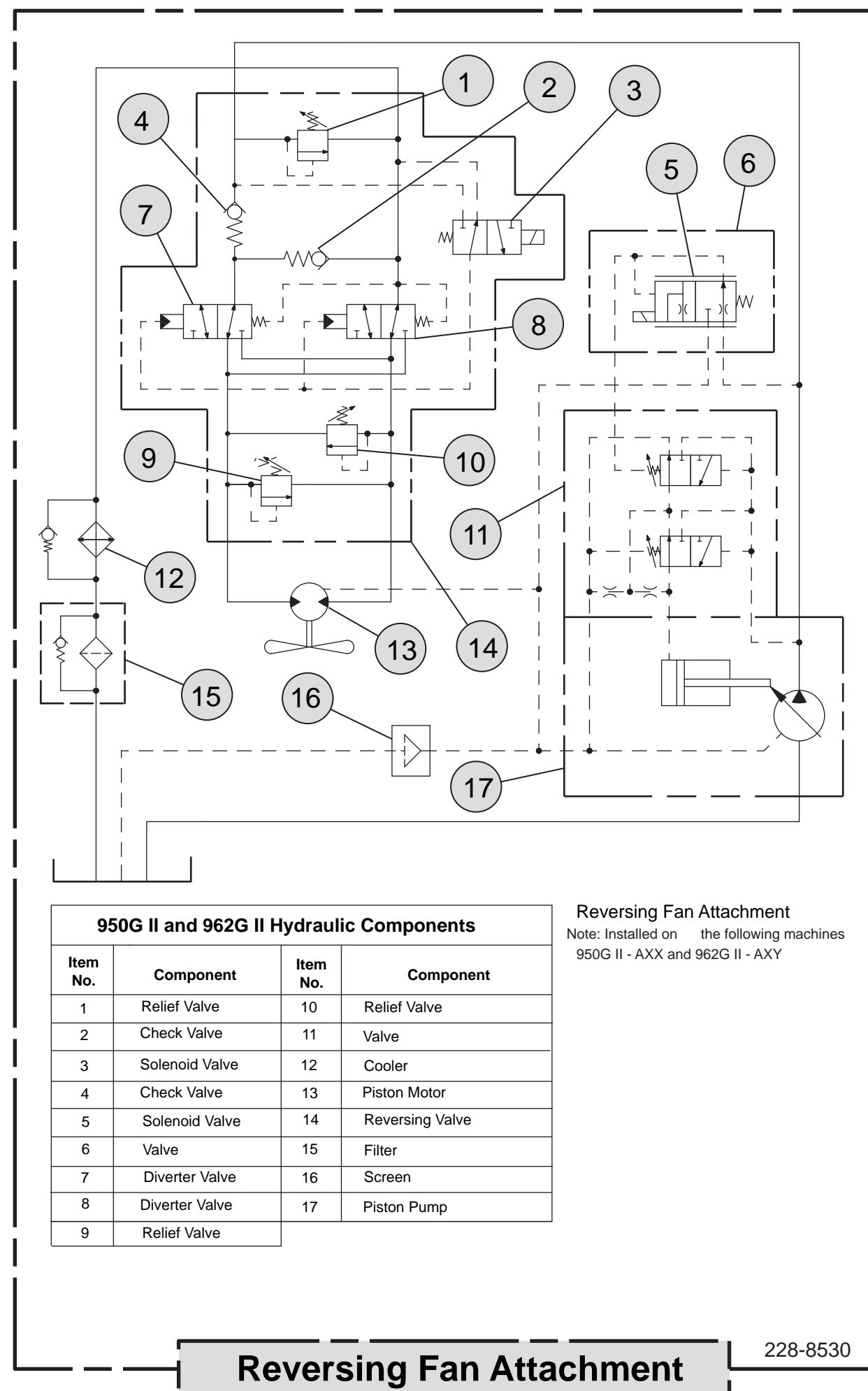


Item No.	Component	Schematic Location
1	Main Control Valve %	A1
2	Auxiliary Cylinders @	A2
3	Tilt Cylinder	A3
4	Lift Cylinders	A4
5	Front Service Brakes	A5
6	Left Pedal Assembly	
7	Right Pedal Assembly	A6
8	Brake Control Valve (SERVICE)	
9	Front Service Brakes Accumulator	
10	Rear Service Brakes Accumulator	A7
11	Parking Brake	
12	Parking Brake Actuator	
13	Accumulator (Ride Control) #	A5
14	Shuttle Valve (Ride Control) #	A4
15	Line Relief Valve (Aux. Cylinder Head End) @	A1
16	Line Relief Valve (Aux. Cylinder Rod End) @	A2
17	Line Relief Valve (Tilt Cylinder Rod End)	A2
18	Line Relief Valve (Tilt Cylinder Head End)	A2
19	Piloted Operated Check Valve (Float)	B4
20	Check Valve (Ride Control) #	B4
21	Relief Valve (Ride Control Diverter Valve) #	B4
22	Solenoid Valve (Ride Control) #	B5
23	Rear Service Brakes	B5
24	Priority Stage Valve (Accumulator Charge)	B5
25	Check Valve (Accumulator Charge)	B5
26	Shuttle Valve (Accumulator Charge)	B6
27	Accumulator Charge Valve (Braking)	B6
28	Brake Valve (Parking)	B7
29	Pressure Switch (Parking Brake)	B7
30	Spool (Ride Control Diverter Valve)	B4
31	Priority Valve (Brake Accumulator Charge)	B6
32	Main Relief Valve	C1
33	Strainers (Pilot Manifold)	C1
34	Relief Valve (Accumulator Charge)	C5
35	Pressure Switch (Service Brake Oil)	C6
36	Primary Reducing Valve (Pilot Manifold)	C2
37	Ball Valve (Implement Lockout)	C3
38	Connector (Orifice 1.7MM)	C3, C4
39	Pilot Control Valve %	C4
40	Float Valve (Pilot Manifold)	C2
41	Shuttle Valve (Pilot Manifold)	C4
42	Cylinder (Quick Coupler)	D6
43	Diverter Valve (Quick Coupler)	D6
44	Secondary Reducing Valve (Pilot Manifold)	D1
45	Selector Spool (Steering Valve)	D6
46	Directional Spool (Steering Valve)	D6
47	Check Valve (Steering Valve)	D6
48	Cylinders (Steering)	D6
49	Gear Motor (Hydraulic Fan)	D2
50	Pressure Switch (Steering Diverter Valve)	D3
51	Steering Diverter Valve	D4
52	Steering Neutralizer Valve (Left)	D4
53	Steering Neutralizer Valve (Right)	D5
54	Check Valve (Hydraulic Oil Cooler Bypass)	E2
55	Hydraulic Oil Cooler	E2
56	Connector (Orifice 1.6MM)	E4
57	Solenoid Valve (Hydraulic Fan)	E3
58	Piston Pump (Steering)	E1
59	Piston Pump (Hydraulic Fan)	E2
60	Pressure Switch (Secondary Steering) *	E4
61	Oil Filter (Hydraulic)	F2
62	Pressure and Flow Compensator (Hyd Fan)	F3
63	Vane Pump (Implement)	F1
64	Vane Pump (Pilot/Braking)	F1
65	Breaker Relief Valve	F1
66	Strainer (Hydraulic Tank)	F1
67	Secondary Steering Pump and Electric Motor	F3
68	Metering Pump (Steering)	F4
69	Check Valve (Steering)	F4
70	Backup Relief Valve (Steering)	F5
71	Make-up Check Valves (Steering)	F5
72	Control Valve (Steering)	F6
73	Crossover Relief Valve (Steering)	F3
74	Hydraulic Tank	F3
75	Relief Valve (Secondary Steering Pump) *	F3

Pressure Tap	Description	Schematic Location
AA	Tilt Cylinder Rod End Pressure	
BB	Tilt Cylinder Head End Pressure	A3
CC	Rear Service Brake Pressure	
DD	Front Service Brake Pressure	A5
EE	Service Brake Accumulator Pressure	C6
FF	Implement Pilot Pump Pressure	C4
GG	Implement Pump Pressure	D1
HH	Fluid Sampling Valve	E3
JJ	Steering Pump Pressure	E5
KK	Hydraulic Fan Pump Pressure	E2
LL	Steering Signal Pressure	F4

Media References		Media Number
<b>Parts Manual</b>		
950G II AYB	SEBP3252	962G II AYE
950G II AYL	SEBP3280	962G II AXS
950G II AXR	SEBP3494	962G II AXY
950G II AXZ	SEBP3495	962G II BAB
950G II BAA	SEBP3492	962G II BAD
<b>Engine</b>		SENR0617
<b>Power Train</b>		
Specifications	REN4308	
Systems Operation	REN4309	
Testing and Adjusting	REN4310	
<b>Systems</b>		
Specifications (Steering)	REN4312	
Systems Operation (Steering)	REN4313	
<b>Systems (Continued)</b>		
Test and Adjusting (Steering)	REN4314	
Specifications (Braking)	REN4315	
System Operation (Braking)	REN4316	
Testing and Adjusting (Braking)	REN4317	
Specifications (Electrohydraulic/Pilot)	REN4318	
Systems Operation (Electrohydraulic/Pilot)	REN4319	
Testing and Adjusting (Hydraulic)	REN4320	
Testing and Adjusting (Electrohydraulic)	REN4321	
Specifications (Machine Systems)	REN6042	
<b>Electrical System</b>		
Schematic (Electrohydraulic System)	REN4362	
Schematic (Pilot System)	REN4324	
<b>Operation &amp; Maintenance Manual</b>		
English	SEBU7459	



REN4322-03  
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# Schematic

## 950G Series II and 962G Series II Wheel Loader Hydraulic System

### Volume 1: Pilot Hydraulics and HMU Steering

950G II:  
AYL1-UP  
AYS1-UP  
AXX1-UP  
BAA1-UP

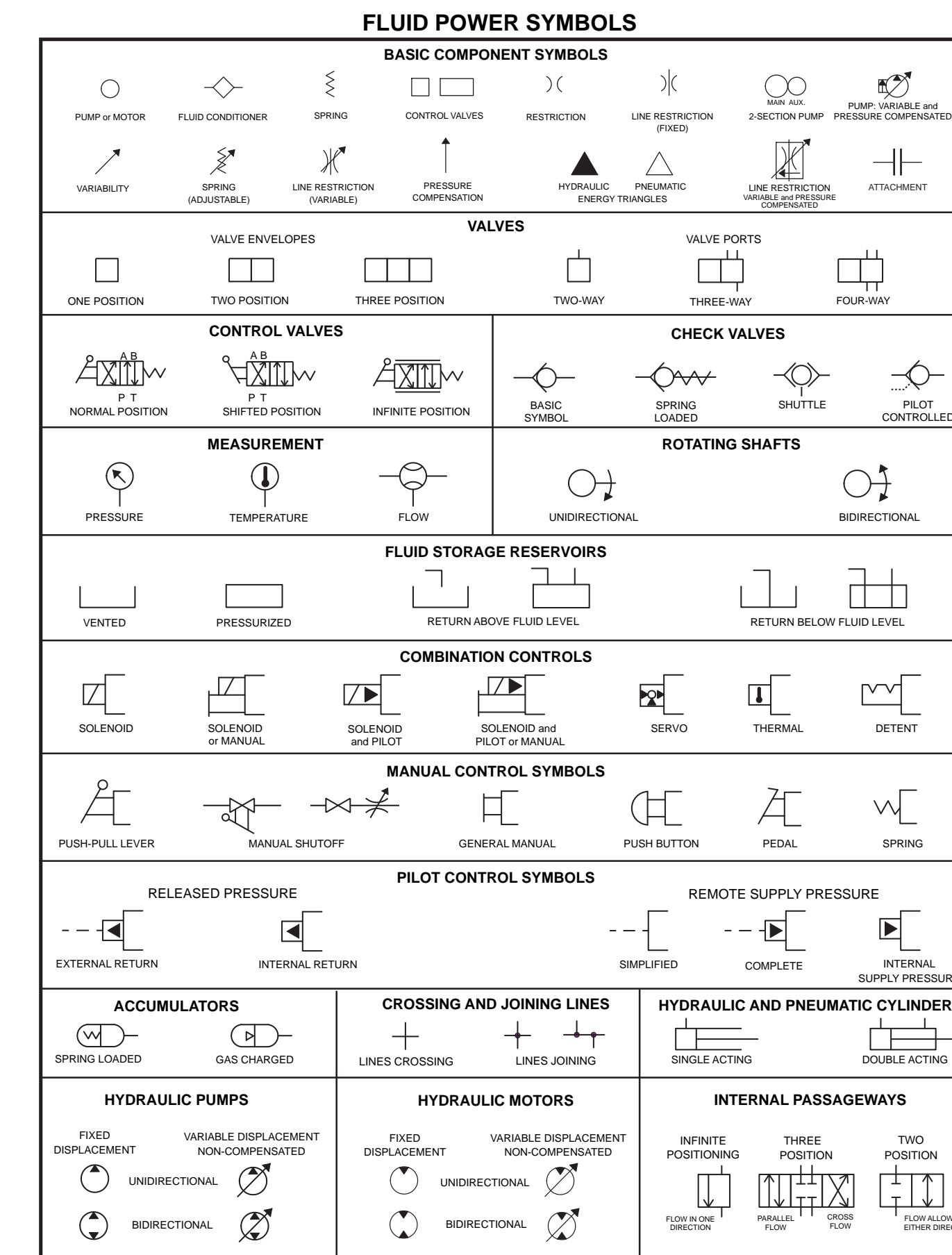
962G II:  
AXY1-UP  
BAB1-UP  
BAC1-UP  
BAD1-UP

### Volume 2: Electrohydraulic and Command Control Steering

950G II:  
AYB1-UP  
AYD1-UP  
AXR1-UP

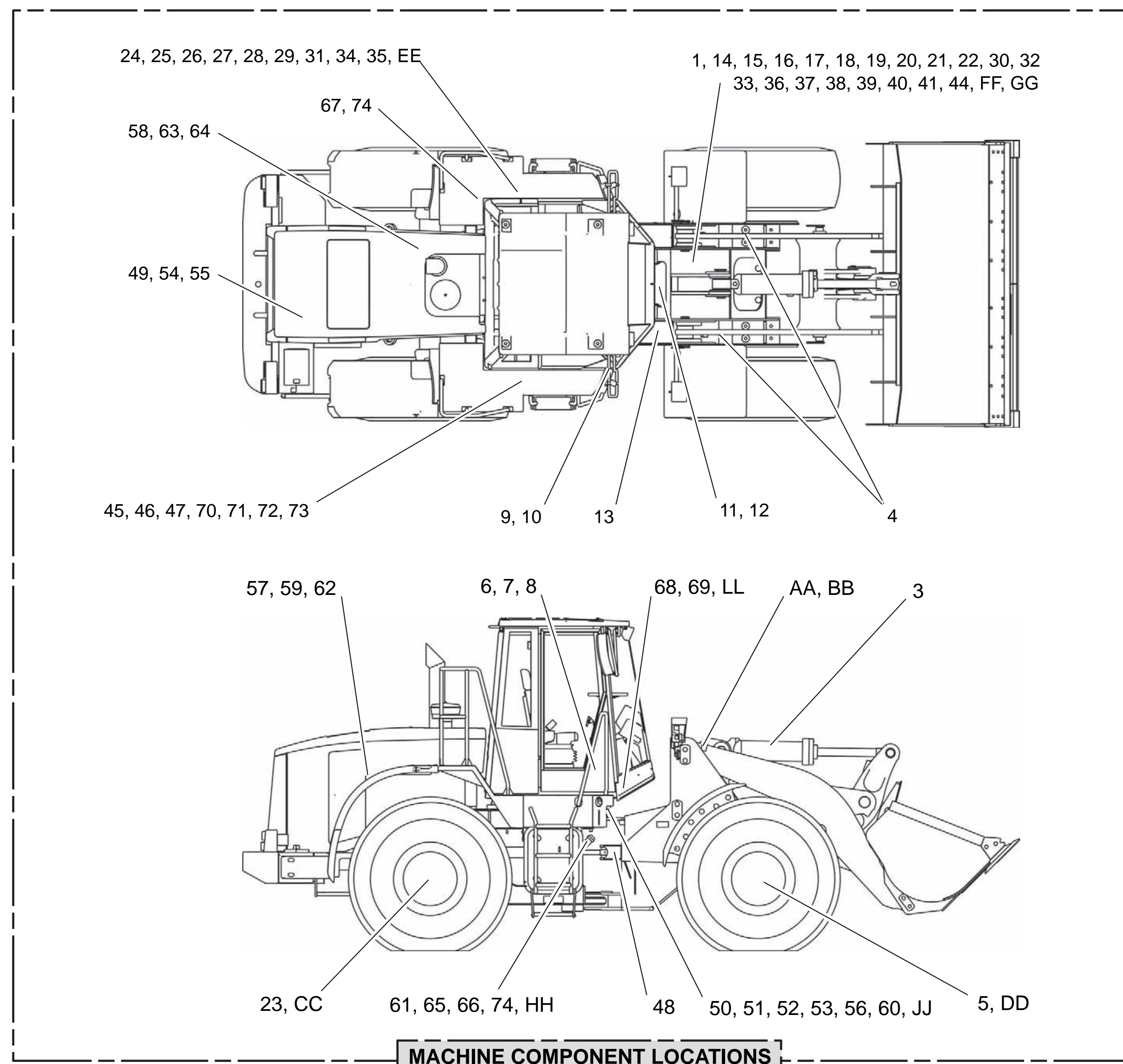
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AYG1-UP  
AXS1-UP

Volume 1

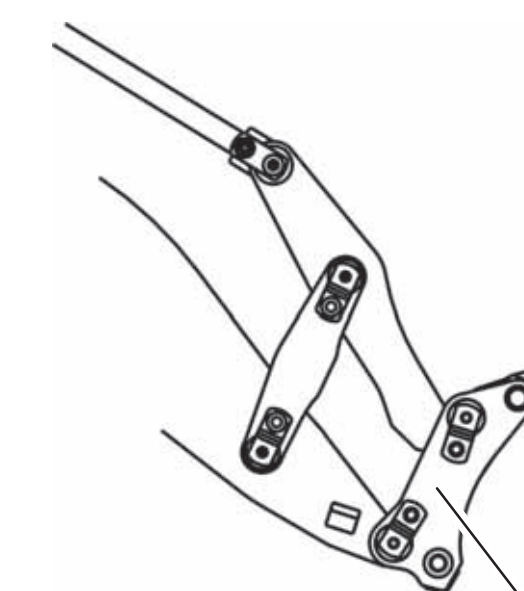
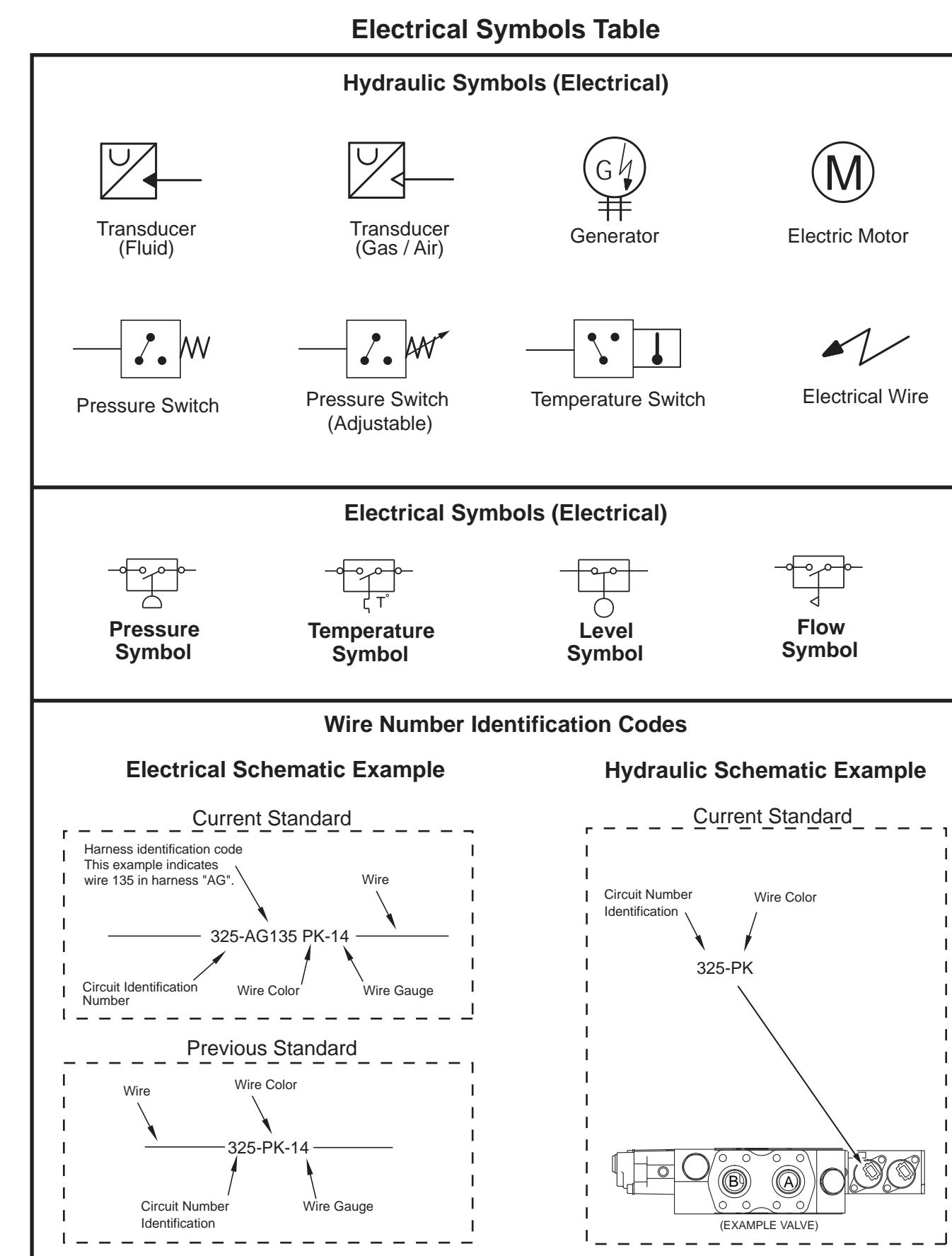


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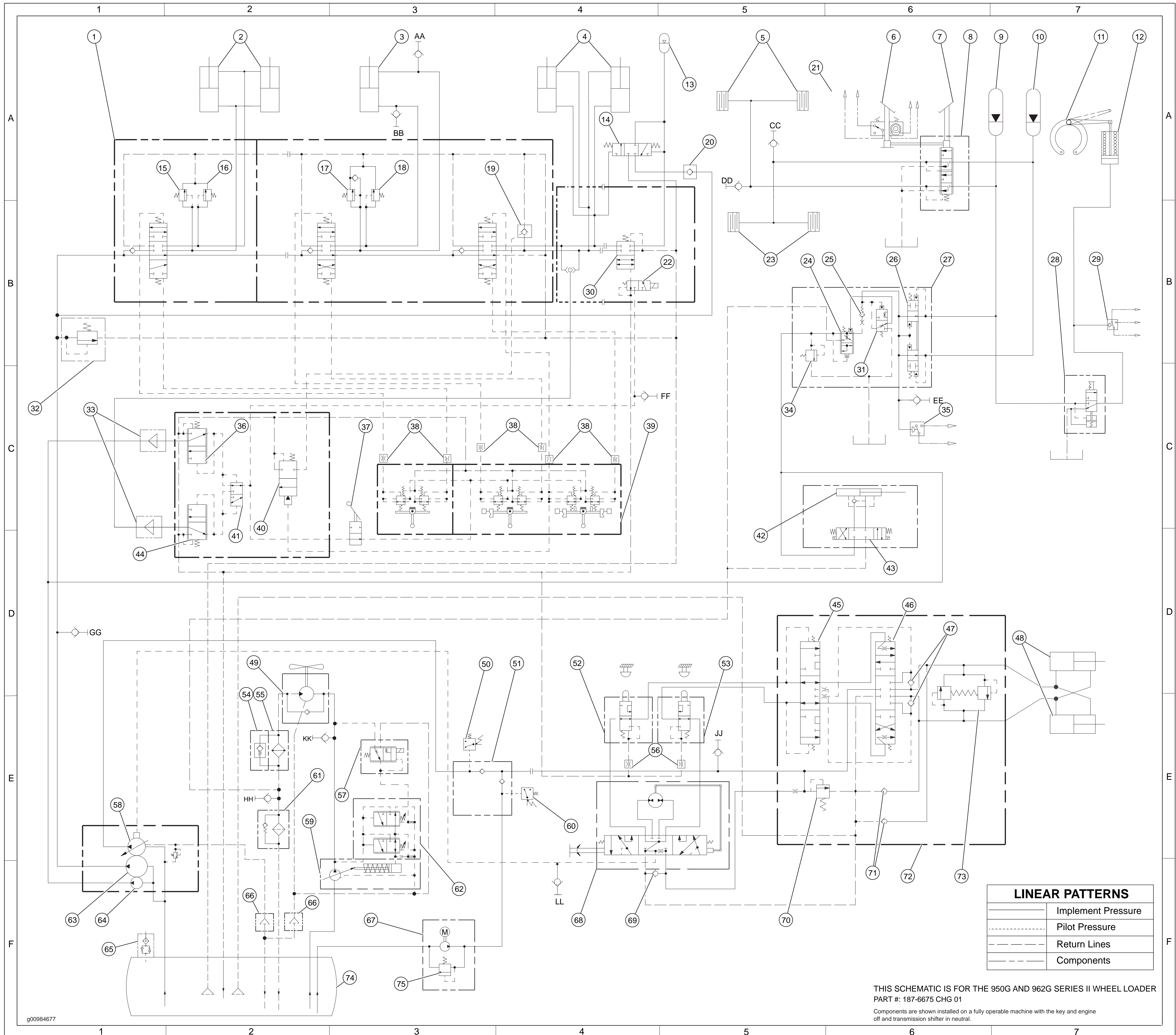
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### MACHINE COMPONENT LOCATIONS



42, 43



LINEAR PATTERNS	
	Implement Pressure
	Pilot Pressure
	Return Lines
	Components

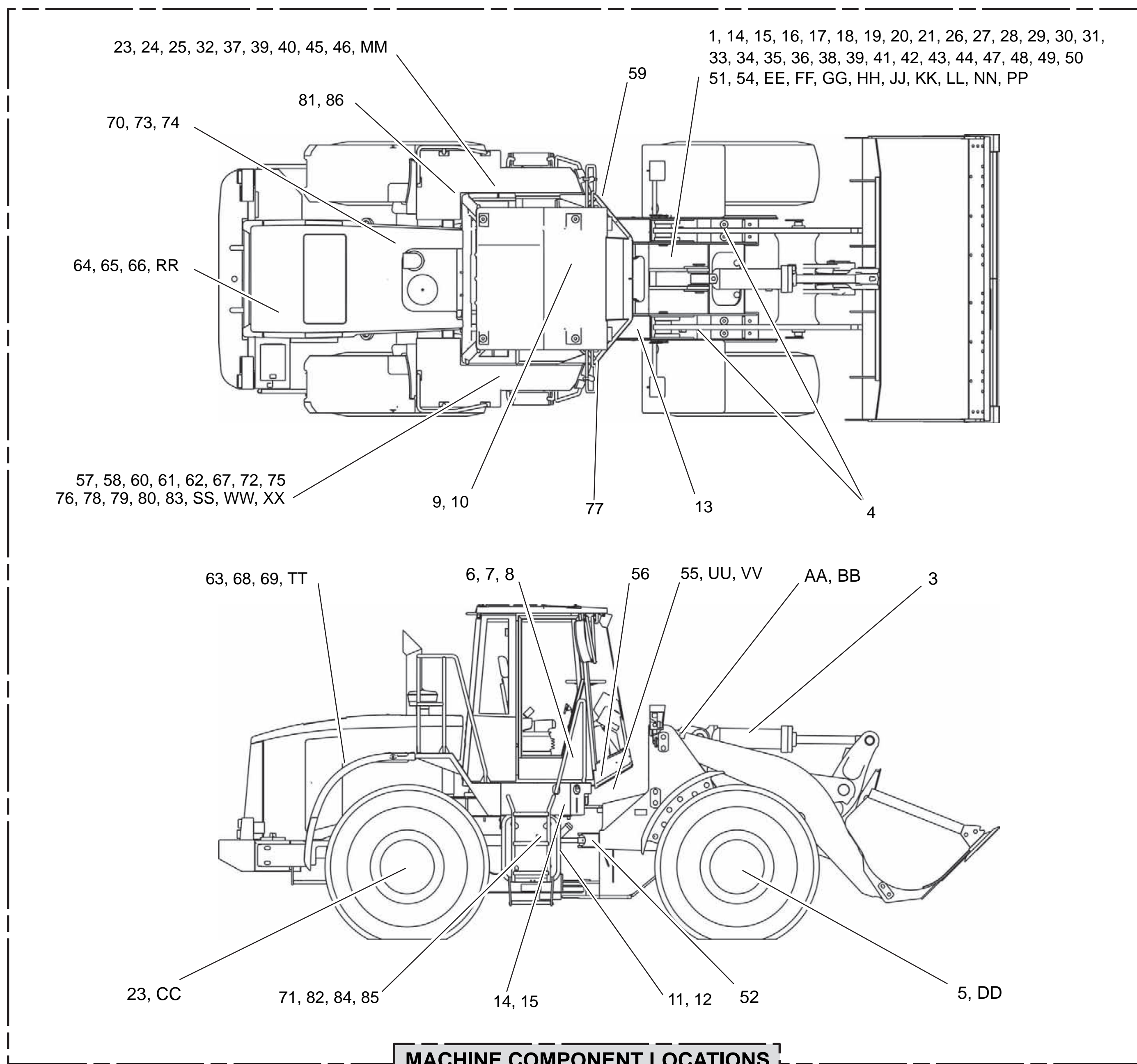
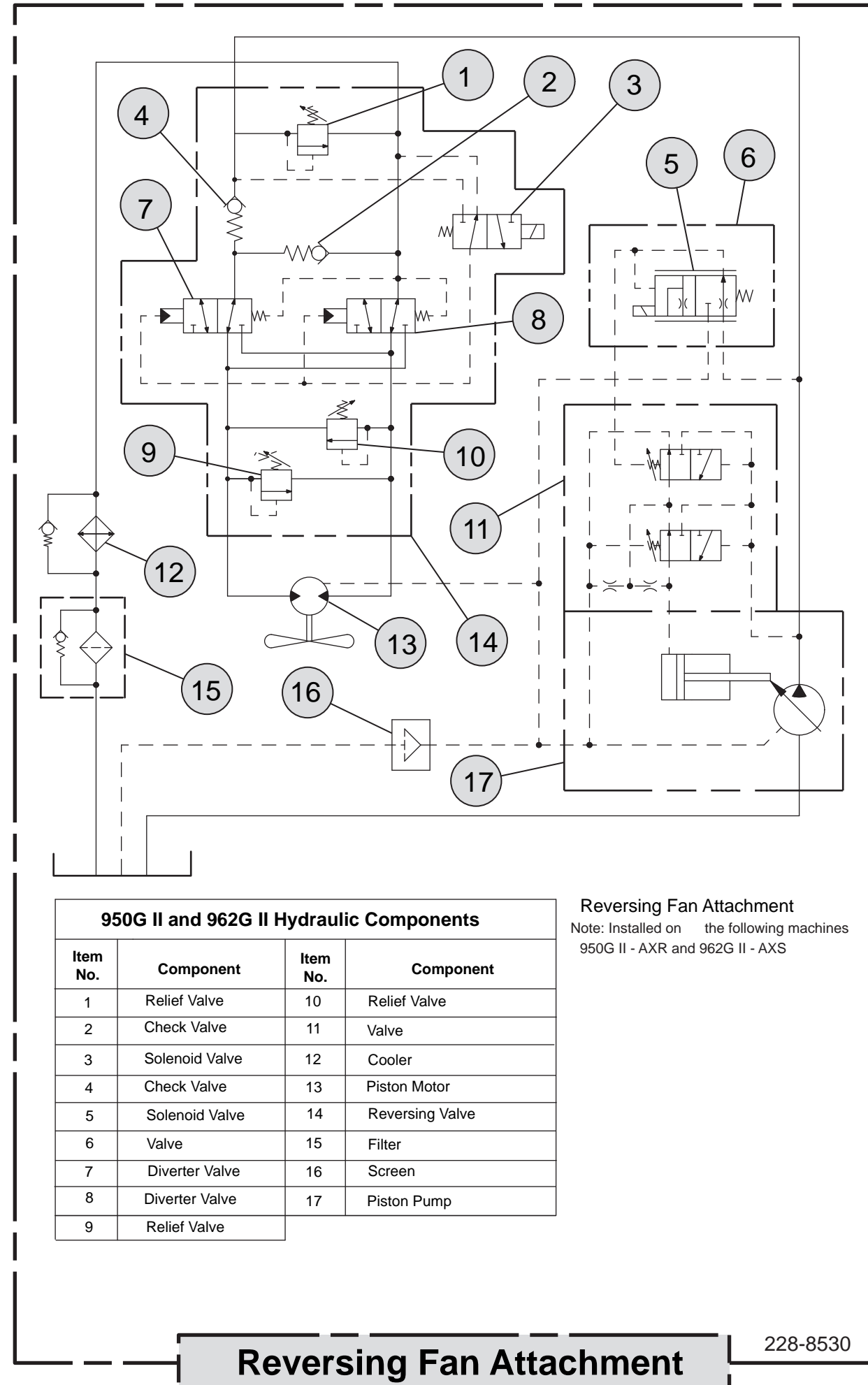
THIS SCHEMATIC IS FOR THE 950G AND 962G SERIES II WHEEL LOADER  
PART #: 187-6675 CHG 01

Components are shown installed on a fully operable machine with the key and engine off and transmission shifter in neutral.

Item No.	Component	Schematic Location
1	Main Control Valve #	A1
2	Auxiliary Cylinders @	A2
3	Tilt Cylinder	A3
4	Lift Cylinders	A4
5	Front Service Brakes	A5
6	Left Pedal Assembly	A6
7	Right Pedal Assembly	A6
8	Brake Control Valve (Service)	A6
9	Front Service Brakes Accumulator	A7
10	Rear Service Brakes Accumulator	A7
11	Parking Brake	A7
12	Parking Brake Actuator	A7
13	Accumulator (Ride Control) #	A5
14	Shuttle Valve (Ride Control) #	A5
15	Ride Control Accumulator #	A5
16	Line Relief Valve (Aux. Cylinder Head End) @	A1
17	Line Relief Valve (Aux. Cylinder Rod End) @	F1
18	Line Relief Valve (Tilt Cylinder Rod End)	A2
19	Line Relief Valve (Tilt Cylinder Head End)	A3
20	Pilot Operated Check Valve (Flow)	B4
21	Relief Valve (Ride Control) #	B5
22	Rear Service Brakes	B5
23	Pressure Switch (Parking Brake)	B7
24	Check Valve (Accumulator Charge)	B6
25	Shuttle Valve (Accumulator Charge)	B6
26	Solenoid Valve (Ride Control) #	B5
27	Auxiliary Spool (Main Control Valve) @	B1
28	Tilt Spool (Main Control Valve)	B2
29	Lift Spool (Main Control Valve)	B3
30	Spool (Ride Control) #	B4
31	Resolver Valve (Dead Engine Lower)	B4
32	Priority Valve (Accumulator Charge Pilot)	C6
33	Primary Reducing Valve (Pilot Manifold)	C2
34	Proportional Valve (Tilt Dump)	C2
35	Proportional Valve (Lift Lower)	C3
36	Proportional Valve (Auxiliary Lower)	C4
37	Main Relief Valve	C1
38	Relief Valve (Accumulator Charge)	C5
39	Priority Stage Valve (Accumulator Charge)	C6
40	Accumulator Charging Valve (Braking)	C6
41	Strainers (Pilot Manifold)	C1
42	Solenoid Valve (Pilot Pressure Supply)	C2
43	Ball Valve (Dead Battery, Lift Arm Lower)	C1
44	Float Valve (Pilot Manifold)	C4
45	Pressure Switch (Service Brakes)	C6
46	Parking Brake Valve	C7
47	Proportional Valve (Tilt Tiltback)	C3
48	Proportional Valve (Lift Raise)	C3
49	Proportional Valve (Auxiliary Raise)	C4
50	Secondary Reducing Valve (Pilot Manifold)	D2
51	Shuttle Valve (Pilot Manifold)	D2
52	Cylinder (Quick Coupler)	D6
53	Diverter Valve (Quick Coupler)	D6
54	Steering Cylinders	D7
55	Pilot Valve (Steering)	D4
56	Wheel (Steering Assembly)	D4
57	Steering Oil Screen Group	D5
58	Check Valve (Steering Quad)	E5
59	Left Neutralizer Valve (Steering)	E5
60	Control Valve (Steering)	E5
61	Crossover Relief Valve (Steering)	E6
62	Resolver Valve (Steering)	E7
63	Proportional Valve (Hydraulic Fan)	E3
64	Check Valve (Hydraulic Oil Cooler Bypass)	E2
65	Hydraulic Oil Cooler	E2
66	Gear Motor (Hydraulic Fan)	E2
67	Check Valves (Steering Valve)	E7
68	Piston Pump (Hydraulic Fan)	E3
69	Pressure and Flow Compensator (Hyd Fan)	E3
70	Piston Pump (Steering)	E1
71	Oil Filter (Hydraulic)	E2
72	Shuttle Valve (Steering)	F6
73	Vane Pump (Implement)	F1
74	Vane Pump (Pilot/Braking)	F1
75	Resolver Valve (Steering)	F4
76	Diverter Valve (Steering)	F5
77	Pressure Switch (Secondary Steering) *	F4
78	Right Neutralizer Valve (Steering)	E5
79	Pressure Reducing Valve (Steering)	F6
80	Backup Relief Valve (Steering)	F7
81	Secondary Steering Pump and Electric Motor *	F1
82	Breaker Relief Valve	F1
83	Pressure Switch (Steering Pump)	F5
84	Hydraulic Tank	F1
85	Strainers (Hydraulic Tank)	F2
86	Relief Valve (Secondary Steering Pump) *	F4

Pressure Tap	Description	Schematic Location
AA	Tilt Cylinder Rod End Pressure	A3
BB	Tilt Cylinder Head End Pressure	A3
CC	Rear Service Brake Pressure	A5
DD	Front Service Brake Pressure	A5
EE	Auxiliary Pilot Pump Pressure (Open)	B1
FF	Auxiliary Pilot Pump Pressure (Close)	B2
GG	Tilt Pilot Pump Pressure (Dump)	B2
HH	Tilt Pilot Pump Pressure (Tiltback)	B3
JJ	Lift Pilot Pump Pressure (Lower)	B3
KK	Lift Pilot Pump Pressure (Raise)	B4
LL	Pilot Pressure (Ride Control)	B5
MM	Service Brake Accumulator Pressure	B6
NN	Pump Pressure (Implement)	D1
PP	Pump Pressure (Steering)	E1
RR	Fluid Sampling Valve	E2
SS	Pilot Pressure (Steering)	E6
TT	Hydraulic Fan Pump Pressure	E3
UU	Steering Control Valve Neutral Pilot Pressure	E4
VV	Pilot Pressure (Steering)	F4
WW	Pilot Pressure (Steering 1)	F6
XX	Pump Signal Pressure (Steering)	F5

Media References		Media Number	Media Number
<b>Parts Manual</b>			
950G II AYB	SEBP3352	962G II AYE	SEBP3281
950G II AYL	SEBP3280	962G II AXS	SEBP3497
950G II AXR	SEBP3494	962G II AXY	SEBP3496
950G II AXZ	SEBP3495	962G II BAB	SEBP3285
950G II BAA	SEBP3492	962G II BAD	SEBP3339
<b>Engine</b>		SEN90617	
<b>Power Train</b>			
Specifications	REN4308		
Systems Operation	REN4309		
Testing and Adjusting	REN4310		
<b>Systems</b>			
Specifications (Steering)	REN4312		
Systems Operation (Steering)	REN4313		
<b>Systems (Continued)</b>			
Test and Adjusting (Steering)	REN4314		
Specifications (Braking)	REN4315		
System Operation (Braking)	REN4316		
Testing and Adjusting (Braking)	REN4317		
Specifications (Electrohydraulic/Pilot)	REN4318		
Systems Operation (Electrohydraulic/Pilot)	REN4319		
Testing and Adjusting (Hydraulic)	REN4320		
Testing and Adjusting (Electrohydraulic)	REN4321		
Specifications (Machine Systems)	REN6042		
<b>Electrical System</b>			
Schematic (Electrohydraulic System)	REN4362		
Schematic (Pilot System)	REN4324		
<b>Operation &amp; Maintenance Manual</b>			
English	SEBU7459		



REN4322-03  
May 2005

# Schematic

## 950G Series II and 962G Series II Wheel Loader Hydraulic System

### Volume 1: Pilot Hydraulics and HMU Steering

**950G II:**  
AYL1-UP  
AYS1-UP  
AXX1-UP  
BAA1-UP

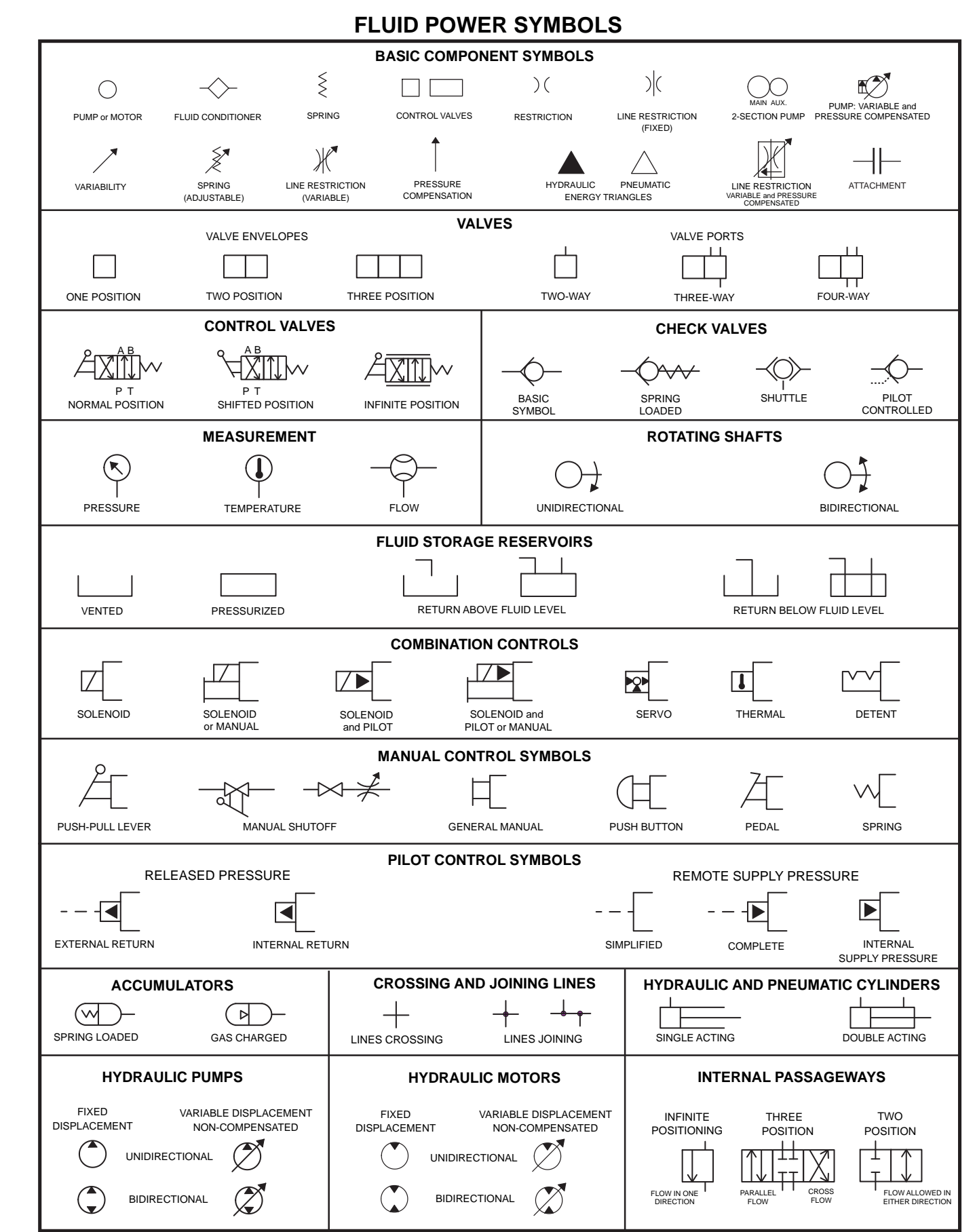
**962G II:**  
AXY1-UP  
BAB1-UP  
BAC1-UP  
BAD1-UP

### Volume 2: Electrohydraulic and Command Control Steering

**950G II:**  
AYB1-UP  
AYD1-UP  
AXR1-UP

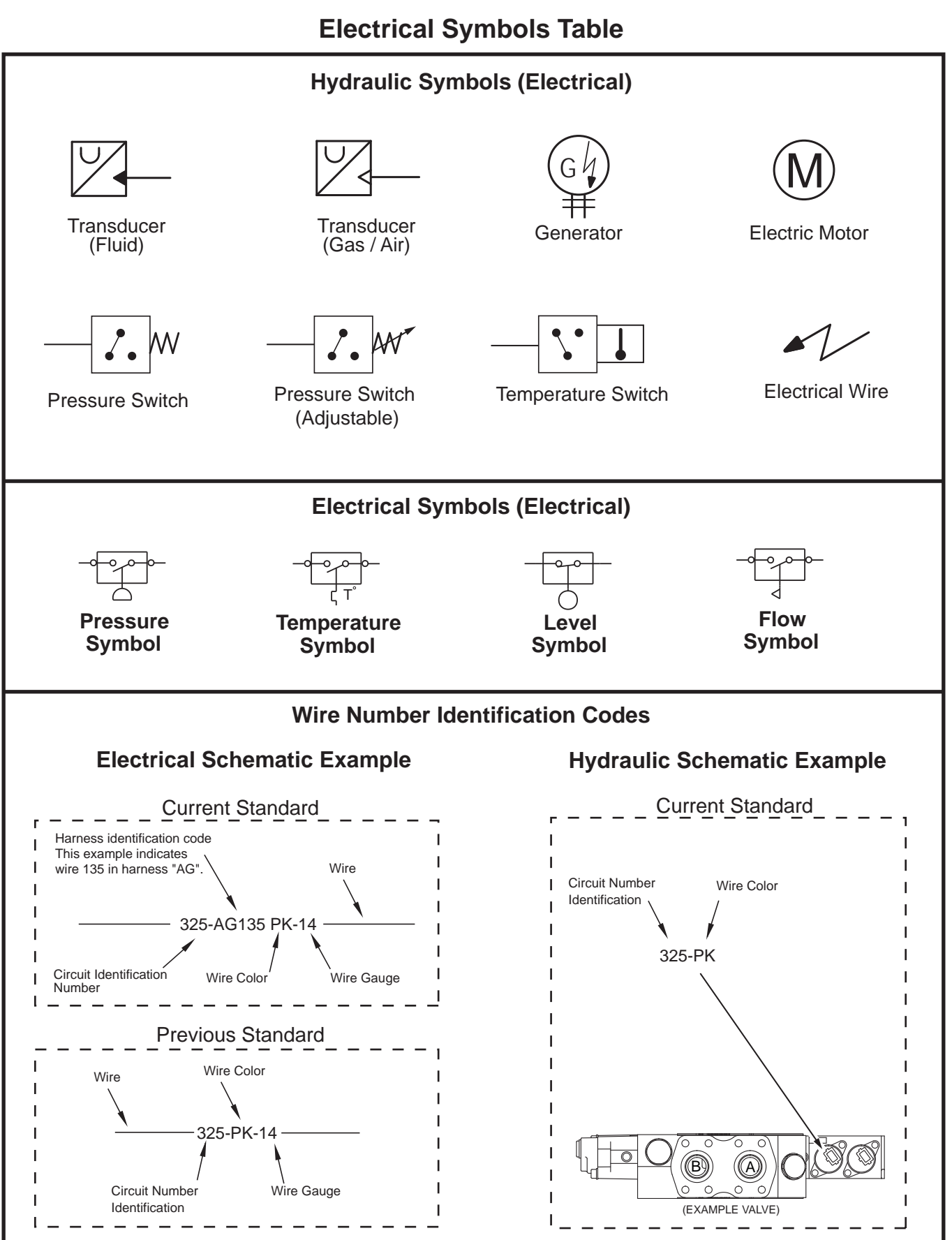
**962G II:**  
AYE1-UP  
AYG1-UP  
AXS1-UP

### Volume 2



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