

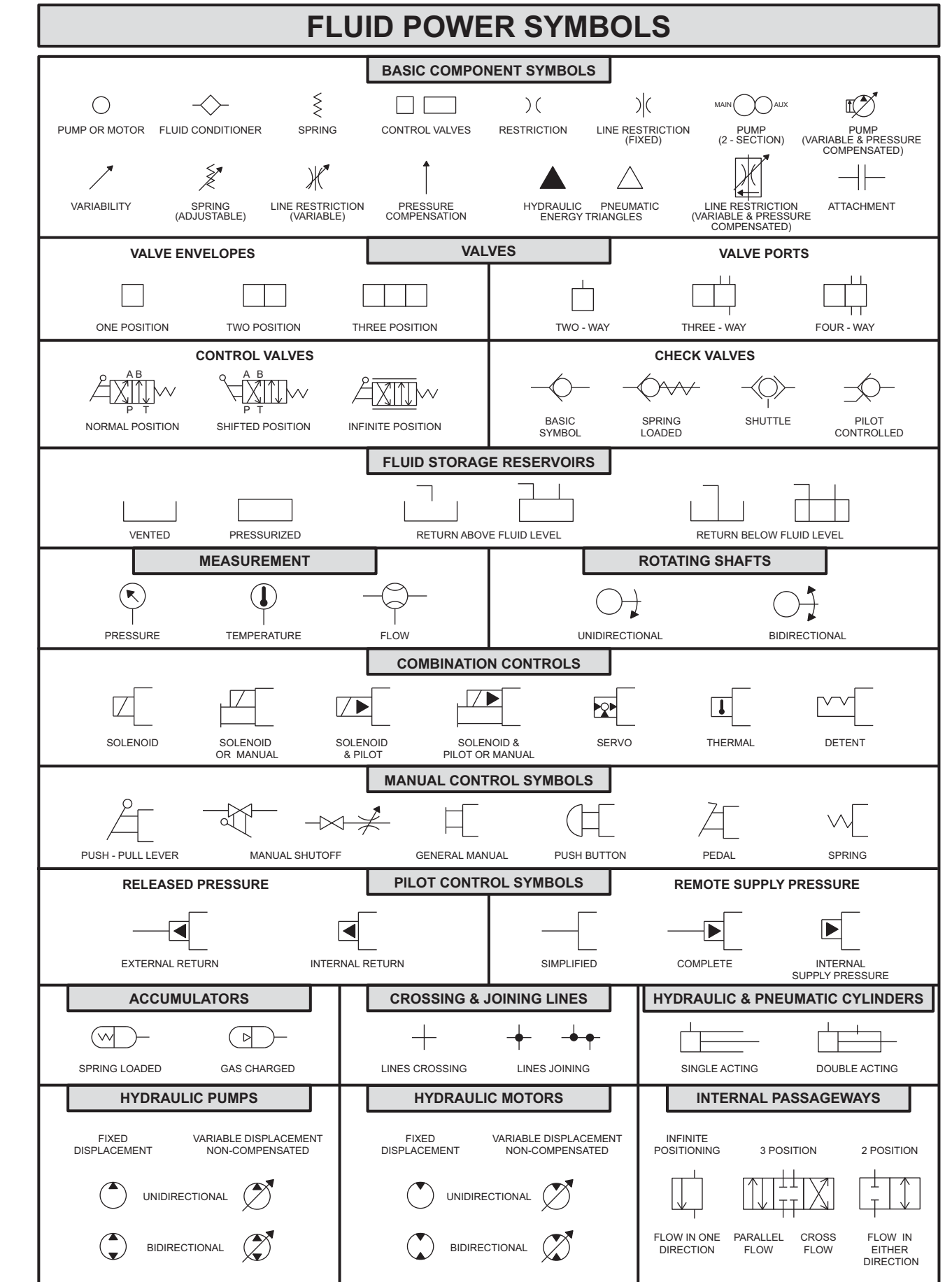
MACHINE VIEWS

Schematic

966M and 972M Wheel Loader Hydraulic System

966M:
EJA1-UP
DYC1-UP
KJP1-UP

972M:
LSJ1-UP
A8P1-UP
JPR1-UP

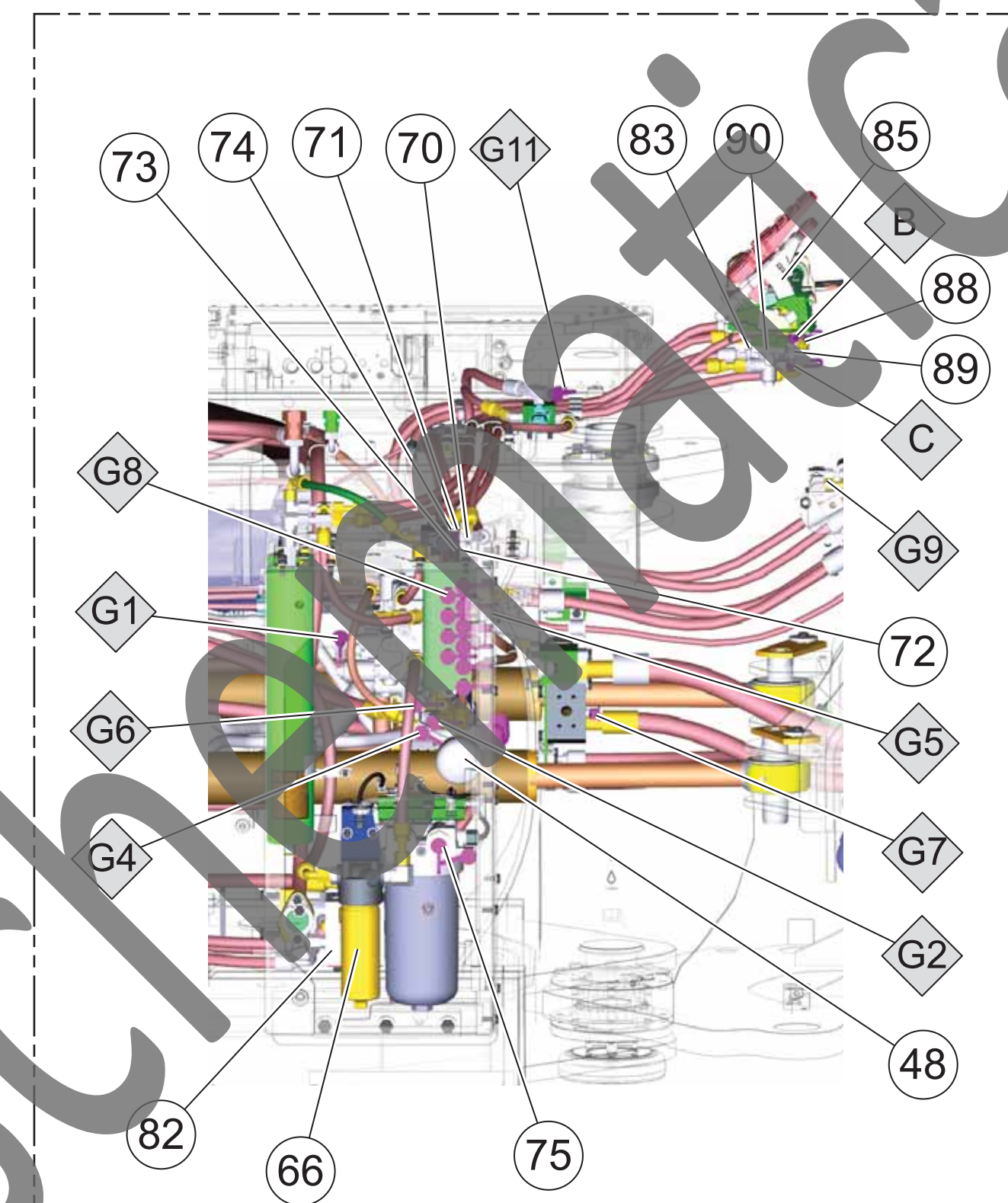


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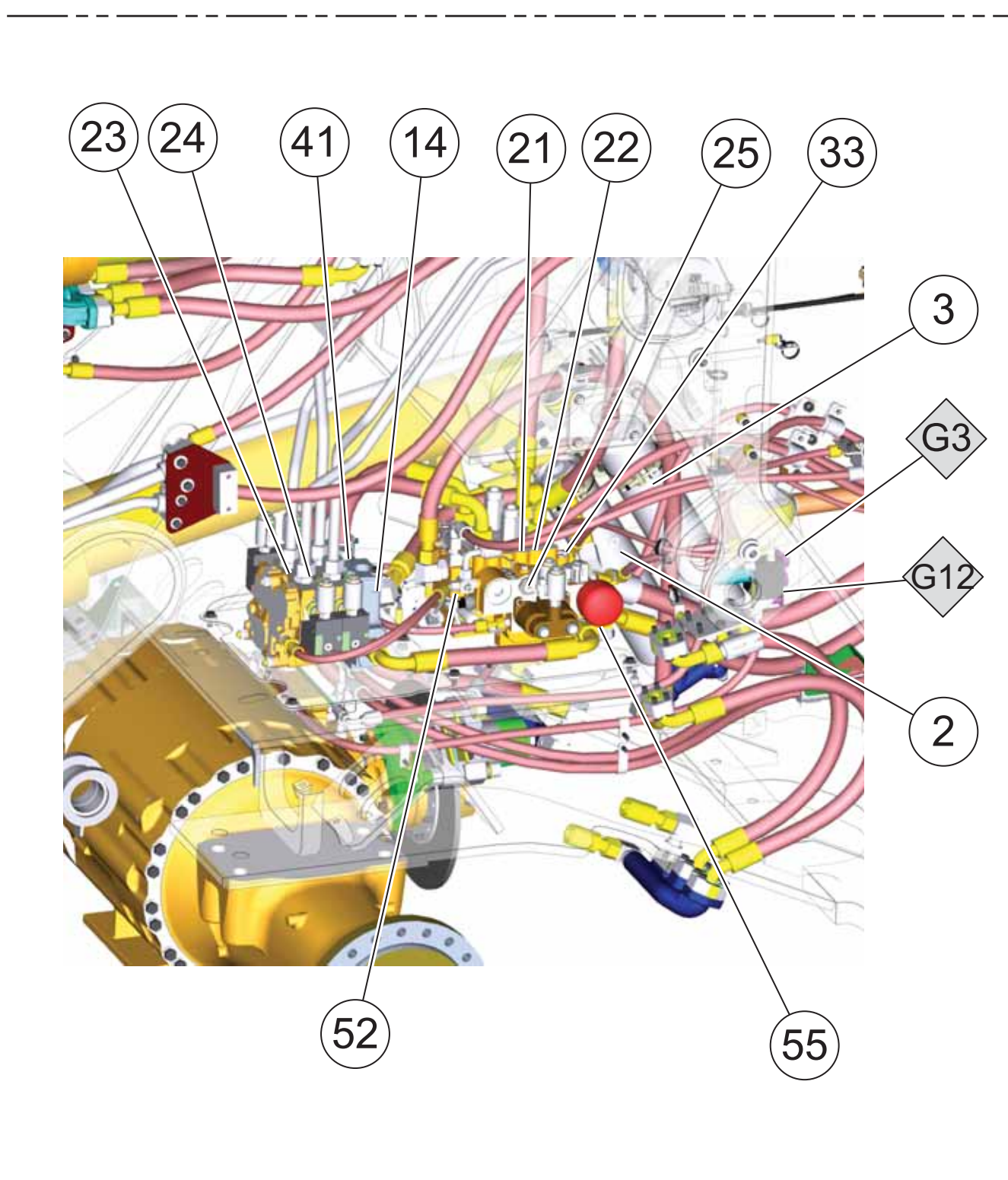
Printed in U.S.A.

Component Locations			
Description	Part Number	Machine Location	Schematic Location
ACCUMULATOR - PILOT	359-9981	47	E-3
ACCUMULATOR - RIDG CONTROL	435-4298	2	E-1
ACCUMULATOR - RIDG CONTROL	435-4297	3	E-1
BREATHER	312-2984	4	E-7
CYLINDER - 966 TLT (HIGH LIFT ATTACHMENT)	359-6952	5	E-3
CYLINDER - 966 TLT (LOGGER ATTACHMENT)	359-6953	6	E-3
CYLINDER - 966 TLT (STANDARD)	359-6991	7	E-3
CYLINDER - 972 TLT (HIGH LIFT ATTACHMENT)	359-6994	8	E-3
CYLINDER - 972 TLT (STANDARD)	359-6993	9	E-3
CYLINDER - LEFT (RIGHT HAND)	349-2514	10	E-2
CYLINDER - LEFT (LEFT HAND)	349-2515	11	E-2
FILTER - RETURN	376-1286	12	B-6
FILTER - RETURN FILTER	376-1288	13	B-6
MANIFOLD - RIDG CONTROL	432-9661	14	D-1
PUMP - IMPLEMENT	365-8177	15	D-6
SCREEN - CASE DRAIN RETURN	118-9993	16	B-7
SENSOR - PRESSURE	344-7391	17	D-2
SENSOR - PRESSURE (PCS & AD ATTACHMENT)	349-1178	18	E-1
SENSOR - PRESSURE (PCS ATTACHMENT)	349-1179	19	E-1
TANK - HYDRAULIC	309-9930	20	B-4
VALVE - 1 FUNCTION AUXILIARY (ATTACHMENT)	445-4988	21	C-2
VALVE - 2 FUNCTION AUXILIARY (ATTACHMENT)	445-4989	22	C-2
VALVE - 2 FUNCTION IMPLEMENT WITH RIDG CONTROL	453-9229	23	E-2
VALVE - 2 FUNCTION IMPLEMENT WITH RIDG CONTROL (LOGGER ATTACHMENT)	453-9228	24	E-2
VALVE - ANTI-DRAFT SEAT	136-6571	25	E-5
VALVE - AID LOAD SENSE CHECK VALVE	123-4750	26	B-2
VALVE - BACKPRESSURE	349-8844	27	B-4
VALVE - IMPLEMENT LOCKOUT SOLENOID	333-5042	28	E-3
VALVE - IMPLEMENT PILOT CHECK	6E-4701	29	E-3
VALVE - LOAD SENSE RELIEF/LEED	375-7899	30	D-3
VALVE - MANDUP	234-6969	31	E-2
VALVE - MANUAL LOWER	112-1817	32	E-1
VALVE - MANUAL RELIEF	370-5166	33	D-3
VALVE - PILOT OPERATED CHECK	445-6109	34	E-3
VALVE - PRESSURE LIMITER (AUXILIARY FUNCTION)	371-1784	35	B-2, B-1
VALVE - RELIEF (FILTER HEAD)	451-6647	36	E-3
VALVE - RELIEF (FILTER HEAD) (ATTACHMENT)	451-6648	37	E-3
VALVE - RELIEF (FILTER HEAD)	332-1985	38	E-3
VALVE - RELIEF (FILTER HEAD) (LOGGER ATTACHMENT)	332-1986	39	E-3
VALVE - RIDG CONTROL BALANCE SPOOL	430-9883	40	D-2
VALVE - RIDG CONTROL PED RELIEF	251-8330	41	D-2
VALVE - RIDG CONTROL PRESSURE LIMITER	373-9443	42	D-1
VALVE - RIDG CONTROL PUMP CHECK	123-4750	43	D-2
VALVE - SOLENOID	313-7668	44	D-2, D-3 C-2, C-1 B-2, B-1
VALVE - SOLENOID	277-5863	45	E-2
VALVE - SOLENOID	397-6597	46	D-1
VALVE - WORK PORT RELIEF (AUXILIARY FUNCTION)	371-9723	47	C-2, C-1
STEERING SYSTEM			
ACCUMULATOR - PILOT	359-9981	48	E-4
CYLINDERS - STEERING	389-4770	49	F-5
PUMP - STEERING	356-6454	50	D-6
PUMP/MOTOR - SECONDARY STEERING (ATTACHMENT)	379-6523	51	E-5
SENSOR - PRESSURE (ATTACHMENT)	344-7391	52	E-6
SENSOR - PRESSURE (ATTACHMENT)	419-5574	53	E-5
SOLENOID - ON/OFF	419-4195	54	E-5
VALVE - CHECK	6E-4701	55	E-4
VALVE - CHECK SECONDARY STEERING (ATTACHMENT)	6E-4701	56	D-7
VALVE - CHECK MANIFOLD (ATTACHMENT)	296-9298	57	E-6
VALVE - SOLENOID	313-7668	58	E-5, F-5
VALVE - STEERING RELIEF	356-8103	59	F-4
VALVE - STEERING BACKPRESSURE	35-5278	60	E-5
VALVE - STEERING RELIEF	345-9961	61	F-5
FAN/BRAKE/PILOT SYSTEM			
ACCUMULATOR - BRAKE	375-2804	62	E-8
ACCUMULATOR - BRAKE ACCUMULATOR (ATTACHMENT)	375-2805	63	E-8
COOLER - HYDRAULIC OIL	349-2804	64	E-8
COOLER - HYDRAULIC OIL (ATTACHMENT)	349-5935	65	E-8
FILTER - KIDNEY LOOP	436-3444	66	C-8
MOTOR - FAN	360-7075	67	E-8
PUMP - FAN	352-4500	68	B-8
SENSOR - PRESSURE	356-5070	69	F-5
SENSOR - PRESSURE	344-7391	70	E-8
SENSOR - PRESSURE	296-5270	71	E-7
VALVE - ELECTROHYDRAULIC FAN DRIVE AND EH BRAKE CHARGE VALVE WITH PED RELIEF	396-9195	72	E-8
VALVE - ELECTROHYDRAULIC FAN DRIVE AND EH BRAKE CHARGING	373-1565	73	E-8
VALVE - PARK BRAKE	448-4308	74	E-8
VALVE - SAMPLE	6C-3446	75	F-8
VALVE - THERMAL BYPASS	188-8726	76	E-8
QUICK COUPLER SYSTEM			
CYLINDERS - QUICK COUPLER (ATTACHMENT), NOT SHOWN	361-2507	77	B-3
VALVE - CHECK	123-4750	78	B-4
VALVE - MANUAL (ATTACHMENT)	112-1817	79	D-4
VALVE - QUICK COUPLER (ATTACHMENT)	416-4796	80	B-4
MISCELLANEOUS			
PUMP - TRANSMISSION	382-9555	81	D-5
VALVE - AXLE OIL COOLER DIVIDER	237-8180	82	F-8
VALVE - DIFF LOCK - FRONT (INTEGRATED LS BOOST & QC DRAIN)	382-7871	83	D-4
VALVE - DIFF LOCK - REAR (ATTACHMENT)	371-4745	84	E-7
BRAKE SYSTEM			
BRAKE GP - CONTROL	351-9419	85	F-6
BRAKE GP - PARKING BRAKE	436-5961	86	F-6
SENSOR - PRESS	296-5270	87	F-8, F-4
SENSOR GP - PCS	369-1962	88	E-7
SWITCH AS - LIMIT	105-6117	89	F-6
VALVE GP - BRAKE CONTROL	210-4587	90	F-6
ADDITIONAL			
SENSOR GP - VALVE POSITION	341-0824	91	E-5
SENSOR GP - CYLINDER POSITION	388-4776	92	F-5

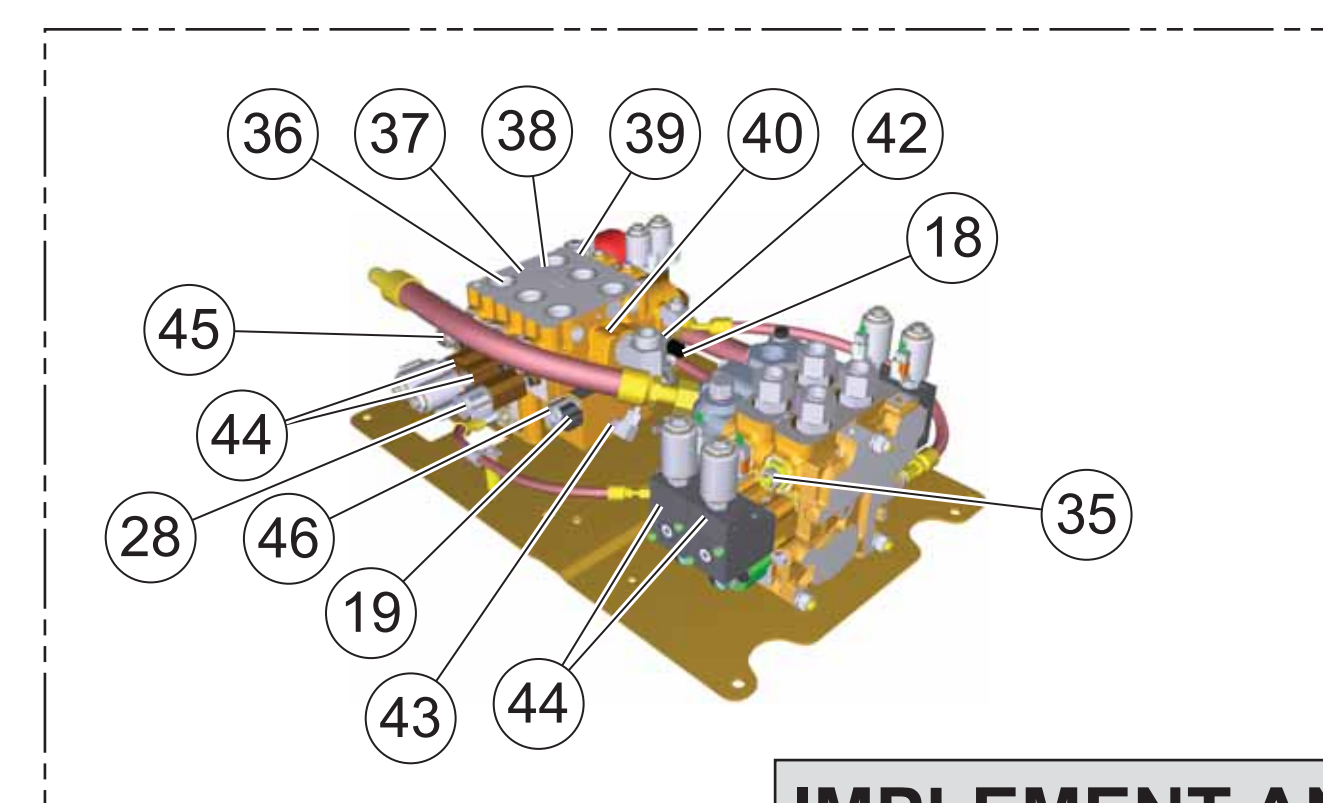
Tap Locations Pressure, Sampling, and Sensor		
Tap Number	Description	Schematic Location
G1	FAN PUMP DISCHARGE GAUGE PORT	D-8
G2	FAN PUMP LOAD SENSE GAUGE PORT	E-7
G3	IMPLEMENT/REDUNDANT STEERING PILOT SUPPLY GAUGE PORT	D-4
G4	PRIMARY STEERING PILOT SUPPLY GAUGE PORT	E-4
G5	BRAKE ACCUMULATOR GAUGE PORT	E-8
G6	STEERING PUMP DISCHARGE GAUGE PORT	D-1
G7	STEERING PUMP LOAD SENSE GAUGE PORT	D-5
G8	IMPLEMENT PUMP DISCHARGE GAUGE PORT	D-5
G9	IMPLEMENT PUMP LOAD SENSE GAUGE PORT	D-4
G10	DIFFERENTIAL LOCK PRESSURE - FRONT	D-4
G11	DIFFERENTIAL LOCK PRESSURE - REAR	E-7
G12	QUICK COUPLER SUPPLY GAUGE PORT	B-5
B	FRONT BRAKE PRESSURE	F-5
C	REAR BRAKE PRESSURE	F-8
SOB	OIL SAMPLE PORT	F-8



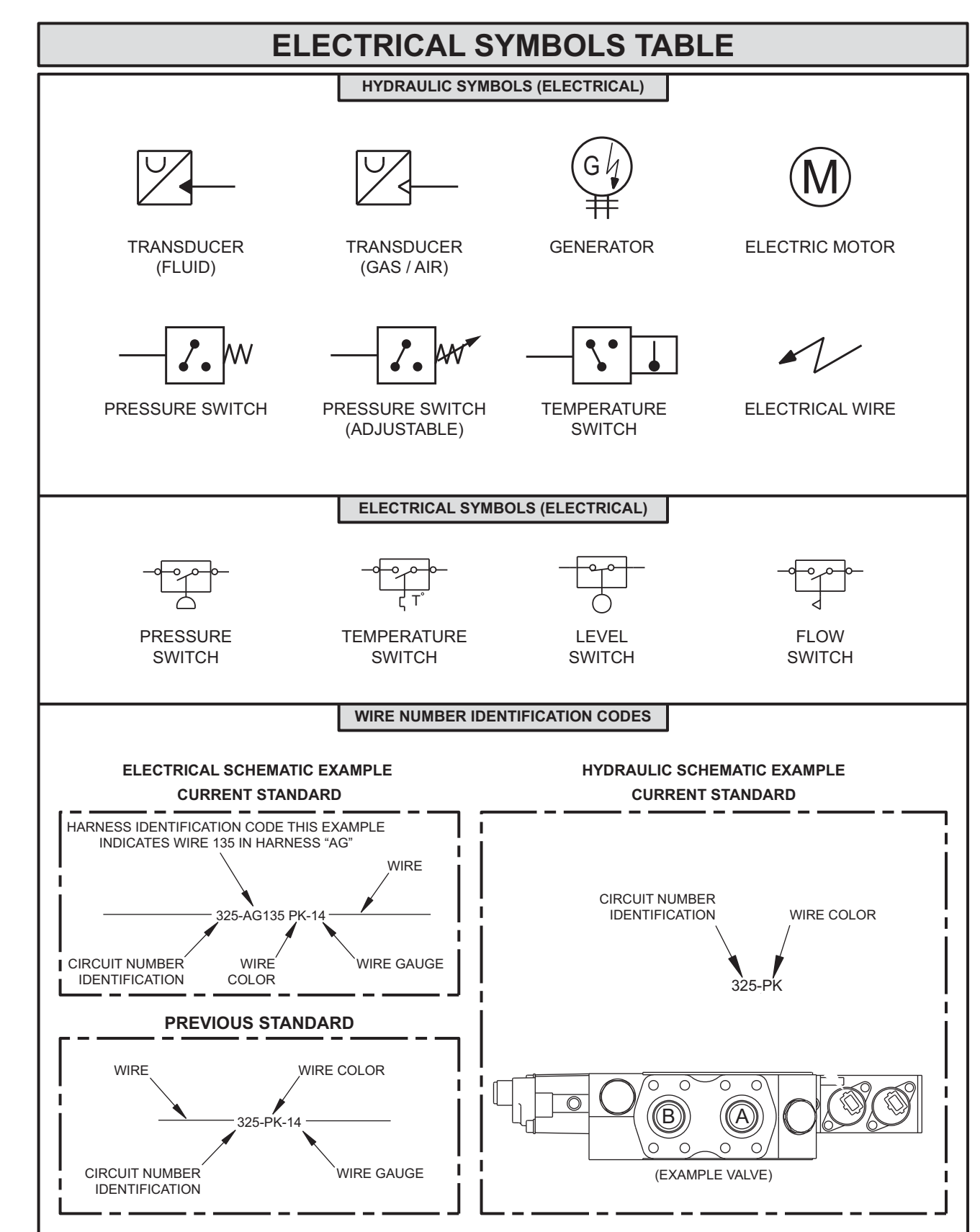
RIGHT SIDE VIEWS

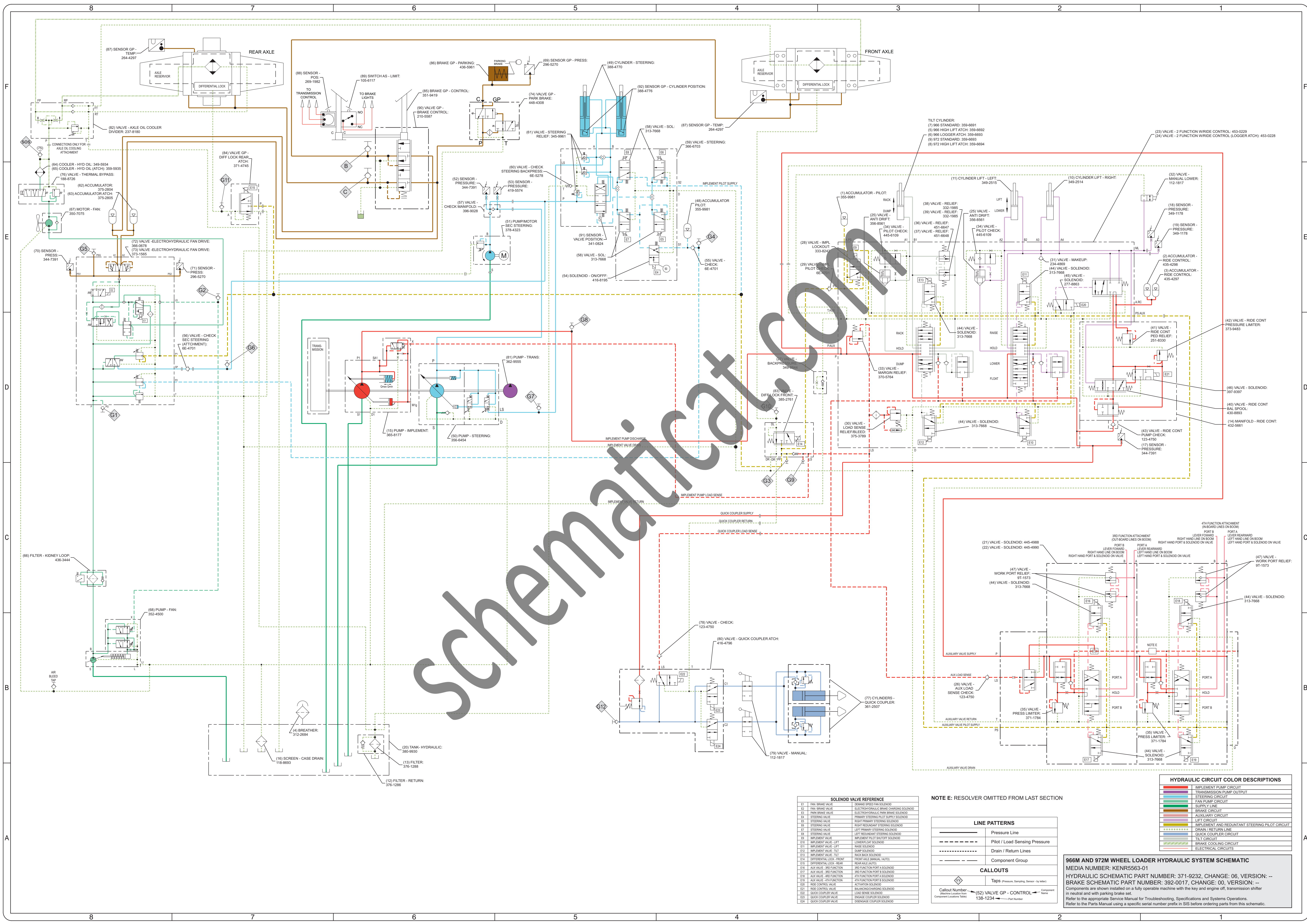


IMPLEMENT AND AUX VALVES VIEW 1



IMPLEMENT AND AUX VALVES VIEW 2





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SOLENOID VALVE REFERENCE	
E1	FAN BRAKE VALVE
E2	FAN BRAKE VALVE
E3	FAN BRAKE VALVE
E4	STEERING VALVE
E5	STEERING VALVE
E6	STEERING VALVE
E7	STEERING VALVE
E8	STEERING VALVE
E9	STEERING VALVE
E10	STEERING VALVE
E11	IMPLEMENT VALVE - LEFT
E12	IMPLEMENT VALVE - LEFT
E13	IMPLEMENT VALVE - LEFT
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E100	IMPLEMENT VALVE - LEFT

NOTE E: RESOLVER OMITTED FROM LAST SECTION

LINE PATTERNS	
—	Pressure Line
---	Pilot / Load Sensing Pressure
----	Drain / Return Lines
- - - -	Component Group

CALLOUTS	
○	Callout Number
○	Component Location (Letter)
○	Component
○	Part Number

HYDRAULIC CIRCUIT COLOR DESCRIPTIONS	
Red	IMPLEMENT PUMP CIRCUIT
Blue	TRANSMISSION PUMP OUTPUT
Green	STEERING CIRCUIT
Yellow	FAN PUMP CIRCUIT
Purple	SUPPLY LINE
Orange	BRAKE CIRCUIT
Light Blue	AUXILIARY CIRCUIT
Light Green	LIFT CIRCUIT
Light Purple	IMPLEMENT AND REDUNDANT STEERING PILOT CIRCUIT
Light Orange	DRAIN / RETURN LINE
Light Yellow	QUICK COUPLER CIRCUIT
Light Blue	TILT CIRCUIT
Light Green	BRAKE COOLING CIRCUIT
Light Purple	ELECTRICAL CIRCUITS

966M AND 972M WHEEL LOADER HYDRAULIC SYSTEM SCHEMATIC
 MEDIA NUMBER: KENR5563-01
 HYDRAULIC SCHEMATIC PART NUMBER: 371-9232, CHANGE: 06, VERSION: --
 BRAKE SCHEMATIC PART NUMBER: 392-0017, CHANGE: 00, VERSION: --
 Components are shown installed on a fully operable machine with the key and engine off, transmission shifter in neutral and with parking brake set.
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.
 Refer to the Parts Manual using a specific serial number prefix in SIS before ordering parts from this schematic.