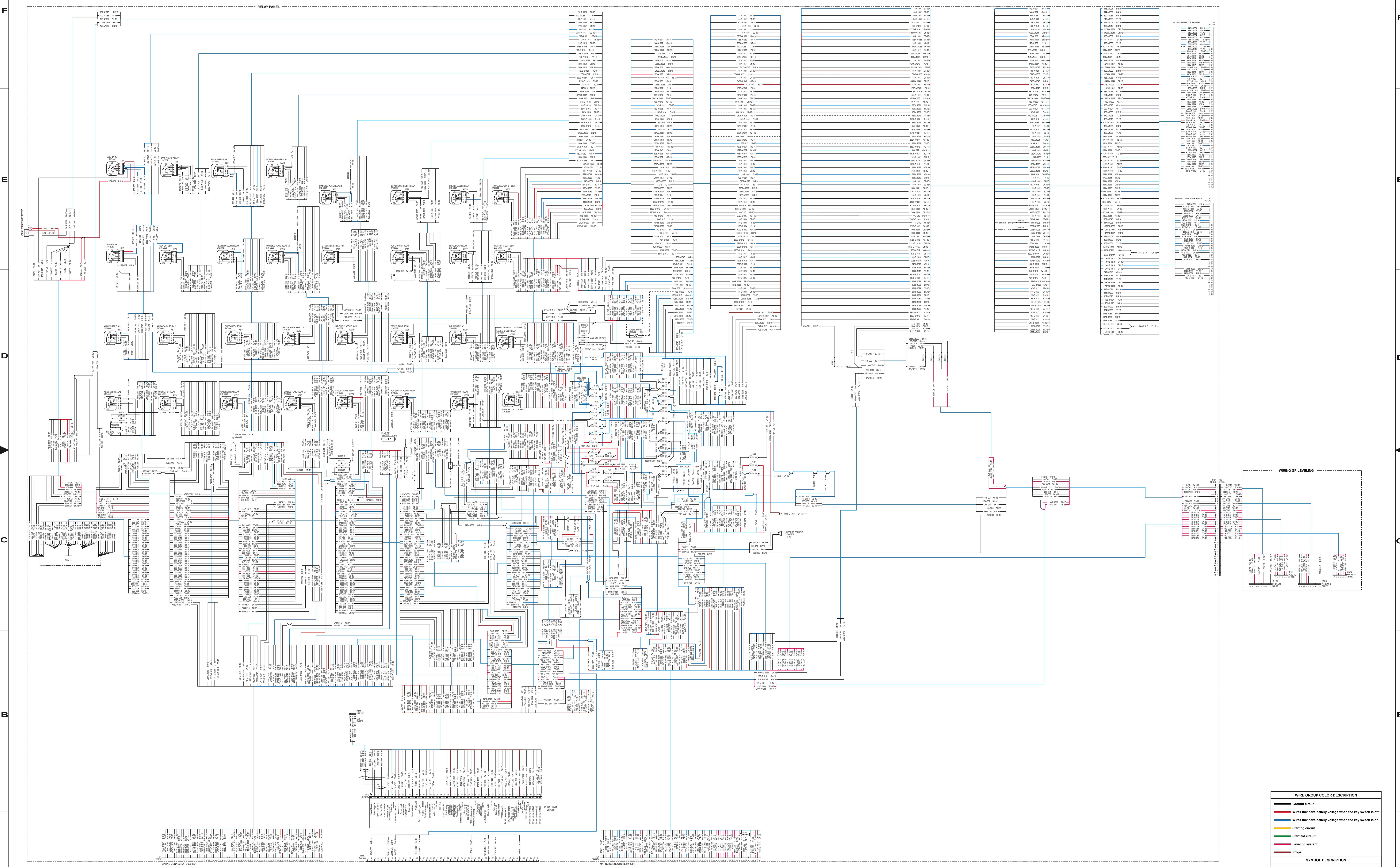
OPERATOR'S PLATFORM - RELAY, FUSES, COMPONENTS

Component Location			
Component	Part Number	Machine Location	Schematic Location
MATING CONNECTOR E	103-0213	1	A5
MATING CONNECTOR (40 Pin) (C98)	9X-1343	2	A6
MATING CONNECTOR D	103-0213	3	A7
PLUS1 UNIT	287396	4	B5
PLUG (C98)	273-8132	5	B6
3-Pin CONNECTOR (C98)	3E-3370	6	B6
3-Pin PLUG (C100)	155-2287	7	B6
PLUG AS 3	288127	8	C1
PLUG AS 4	288127	9	C1
PLUG AS 1	284660	10	C1
PLUG AS 2	284660	11	C1
HORN AS CONSOLE	174-7675	12	C4
FLASHER (OPT)	108-0358	13	D5
FLASHER	108-0358	14	D6
MATING CONNECTOR B	8T-8834	15	E2
MATING CONNECTOR (40 Pin) (B1)	9X-1343	16	E2
MATING CONNECTOR Y	155-2287	17	E8
MATING CONNECTOR A	9X-4391	18	F2
MATING CONNECTOR (40 Pin) (A1)	103-0213	19	F2

RELAYS (DASHBOARD)			
Relay	Component	Part Number	Schematic Location
KE1	MAIN RELAY 1	270-5062	E8
KE2	MAIN RELAY 2	270-5062	E8
KE3	AUXILIARY START RELAY 1	270-5062	D8
KE4	AUXILIARY START RELAY 2	270-5062	D8
KE5	STOP ENGINE RELAY	270-5062	E8
KE6	GEN ON RELAY	270-5062	E8
KE7	AUXILIARY GEN ON RELAY 2	270-5062	D8
KE8	AUXILIARY GEN ON RELAY 1	270-5062	D8
KE9	DRUM INSPECTION RELAY	270-5062	E7
KE10	REAR RIGHT HAND COLUMN RELAY	270-5062	E7
KE11	CONSTANCY RELAY	270-5062	D7
KE12	WATER SPRAY RELAY	270-5062	D7
KE13	MILDBOARD ON RELAY	270-5062	E7
KE14	LEFT HAND DOWN SIDE PLATE RELAY	270-5062	E7
KE15	LEFT HAND UP SIDE PLATE RELAY	270-5062	D7
KE16	LEFT HAND UP/DOWN SIDE PLATE RELAY	270-5062	D7
KE17	RIGHT HAND DOWN SIDE PLATE RELAY	270-5062	E7
KE18	RIGHT HAND UP SIDE PLATE RELAY	270-5062	E7
KE19	RIGHT HAND UP/DOWN SIDE PLATE RELAY	270-5062	D7
KE20	FLOOD LIGHTS RELAY	270-5062	D7
KE21	COLUMN HEIGHT BYPASS RELAY	270-5062	E6
KE22	DRUM ON AUXILIARY RELAY	270-5062	E6
KE24	PROPEL PUMP RELAY	270-5062	D6
KE25	AUXILIARY SENSOR POWER RELAY	270-5062	D6
KE26	PROPEL LEVER RELAY	270-5062	E6
KE27	LEVELLING GP RELAY	270-5062	E6
KE28	DRUM ON RELAY	270-5062	D6
KE29	WATER PUMP RELAY	270-5062	D6
KE30	PROPEL BACKWARD RELAY	270-5062	E6
KE31	REAR RIGHT HAND STEER RELAY	270-5062	E6
KE32	ENGINE SPEED RELAY	270-5062	D6
KE33	REAR RIGHT HAND COLUMN LOCK RELAY	270-5062	D6

FUSES (DASHBOARD)			
Fuse	Fuse Protection	Amp	Part Number Schematic Location
FU1	Main fuse	10	271-4223 D6
FU2	Rotating beacon, hazard lights	10	271-4223 D5
FU3	Lights switch	10	271-4223 D6
FU4	Horn, backup alarm	10	271-4223 D6
FU5	Propel lever	10	271-4223 D5
FU6	Water pump	10	271-4223 D6
FU7	Engine ECM	10	271-4223 D6
FU8	Ignition key	10	271-4223 D5
FU9	Work lights	10	271-4223 C5
FU10	Side lights	10	271-4223 D5
FU11	Work lights	20	270-6709 C5
FU12	Engine ECM	10	271-4223 C5
FU13	Work lights	10	271-4223 C5
FU14	Propel control system	10	271-4223 C5
FU15	Circuits enabled - rotor drum enabled, legs movement	10	271-4223 C5
FU16	Milddboard control	10	271-4223 C5
FU17	Propel speed control	10	271-4223 D5
FU18	Grade/Slope system	10	271-4223 D5
FU20	Conveyors, ON-Standby switch	10	271-4223 D5
FU21	Artisab, plate, rotor side plates	10	271-4223 D5
FU22	Water pump	10	271-4223 D5
FU23	High pressure water pump, water filling pump (if equipped)	10	271-4223 D5
FU24	Display	10	271-4223 D5
FU25	Water pump	10	271-4223 D5
FU26	Sensor power positive	10	271-4223 D5
FU27	Grade/Slope system	10	271-4223 C5
FU28	Reading lights	10	271-4223 C5
FU29	Dashboard lights, front reading lights	10	271-4223 C5
FU30	Front reading lights	10	271-4223 C4
FU31	Water pump	10	271-4223 C4
FU32	Grade/Slope system	10	271-4223 C4





THIS DIAGRAM IS FOR THE PM102 COLD PLANER 284-8645 CH. 04
 COMPONENTS ARE SHOWN INSTALLED ON A FULLY OPERABLE MACHINE
 WITH THE KEY AND ENGINE OFF AND PROPEL CONTROL IN NEUTRAL.

WIRE GROUP COLOR DESCRIPTION	
—	Ground circuit
—	Wires that have battery voltage when the key switch is off
—	Wires that have battery voltage when the key switch is on
—	Starting circuit
—	Start aid circuit
—	Levelling system
—	Propel

SYMBOL DESCRIPTION	
□	Blade, spade, ring, or screw terminal
•	Splice
+	Circuit not connected
⊥	Electrical connection to machine structure
⊥	Internal electrical connection to surface of component
⊥	Connector
⊥	Attach wire, cable, component
⊥	Circuit grouping designation

COLOR ABBREVIATIONS			
RD	Red	GY	Grey
WH	White	PU	Purple
OR	Orange	BR	Brown
YL	Yellow	GN	Green
PK	Pink	BU	Blue
BK	Black		

Schematic

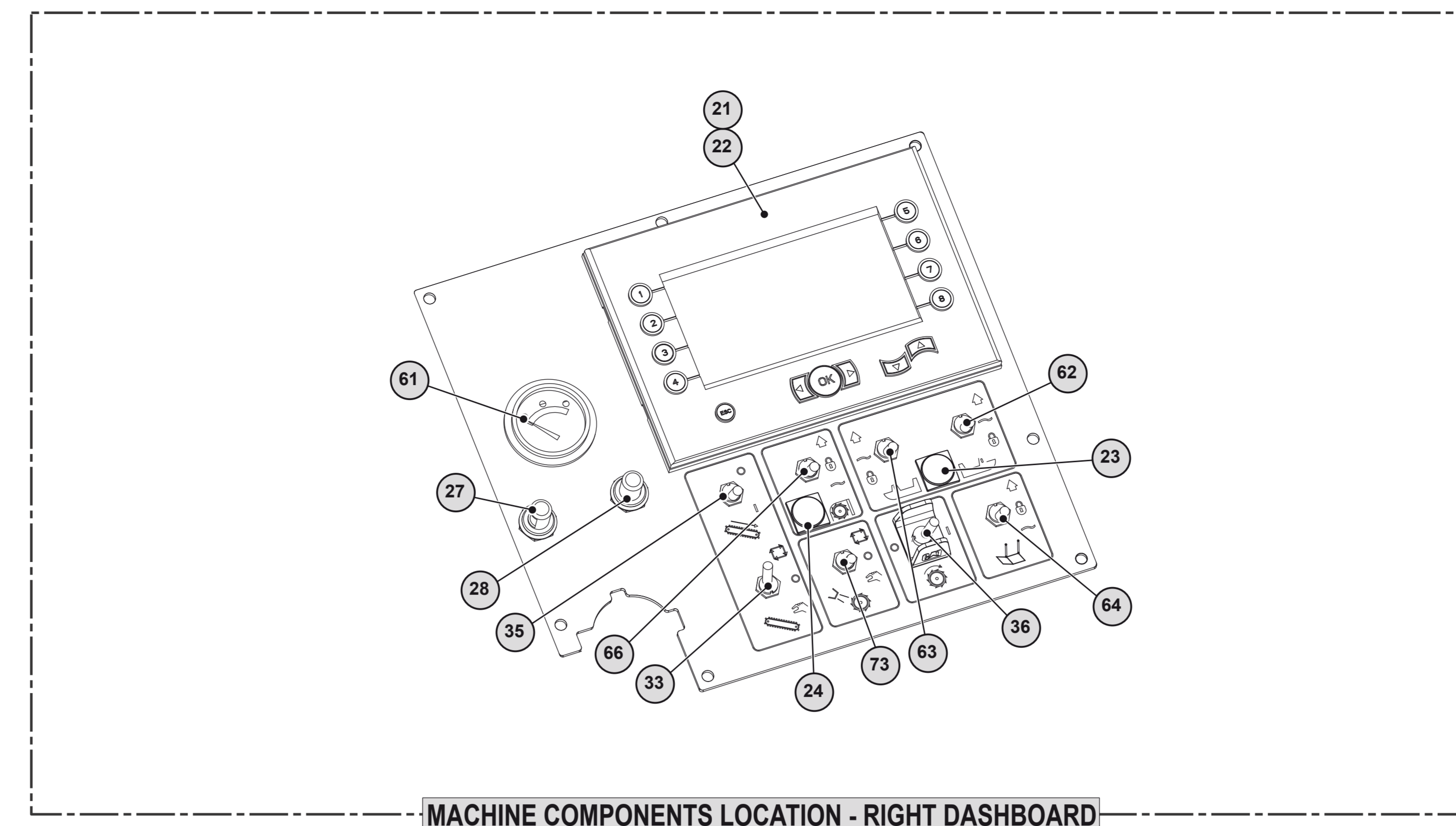
PM102 Cold Planer Electrical System

22X250 Up (Machine)

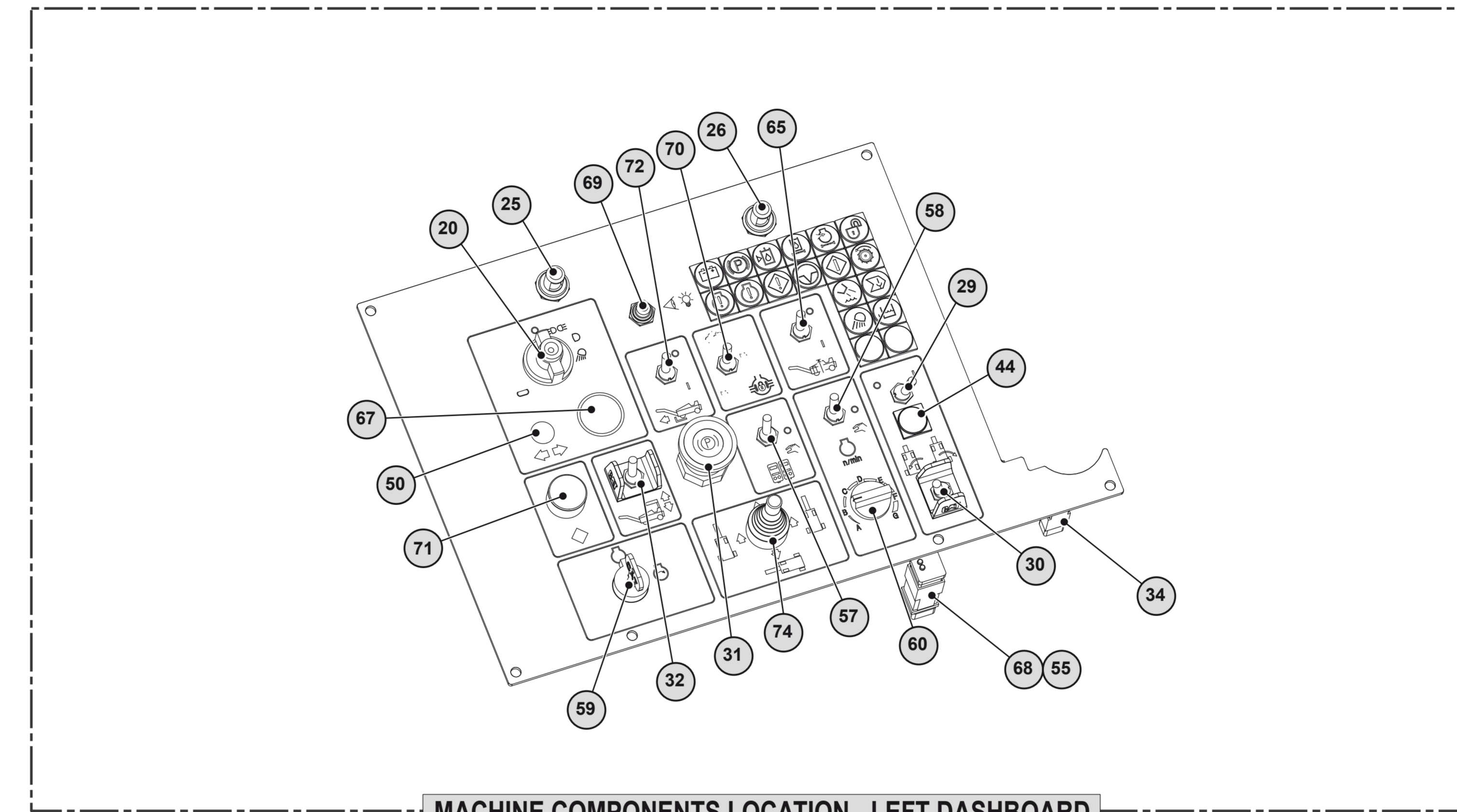
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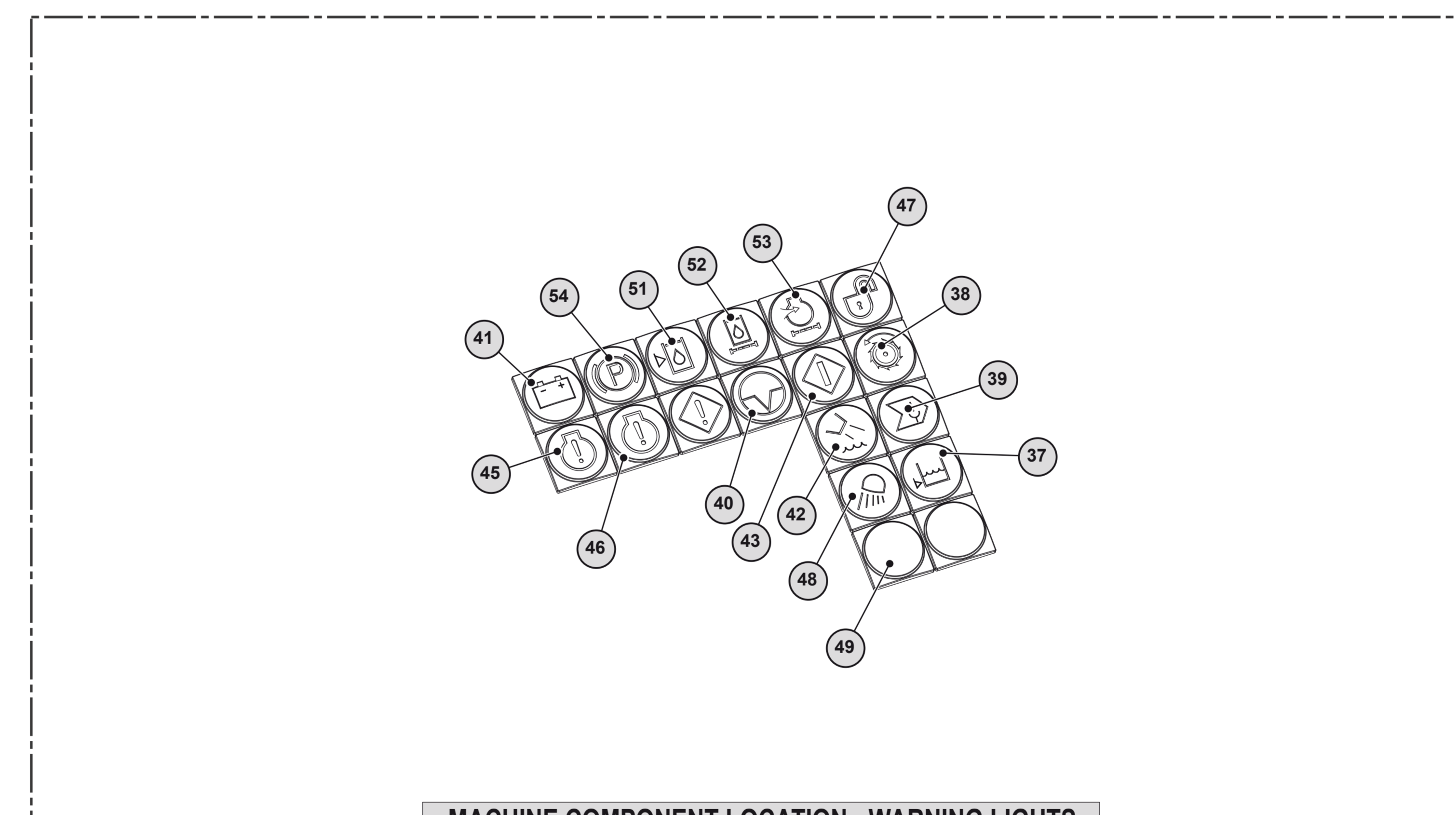
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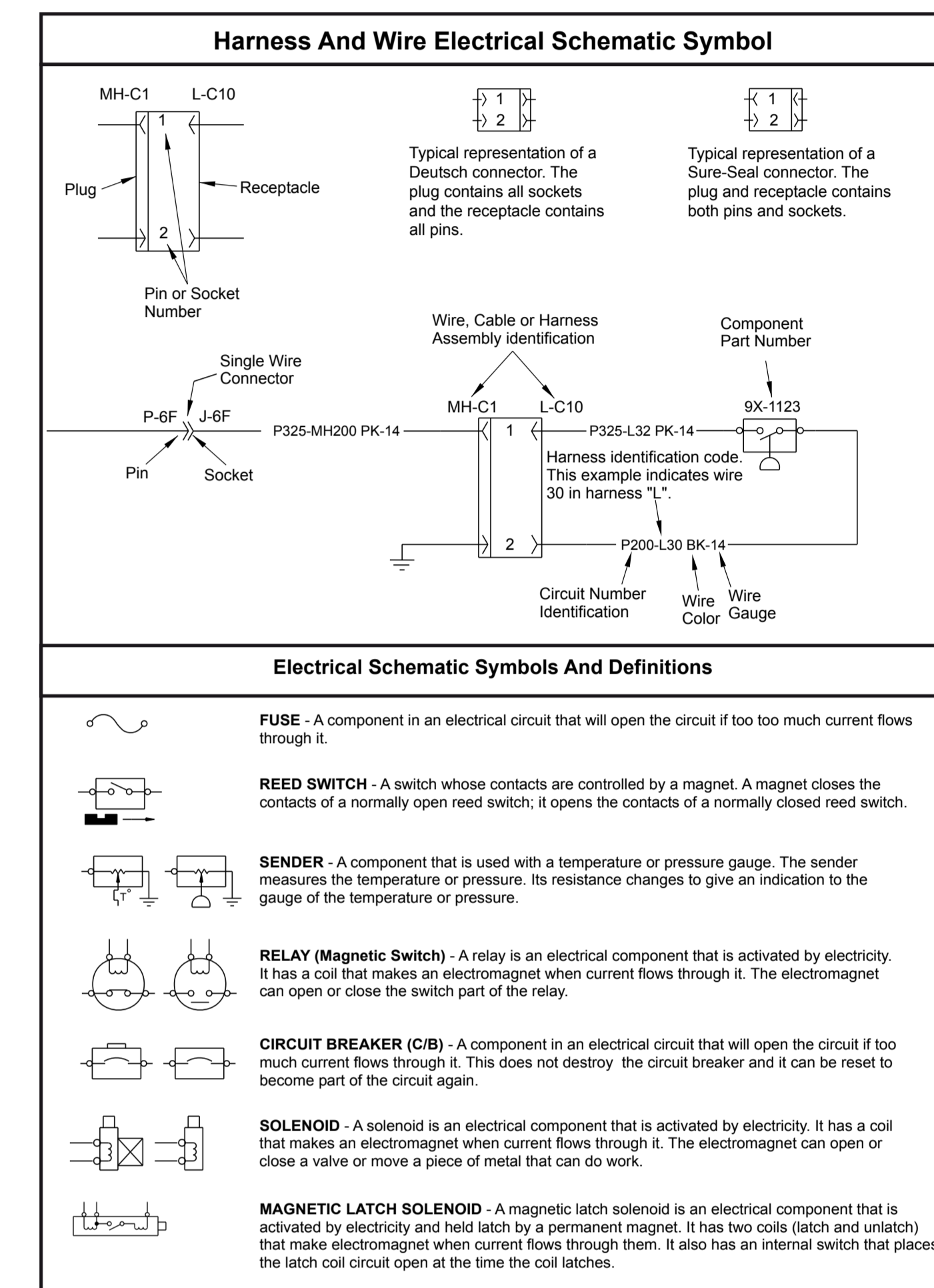
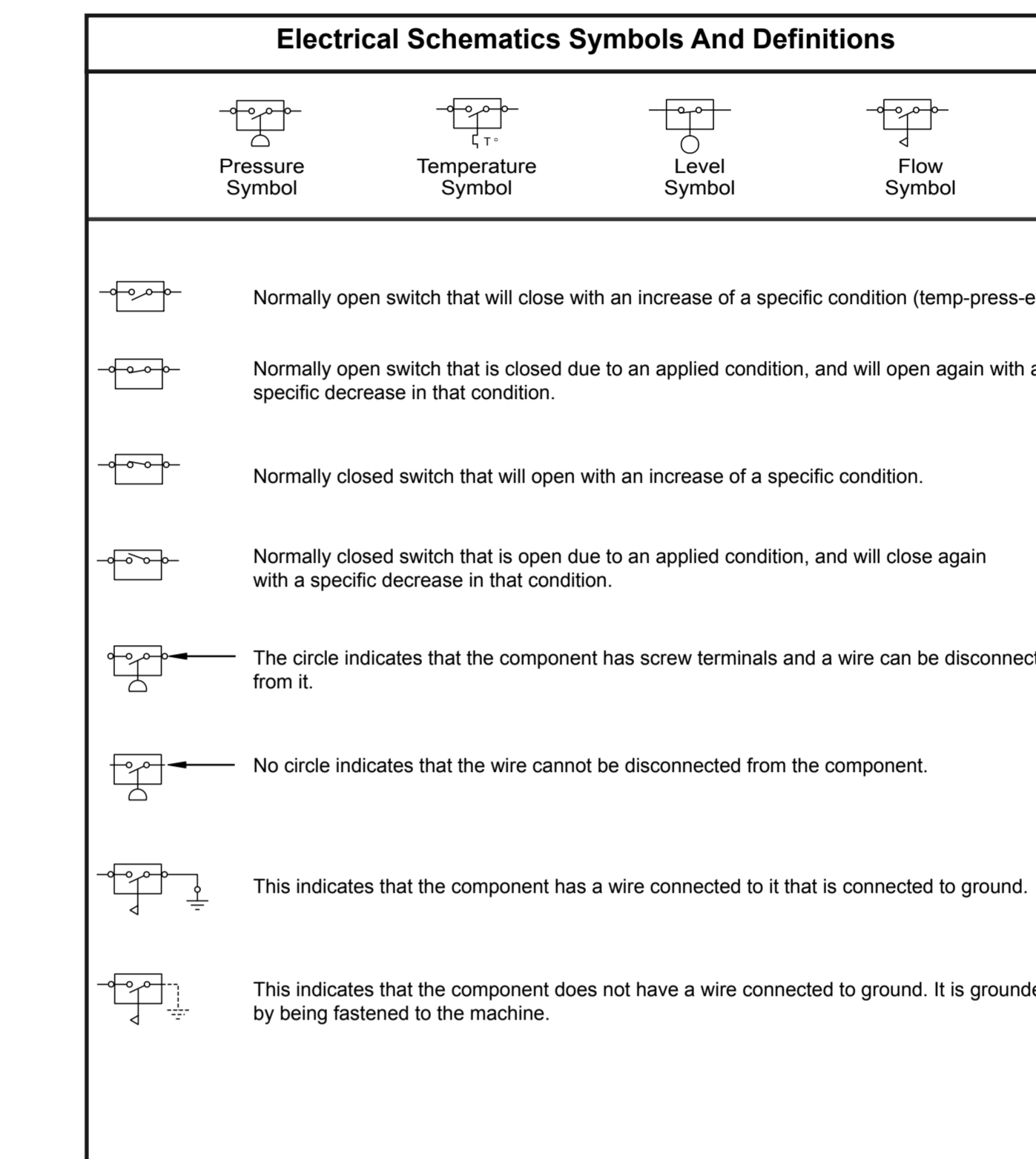
MACHINE COMPONENTS LOCATION - RIGHT DASHBOARD



MACHINE COMPONENTS LOCATION - LEFT DASHBOARD



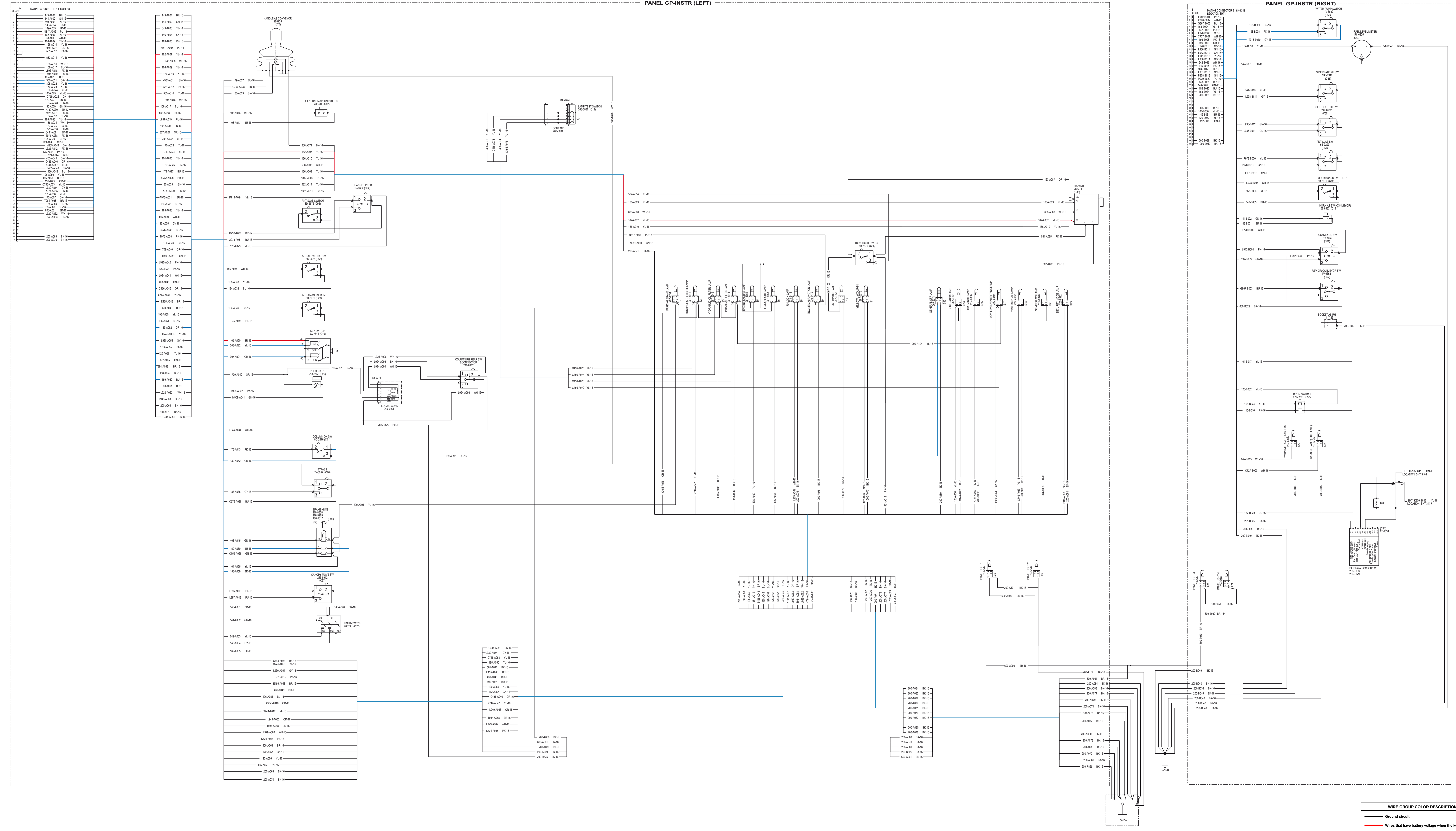
MACHINE COMPONENT LOCATION - WARNING LIGHTS



Component Location			
Component	Part Number	Machine Location	Schematic Location
LIGHT SWITCH	263336	20	B6
DISPLAY AS (COLOR)	263-7093	21	C1
DISPLAY AS (BW)	263-7079	22	C1
WARNING LAMP (SIDEPLATE)	267-6376	23	C1
WARNING LAMP (FLASHER)	267-6378	24	C2
PANEL LIGHT 3	7N-9876	25	C2
PANEL LIGHT 4	7N-9876	26	C2
PANEL LIGHT 1	7N-9876	27	C3
PANEL LIGHT 2	7N-9876	28	C3
COLUMN ON SWITCH	80-2876	29	C7
BYPASS	1V-8652	30	C7
BRAKE/NOB	1V-8338	31	C7
CANOPY MOVE SWITCH	246-8912	32	C7
CONVEYOR SWITCH	1V-8652	33	D1
SOCKET AS (R)	1V-2311	34	D1
REV DIR CONVEYOR SWITCH	1V-8652	35	D1
DRUM SWITCH	077-8000	36	D2
LOW LEVEL WATER TANK LAMP	267-6396	37	D3
DRUM ROT LAMP	267-6396	38	D3
SECURITY MODE LAMP	267-6372	39	D3
GENERAL OFF LAMP	267-6371	40	D3
GENERATOR LAMP	267-6338	41	D3
WATER SPRAY LAMP	270-2482	42	D3
ENGINE MALFUNCTION LAMP	270-2479	43	D4
YELLOW (COLUMN)	267-6375	44	D4
ENGINE FAILURE LAMP	267-6352	45	D4
ENGINE MALFUNCTION LAMP	270-2479	46	D4
LOOKUP LAMP	273-8413	47	D4
FLOOD LIGHT LAMP	267-6363	48	D4
TURN SIGNALS LAMP	267-6358	49	D4
TURN LIGHT SWITCH	80-2876	50	D4
HYDRAULIC OIL LEVEL LAMP	267-6342	51	D5
HYDRAULIC OIL FILTER LAMP	267-6345	52	D5
INTAKE AIR FILTER LAMP	267-6344	53	D5
PARKING BRAKE LAMP	267-6334	54	D5
PLUGS - COIN	245-0164	55	D6
COLUMN REAR SWITCH & CONNECTOR	246-8912	56	D6
AUTO LEVELING SWITCH	80-2876	57	D7
AUTO MANUAL RPM	80-2876	58	D7
KEY SWITCH	90-7681	59	D7
RHEOSTAT 1	213-8155	60	D7
FUEL LEVEL METER	170-8365	61	E1
SIDE PLATE RH SWITCH	246-8912	62	E1
SIDE PLATE LH SWITCH	246-8912	63	E1
ANTI-SLAB SWITCH	5E-9209	64	E1
HORN AS SWITCH (CONVEYOR)	158-8652	65	E1
MOLDINGBOARD SWITCH	80-2876	66	E1
HAZARD	288271	67	E3
CONT TIP	269-0834	68	E5
LAMP TEST SWITCH	269-0837	69	E5
CHANGE SPEED	1V-8652	70	E6
GENERAL ON BUTTON	268381	71	E7
ANTI-SLAB SWITCH	80-2876	72	E7
WATER PUMP SWITCH	1V-8652	73	F1
HANDLE AS CONVEYOR	288235	74	F7

PANEL GP-INSTR (LEFT)

PANEL GP-INSTR (RIGHT)



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THIS DIAGRAM IS FOR THE PM102 COLD PLANER 284-8645 CH. 04
 COMPONENTS ARE SHOWN INSTALLED ON A FULLY OPERABLE MACHINE WITH THE KEY AND ENGINE OFF AND PROPEL CONTROL IN NEUTRAL.

WIRE GROUP COLOR DESCRIPTION	
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Blue	Wires that have battery voltage when the key switch is off
Red	Wires that have battery voltage when the key switch is on
Green	Starting circuit
Yellow	Start aid circuit
Purple	Leveling system
Pink	Propel

SYMBOL DESCRIPTION	
⊙	Blade, speed, ring, or screw terminal
⊕	Splice
⊖	Circuit not connected
⊚	Electrical connection to machine structure
⊛	Internal electrical connection to surface of component
⊜	Connector
⊝	Aitch wire, cable, component
⊞	Circuit grouping designation

COLOR ABBREVIATIONS			
RD	Red	GY	Gray
WH	White	PU	Purple
OR	Orange	BR	Brown
YL	Yellow	GN	Green
PK	Pink	BU	Blue
BK	Black		

Schematic

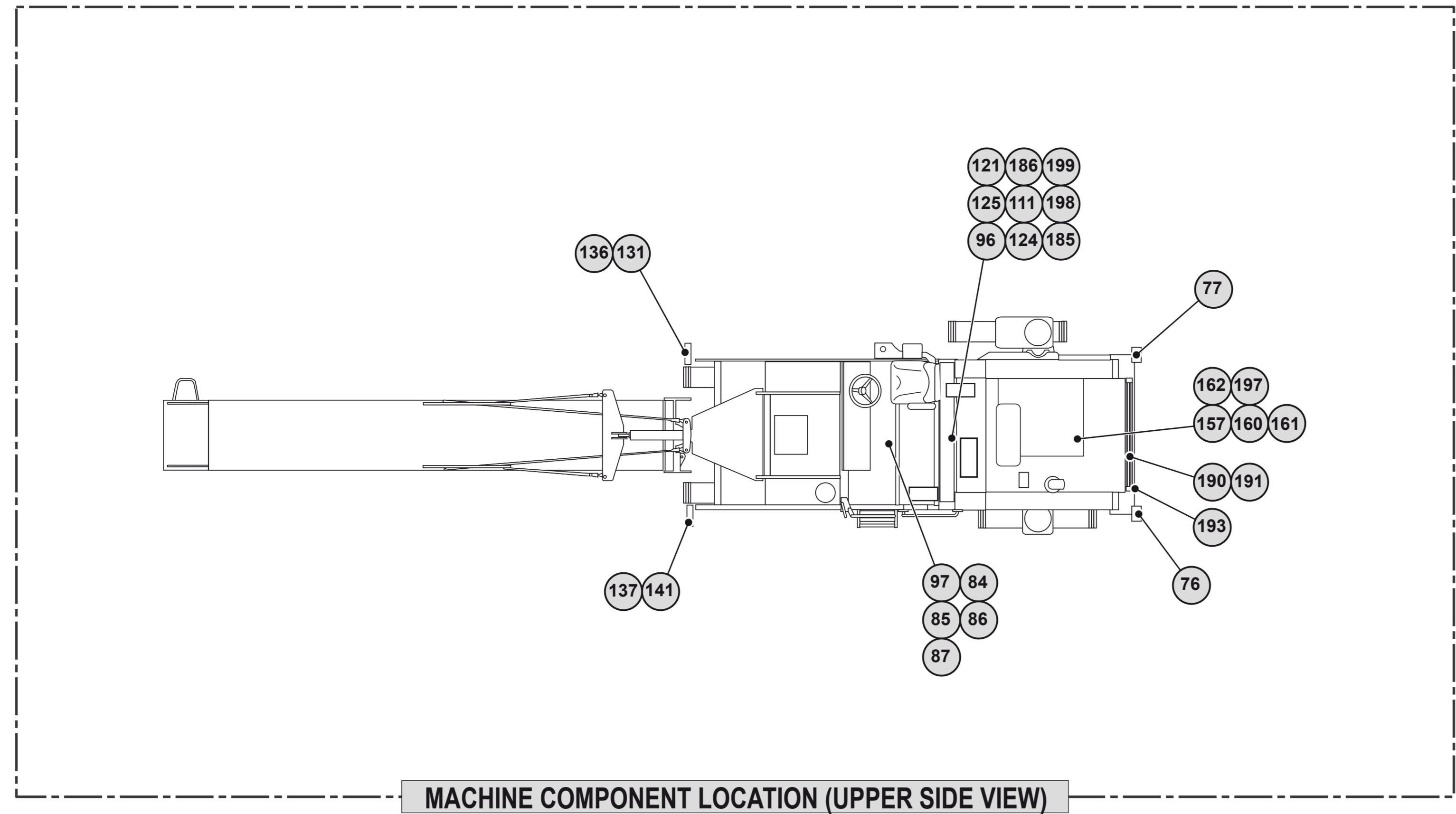
PM102 Cold Planer Electrical System

22X250 Up (Machine)

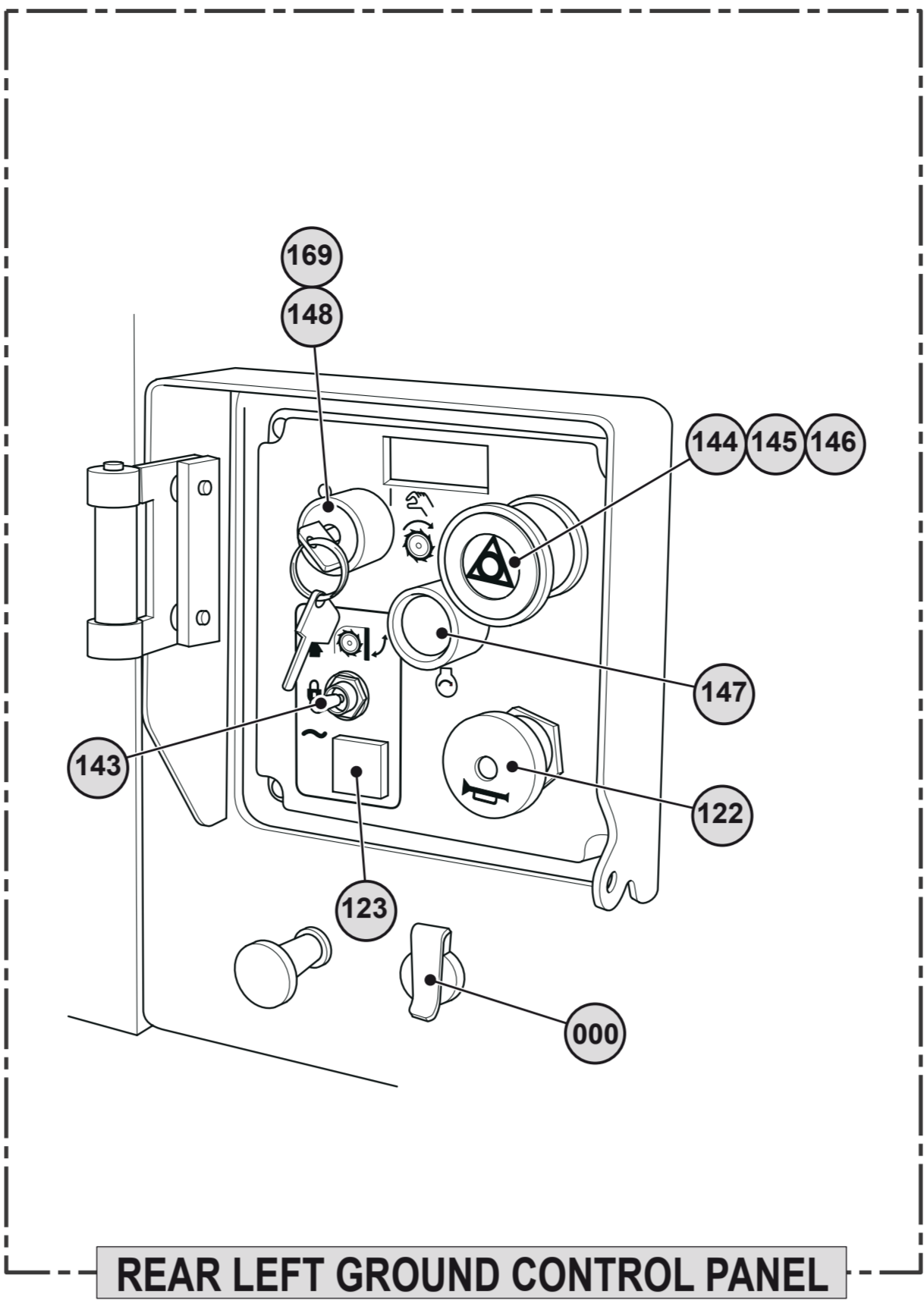
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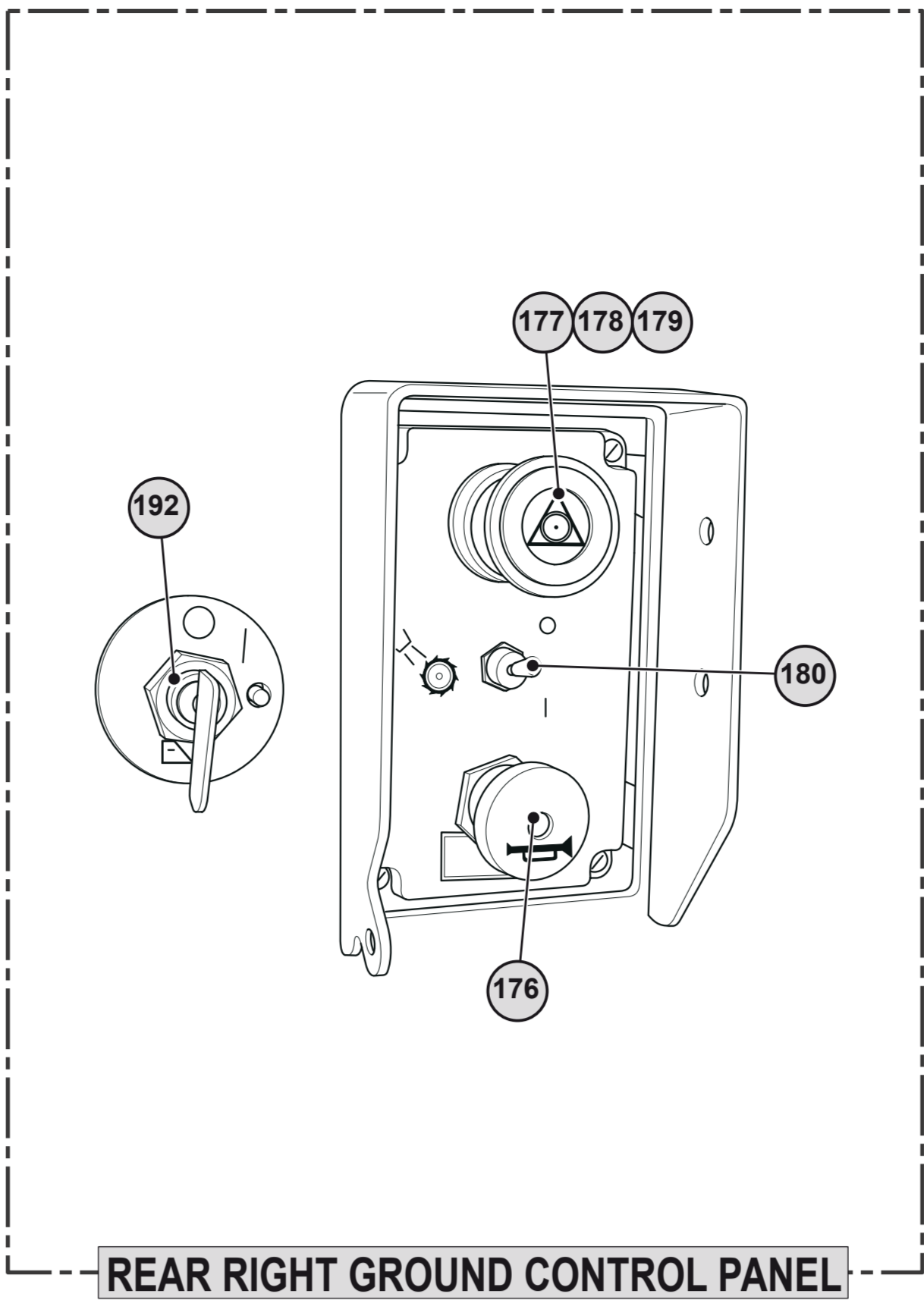
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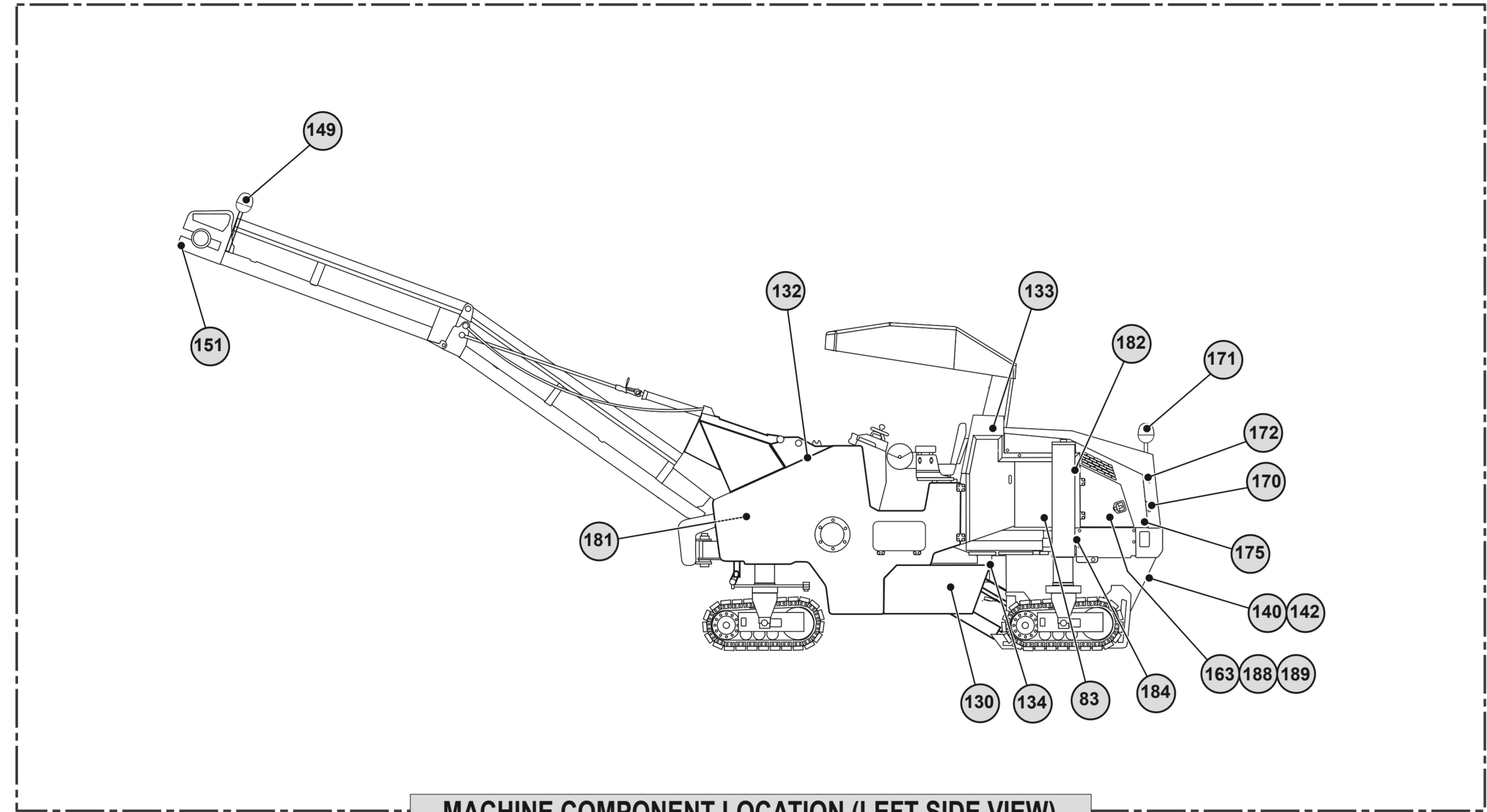
MACHINE COMPONENT LOCATION (UPPER SIDE VIEW)



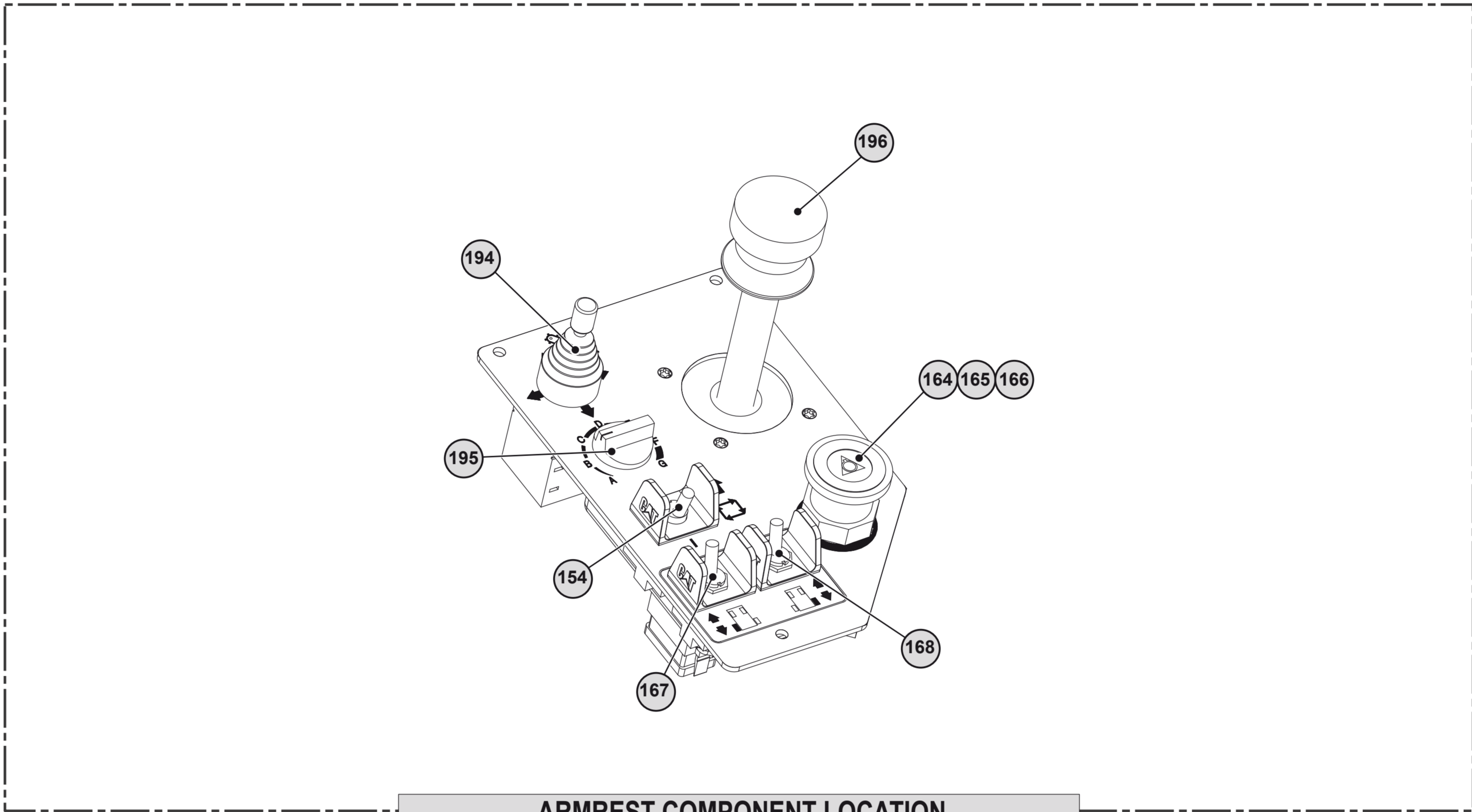
REAR LEFT GROUND CONTROL PANEL



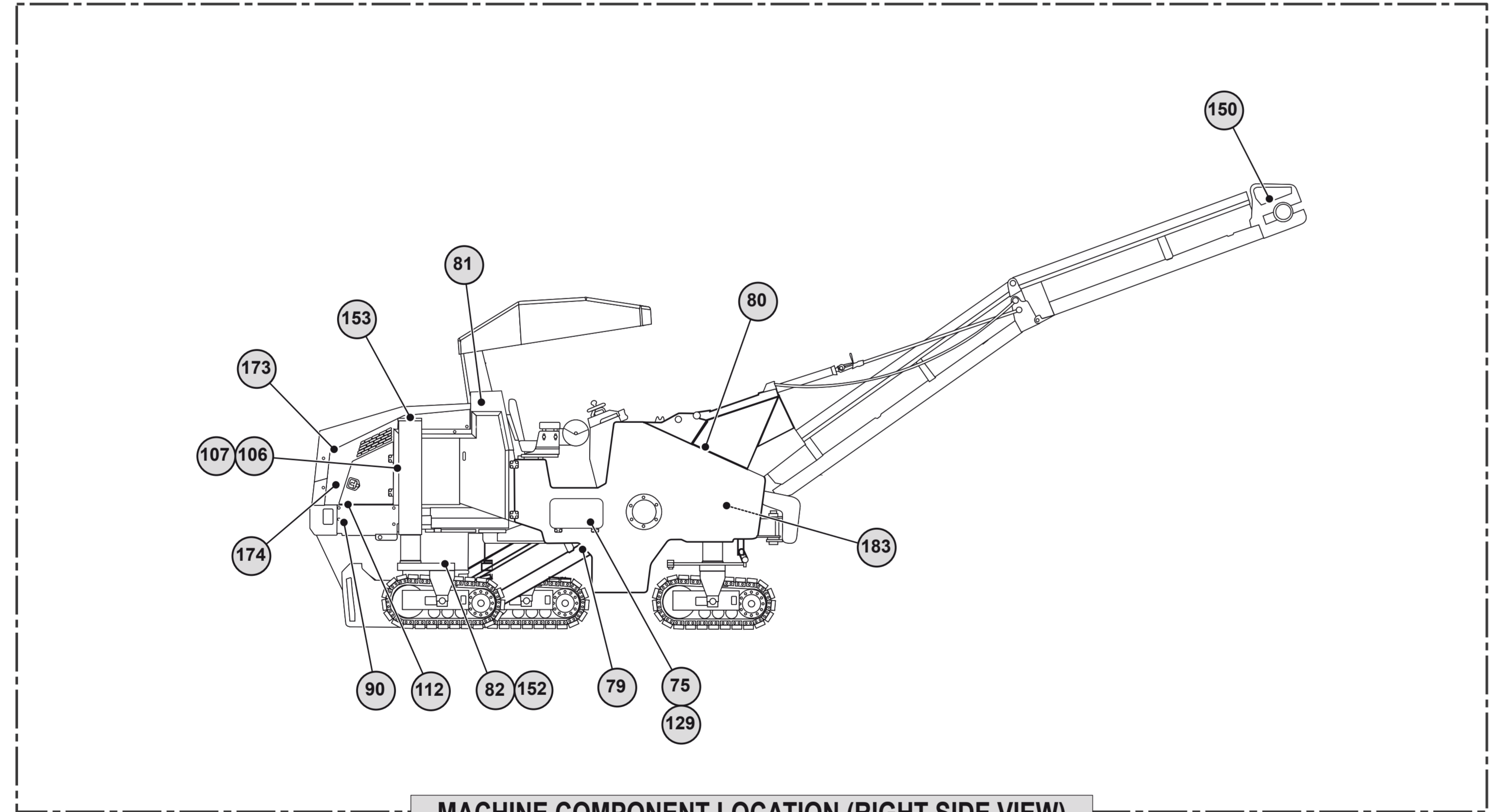
REAR RIGHT GROUND CONTROL PANEL



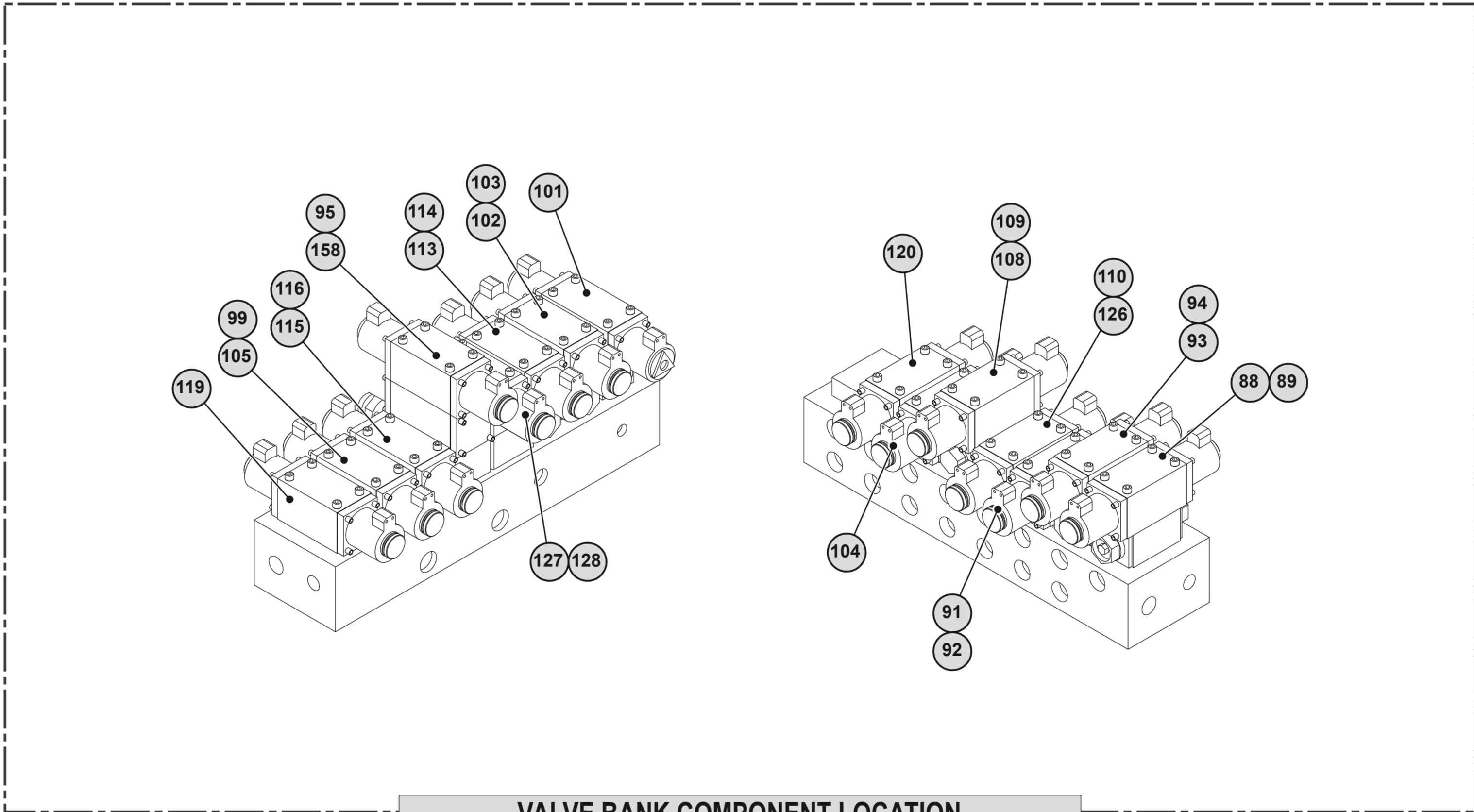
MACHINE COMPONENT LOCATION (LEFT SIDE VIEW)



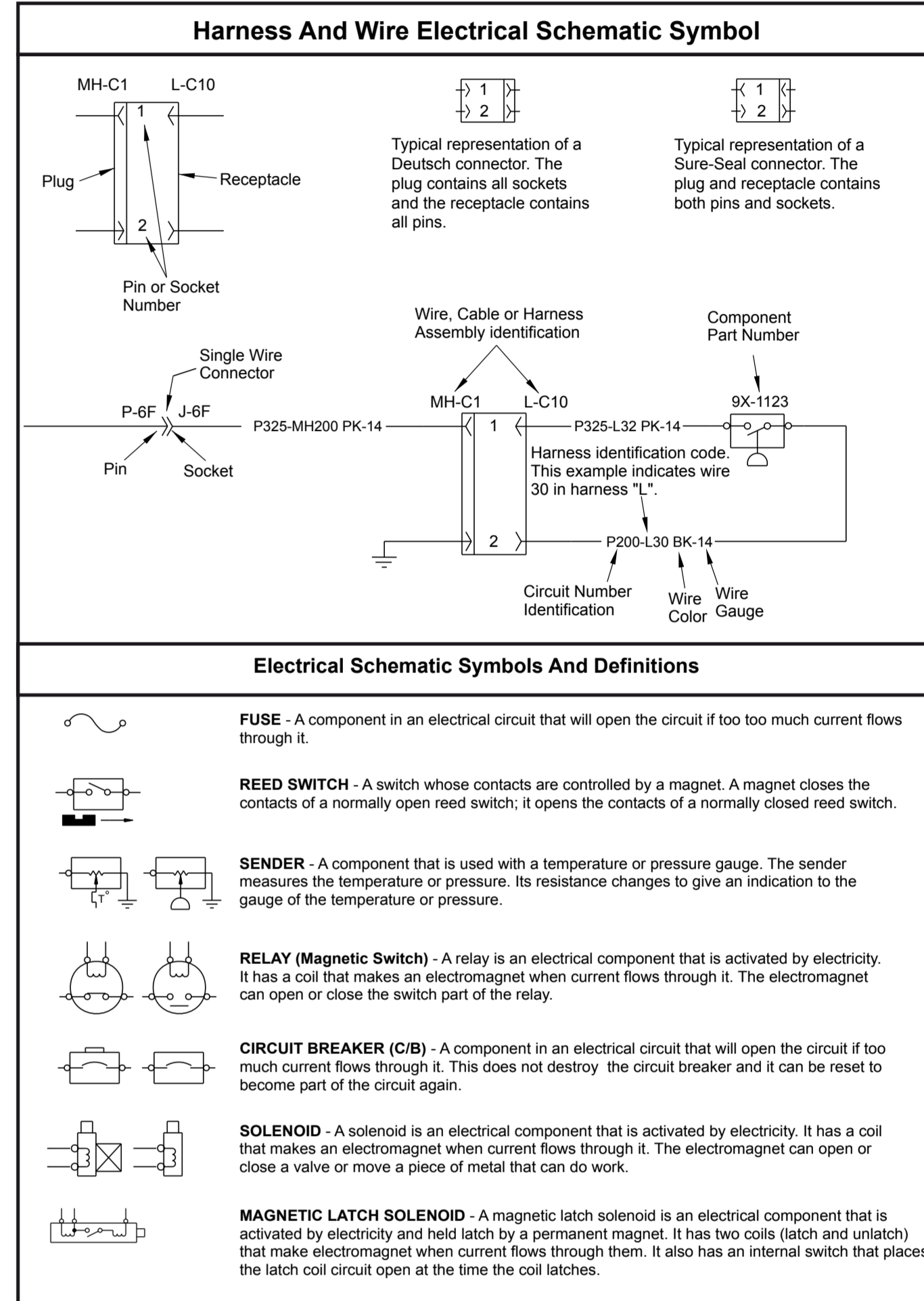
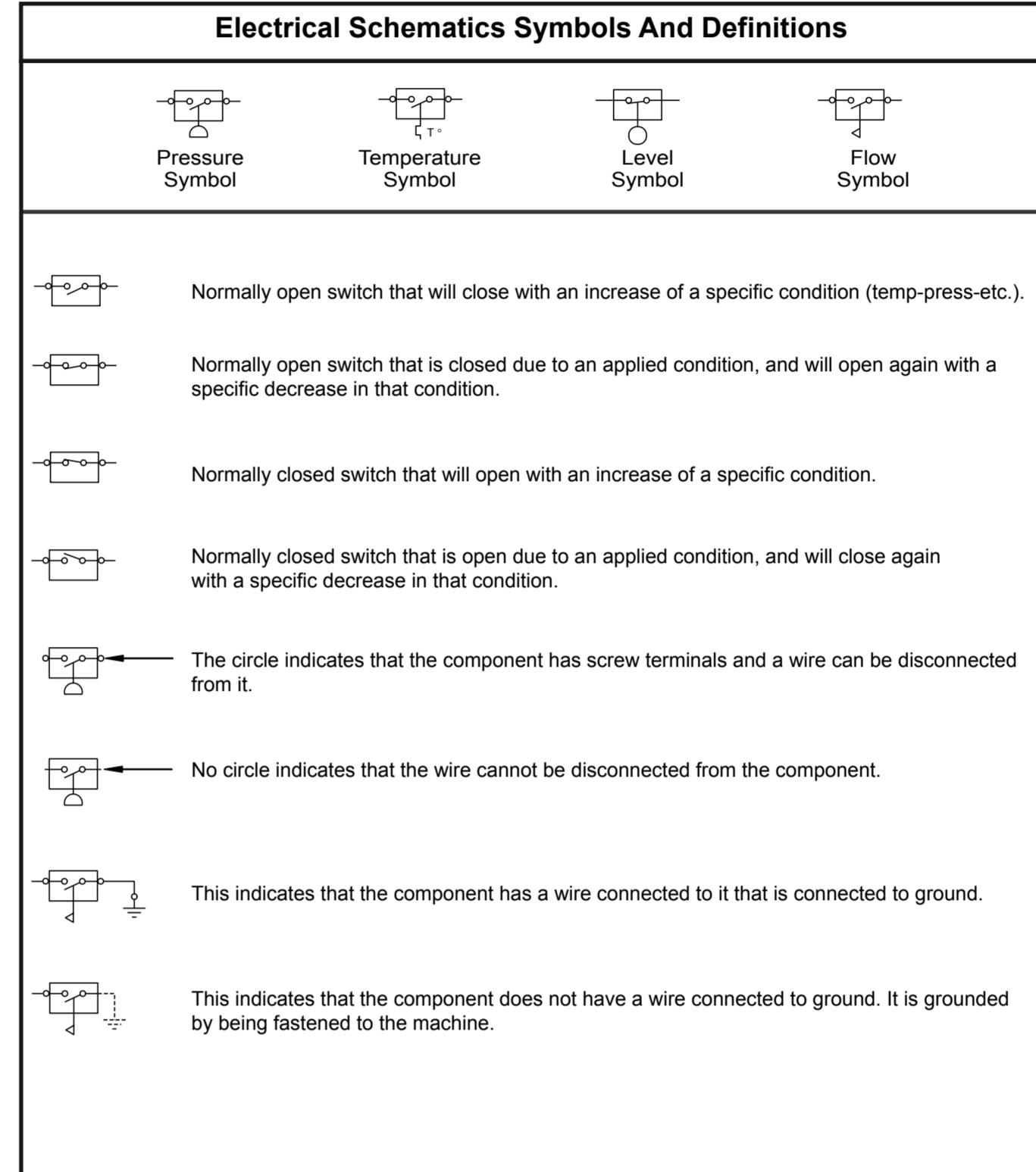
ARMREST COMPONENT LOCATION



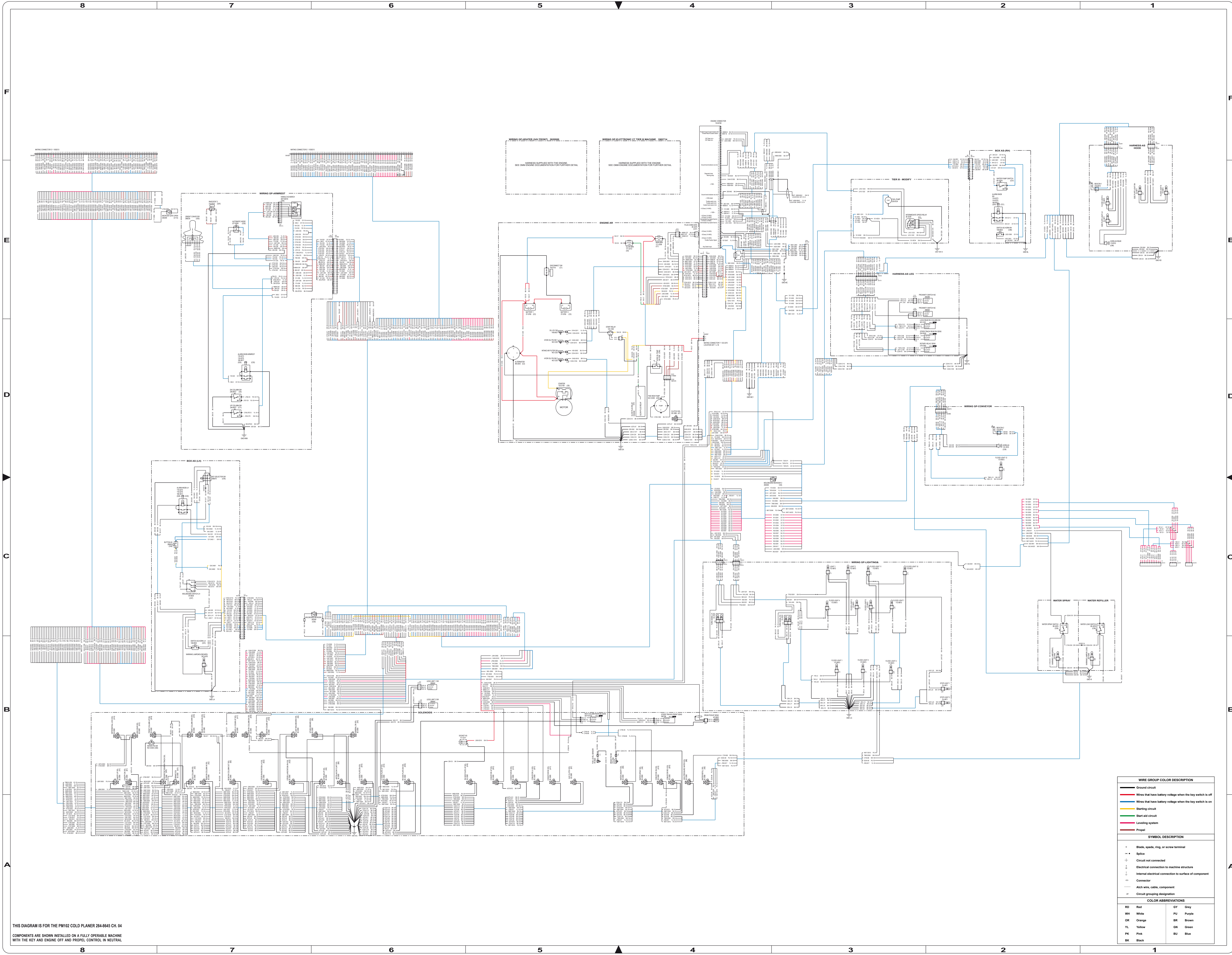
MACHINE COMPONENT LOCATION (RIGHT SIDE VIEW)



VALVE BANK COMPONENT LOCATION



Component Location				Component Location			
Component	Part Number	Machine Location	Schematic Location	Component	Part Number	Machine Location	Schematic Location
WARNING LAMP (OVERLOAD)	207-6300	75	B1	FLOOD LIGHT 10	172-9973	139	C3
STOP LIGHT 1	204-6171	76	B2	HOLDBOARD MICROSWITCH 2	203399	140	C4
STOP LIGHT 2	204-6171	77	B2	TURN SIGNAL LH	204-6522	141	C4
FLOOD LIGHT 1	172-9973	79	B3	HOLDBOARD MICROSWITCH 1	203399	142	C7
FLOOD LIGHT 2	172-9973	80	B3	HOLDBOARD SWITCH LH	21-8004	143	C7
FLOOD LIGHT 3	172-9973	81	B3	ALARM KNOB LH	118-5273	144	C7
STEER TRACKS FRONT SENSOR	282198	82	B4	SWITCH-OPERATOR	118-5275	145	C7
DIRM FLOPPY SENSOR	40-9620	83	B4	BLOCK-CONTACT	180-5617	146	C7
CONVEYOR RBV SOLENOID	3E-3380	84	B4	BUTTONS	208851	147	C7
CONVEYOR ON SOLENOID	3E-3380	85	B4	KEY SELECTOR SW	208875	148	C7
HIGH PRESSURE WATER SOLENOID	3E-3380	86	B4	BEACON 2	270-9010	149	D2
WATER REFILL SOLENOID	3E-3380	87	B4	FLOOD LIGHT 12	172-9973	150	D2
WATER ON/OFF SOLENOID	3E-3380	88	B4	HORN AS	174-7875	151	D2
WATER SPRAY SOLENOID	3E-3380	89	B4	STEER TRACK REAR RH SENS	224-5530	152	D2
DN COLUMN REAR RH SENSOR	407101016	90	B5	PROXIMITY SENS	219-2082	153	D2
CONVEYOR DOWN SOLENOID	3E-3380	91	B5	AUTOMATIC MODE SWITCH	077-8200	154	D2
CONVEYOR UP SOLENOID	3E-3380	92	B5	STEER TRACK REAR RH SENS	224-5530	155	D3
CONVEYOR LH SOLENOID	3E-3380	93	B5	PROXIMITY SENS	219-2082	156	D3
CONVEYOR RH SOLENOID	3E-3380	94	B5	HYDR OIL TEMP	145-7028	157	D4
AUXILIARY CLUTCH SOLENOID	3E-3380	95	B5	CLUTCH SOLENOID	3E-3380	158	D4
BRAKE P/S SW	270-9383	96	B5	MATING CONNECTOR Y 1	3E-3370	159	D4
FUEL LEVEL SENSOR	206-9602	97	B5	ALTERNATOR	99-3043	160	D5
SOCKET AS	117-2311	98	B5	OIL LEV SW	148-8437	161	D5
RH SIDE PLATE UP SOLENOID	3E-3380	99	B5	STARTER	130-2196	162	D5
RH SIDE PLATE DOWN SOLENOID	117-2311	100	B5	START RELAY	126-1302	163	D5
GENERAL ON SOLENOID	3E-3380	101	B6	ALARM KNOB ARMREST	118-5273	164	D7
ANTILAR UP SOLENOID	3E-3380	102	B6	SWITCH-OPERATOR	118-5275	165	D7
ANTILAR DN SOLENOID	3E-3380	103	B6	BLOCK-CONTACT	180-5617	166	D7
LH SIDE PLATE UP SOLENOID	3E-3380	104	B6	DN COLUMN SWITCH	248-8912	167	D7
RH SIDE PLATE DN SOLENOID	3E-3380	105	B6	UP COLUMN SWITCH	248-8912	168	D7
LEGS LIMIT 1 SWITCH	288560	106	B6	KEY SELECTOR SWITCH	208875	169	D7
LEGS LIMIT 2 SWITCH	288560	107	B6	HORN AS REAR	174-7875	170	E1
JP MOLDBOARD SOLENOID	3E-3380	108	B7	BEACON 1	270-9010	171	E1
FLOAT MOLDBOARD SOLENOID	3E-3380	109	B7	FLOOD LIGHT 9	172-9973	172	E1
FRONT COLUMN DOWN SOLENOID	3E-3380	110	B7	FLOOD LIGHT 8	172-9973	173	E1
BRAKE SOLENOID	3E-3380	111	B7	SIDE PLATE LIGHT RH	204-6671	174	E1
LOCK COLUMN SOLENOID	3E-3380	112	B7	SIDE PLATE LIGHT LH	204-6671	175	E1
REAR RH COLUMN IN SOLENOID	3E-3380	113	B7	SWITCH AS HORN RH	198-6632	176	E2
REAR LH COLUMN IN SOLENOID	3E-3380	114	B7	ALARM KNOB RH	118-5273	177	E2
STEER ROTATION LH SOLENOID	3E-3380	115	B7	SWITCH-OPERATOR	118-5275	178	E2
STEER ROTATION RH SOLENOID	3E-3380	116	B7	BLOCK-CONTACT	180-5617	179	E2
REAR RH COLUMN DN SOLENOID	3E-3380	119	B7	WATER PUMP SWITCH	80-2676	180	E2
REAR LH COLUMN DN SOLENOID	3E-3380	120	B7	PROXIMITY SWITCH ND	203398	181	E2
STEREOROT REAR RH TRACK SOLENOID	3E-3380	121	B7	PROXIMITY SWITCH NC	208560	182	E2
SWITCH AS-HORN LH	158-8832	122	B7	PROXIMITY SWITCH ND	203398	183	E3
WARNING LAMP (MOLDBOARD)	207-6300	123	B7	PROXIMITY SWITCH NC	208560	184	E3
HIGH GEAR SOLENOID	3E-3380	124	B8	INTERMEDIATE SPEED RELAY	3E-3209	185	E3
DIFFERENTIAL LOCK SOLENOID	3E-3380	125	B8	FUEL PUMP	235-8724	186	E3
FRONT COLUMN UP SW	3E-3380	126	B8	PLUG CONN DATA	3E-3370	187	E4
CANOPY UP SOLENOID	3E-3380	127	B8	MAIN BREAKER	171-5208	188	E4
CANOPY DN SOLENOID	3E-3380	128	B8	GLOW BREAKER	171-2212	189	E4
WATER LOAD SWITCH	80-2676	129	C1	BATTERY 2	37-5760	190	E5
WATER BRISK SWITCH	40-9078	130	C2	BATTERY 1	37-5760	191	E5
TURN SIGNAL RH	204-6522	131	C3	DISCONNECT SW	74-0718	192	E5
FLOOD LIGHT 4	172-9973	132	C3	MICROSWITCH GATE OPEN	203399	193	E7
FLOOD LIGHT 5	172-9973	133	C3	CURRENT CONVEYOR	208895	194	E7
FLOOD LIGHT 6	172-9973	134	C3	RHEOSTAT 2	213-8147	195	E7
FLOOD LIGHT 7	172-9973	135	C3	HANDLE AS MARCH	497104016	196	E7
LIGHT 1	172-9973	136	C3	ENGINE CONNECTOR	133-8746	197	F4
LIGHT 2	172-9973	137	C3	MATING CONNECTOR E 1	103-0213	198	F7
FLOOD LIGHT 11	172-9973	138	C3	MATING CONNECTOR D 1	103-0213	199	F8



THIS DIAGRAM IS FOR THE PM102 COLD PLANER 284-8645 CH. 04
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SYMBOL DESCRIPTION	
(Blade, spade, ring, or screw terminal)	
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(Connector)	
(Aitch wire, cable, component)	
(Circuit grouping designation)	

COLOR ABBREVIATIONS			
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