

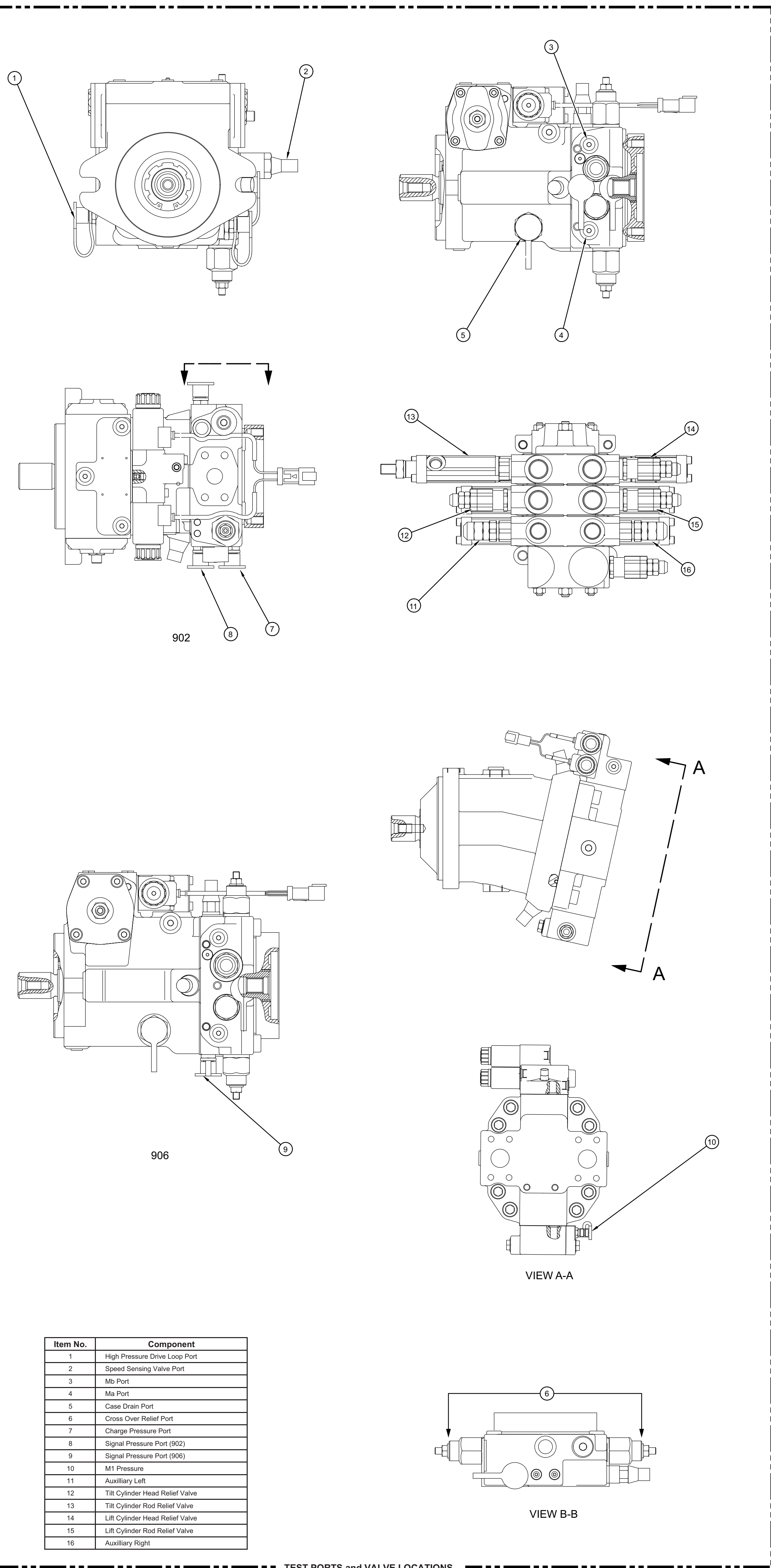
HYDRAULIC CIRCUIT COLOR DESCRIPTIONS

Red	Steering and Brake Pump Output
Blue	Work Tool Pump Output
Green	Secondary Steering Pump Output
Orange	Hydrostatic Drive Pump Output
Purple	Hydrostatic Charge Output
Light Blue	Supply Line
Dark Blue	Drain / Return Line
Light Green	Head Metering Control System
Light Purple	Rearing and Brake Charging Circuit
Light Orange	Hydrostatic Pump Signal Control Circuit
Light Yellow	Tilt Cylinder Control Circuit
Light Cyan	Coupler Cylinder Control Circuit
Light Magenta	4th Function Control Circuit
Light Brown	Lift Cylinder Control Circuit
Light Grey	Brake Circuit

LINE PATTERNS

—	Pressure Line
- - -	Pilot / Load Sensing Pressure
· · · · ·	Drain / Return Lines
—	Component Group
- - -	Attachment
—	Air Line

THIS SCHEMATIC IS FOR THE 902, 906, 908 Compact Wheel Loader
Part #: 145-0101 CHG18 (902, 906), Part #: 175-7688 CHG18 (908)
Components are shown installed on a fully operable machine with the key and engine off and transmission shifter in neutral.



Related Manuals	
Description	Media Number
Parts Book (902: 7ES1-UP and 906: 6ZS1-UP)	SEBP2816
Parts Book (906: 6ZS1-UP)	SEBP2819
Parts Book (906: MER1-UP)	SEBP3756
Parts Book (906: TAR1-UP)	SEBP3757
Machine System	
Specifications: Machine Systems (New Coupler and Steering Components) (902: 7ES1-UP and 906: 6ZS1-UP)	RENRR467
Specifications: Power Train (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1294
Specifications: Steering System (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1287
Specifications: Braking System (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1289
Specifications: Hydraulic System (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1291
Specifications: Power Train (906: MER1-UP and 908: TAR1-UP)	RENRR4655
Specifications: Hydraulic and Steering System (906: MER1-UP and 908: TAR1-UP)	RENRR4657
Testing and Adjusting: Machine Systems (New Coupler and Steering Components) (902: 7ES1-UP and 906: 6ZS1-UP)	RENRR468
Testing and Adjusting: Steering Systems (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1290
Testing and Adjusting: Braking Systems (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1292
Testing and Adjusting: Hydraulic Systems (902: 7ES1-UP and 906: 6ZS1-UP)	SENRR1293
Testing and Adjusting: Power Train Systems (906: MER1-UP and 908: TAR1-UP)	RENRR4656
Testing and Adjusting: Hydraulic and Steering Systems (906: MER1-UP and 908: TAR1-UP)	RENRR4658
Electrical System	
Schematic (Electrical System - 902, 906)	RENRR4806
Schematic (Electrical System - 902, 906)	RENRR4860
Schematic (Electrical System - 906, 908)	RENRR4863

Tap Locations Pressure, Sampling, and Sensor		
Tap Number	Description	Schematic Location
AA	LOAD SENSING STEERING PRESSURE	J-15, J-6
BB	FAN PUMP PRESSURE	1-17, 1-8
CC	IMPLEMENT PRESSURE	1-15, 1-7
DD	PUMP SIGNAL PRESSURE	D-15
EE	CHARGE PRESSURE	D-14
FF	PUMP CASE PRESSURE	D-13
GG	HIGH PRESSURE FOR THE DRIVE LOCK	D-13
HH	SERVICE BRAKE PRESSURE	C-10
JJ	FILL PORT	A-15
KK	OIL SAMPLING VALVE	A-15
LL	MOTOR CASE PRESSURE	B-12
MM	MOTOR CASE PRESSURE	1-15, 1-6
NN	CHARGE PRESSURE (908 ONLY)	D-14

Component Locations					
Description	Part Number	Machine Location	Description	Part Number	Schematic Location
Steering Cylinder	134-8838 144-8137	1	M-16, M-8	Crossover Relief Valve	(Note A) 27
Coupler Valve and Mounting	211-7758	2	K-14, K-5	Charge Relief Valve	(Note A) 28
Coupler Cylinder	138-2289 132-4422	3	L-13, L14, L-4	Motor Displacement Control	(Note B) 29
Coupling	153-2995	4	K-12, K-4	Rabbit/Turtle Solenoid	(Note B) 30
Coupling	153-2994	5	K-12, K-3	Creep Valve (If Equipped)	171-1457 31
Implement Valve with E/H Aux	226-4780 1223-7927 223-7945			Fluid Level Sensor (for brakes)	(Note C) 32
Tilt Cylinder	1444-6537 1135-0532 187-0549	7	K-11, L-3	Master Cylinder (Brake Valve)	137-7745 145-9896 33
Lift Cylinder	1444-7341 134-4485	8	K-11, L-3	Motor Group (Hystat)	203-4141 203-4142 201-0471 34
Load Check Valves (If Equipped) 6ZS1541-Up, 7ES809-Up	211-3490 211-3495	9	K-3, K-2	Reverse Solenoid	(Note B) 35
Implement Valve Group	528-4781 223-7926 223-7928	10	J-10, J-2	Shuttle Pin	(Note B) 36
Boom Lower Valve (If Equipped) (With Load Check Valve)	180-3572	11	I-2	Motor Actuator	(Note B) 37
Work Tool Positioner Valve (If Equipped)	203-3055	12	I-3	Flushing Valve	(Note B) 38
Pilot Valve (Lift/Tilt/Auxiliary)	141-9113	13	I-10, H-2	POR Valve (Pressure Override Valve)	(Note A) 39
Pilot Shutoff Valve and mounting	154-2488	14	G-12, G-13	Crossover Relief Valve	(Note A) 40
Pilot Shutoff Valve and Mounting 6ZS1473-Up, 7ES790-Up	203-3055	15	I-13, I-14	Filter Group	137-7747 41
Pilot Oil Accumulator	144-8005 135-8956	16	I-13, I-5 G-12, G-3	Hydraulic Filter	1G-8878 42
Cooler Assembly	138-1755	17	H-14, H-5	FNR Solenoid (Forward Neutral Reverse)	(Note A) 43
Cooler Bypass Valve (High Pressure)	142-1656	18	H-14, H-5	Piston Pump Actuator	(Note A) 44
Check Valve (Cooler Bypass Low Pressure)	130-6039 s4E-1437	19	H-14, H-5	Manual Boom Lower Bypass 6ZS782-Up, 7ES482-Up	(Note E) 45
Gear Pump	215-8173 215-8193 231-0469	20	J-16, I-7	Work Tool System Control (Standard)	226-4781 223-7925 46
Hydraulic Tank	140-1609 167-0510	21	H-16, H-7	Work Tool System with Load Check Valves (If Equipped) 6ZS782-Up, 7ES482-Up	226-4780 223-7927 47
Fan Drive Motor	212-8715 212-8716	22	I-16, I-8	Filter By-pass Switch	(Note D) 48
Metering Pump	238-9489	24	K-16, K-7	Pilot Valve	141-9114 49
Pump Group (Hystat)	203-4138 203-4139 201-0470	25	D-16	Relief Valve	215-8157 50
Speed Sensing Valve	(Note A)	26	C-14	Solenoid Valve	223-0495 51

(1) 902 Only (2) 906 Only (3) 908 Only
 (A) This component is included in the Pump Group (Hystat).
 (B) This component is included in the Motor Group (Hystat).
 (C) This component is included in the Master Cylinder.
 (D) This component is included in the Filter Group.
 (E) This component is included in the Implement Valve Group.

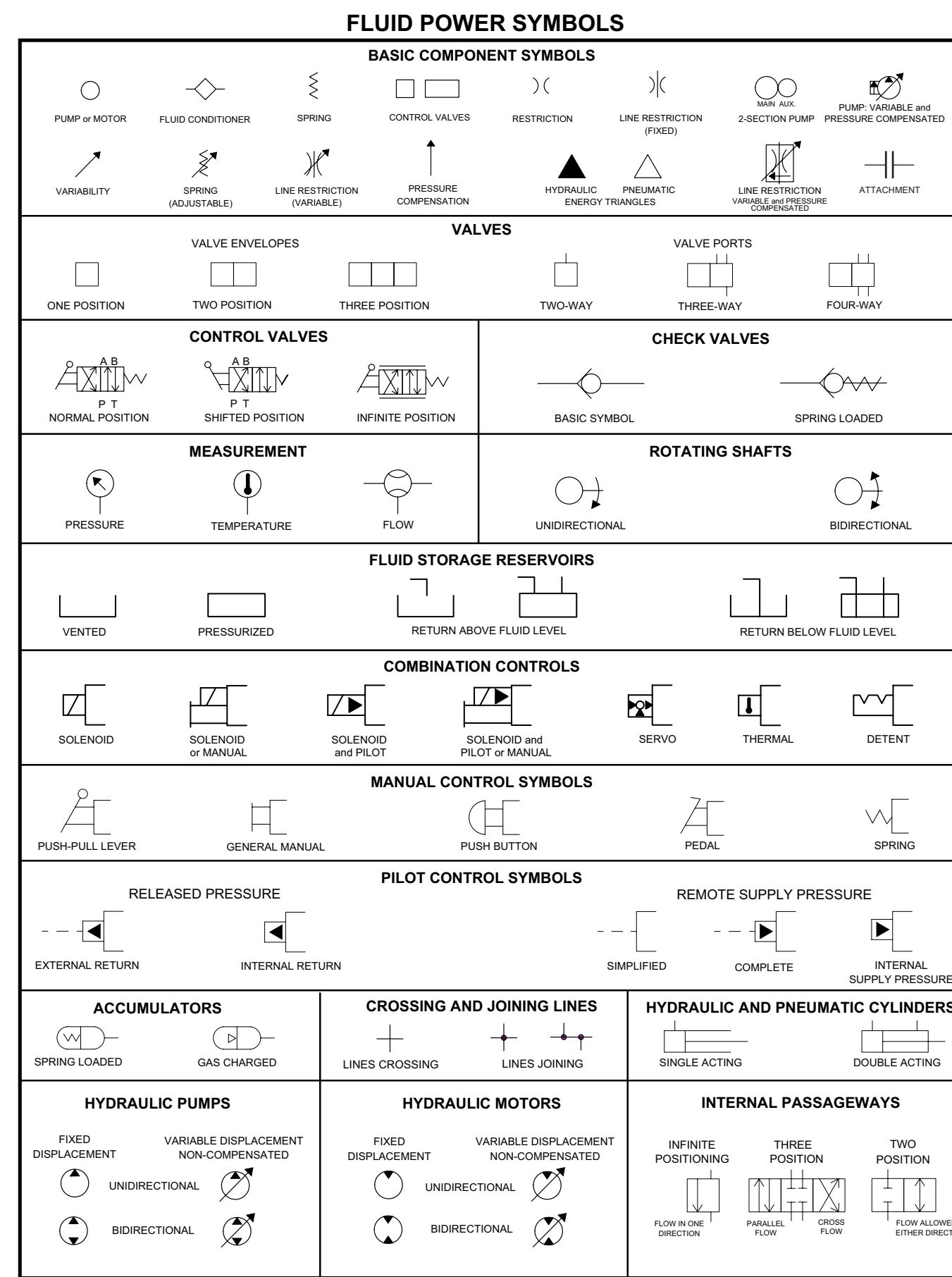
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Schematic

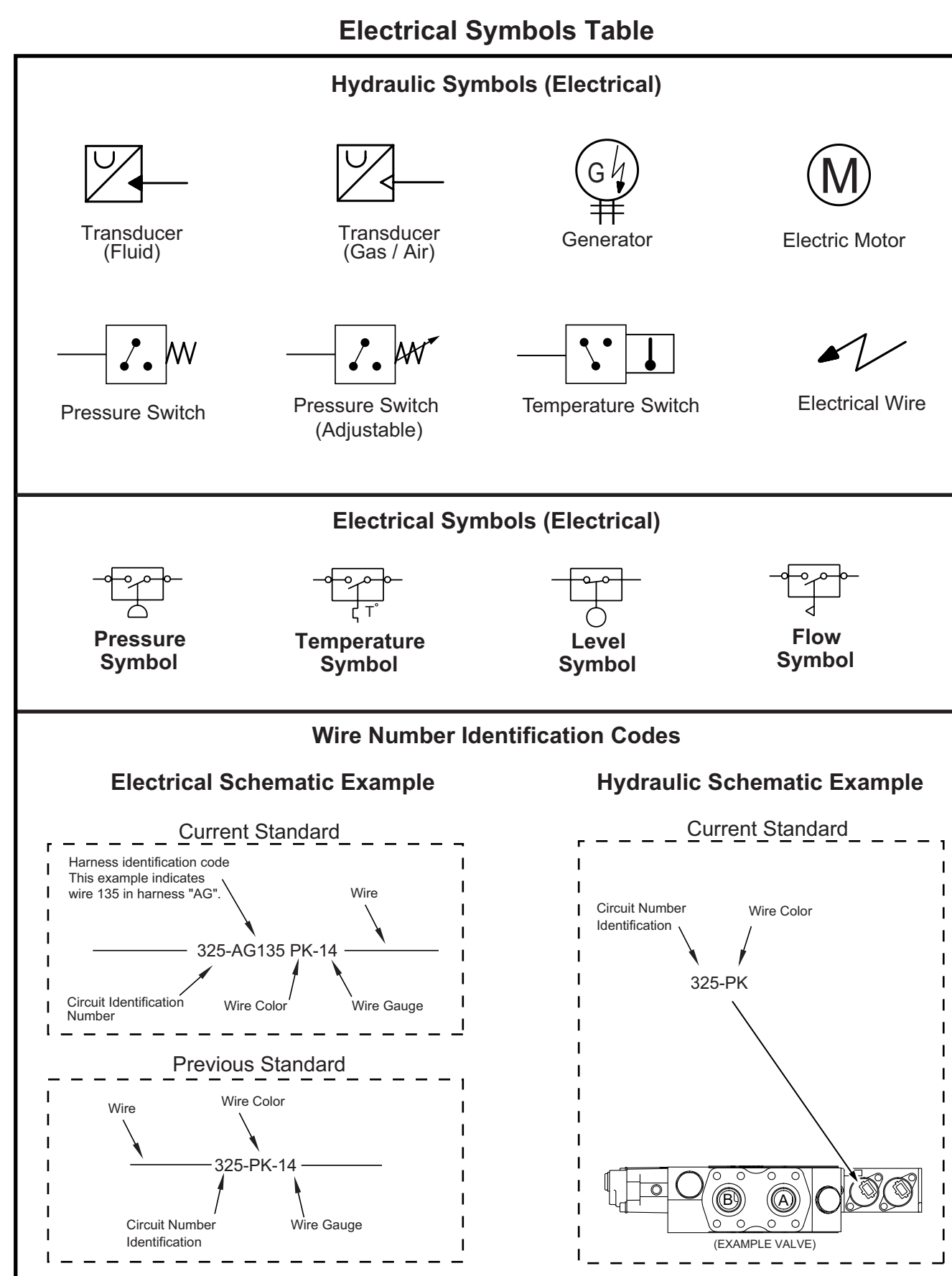
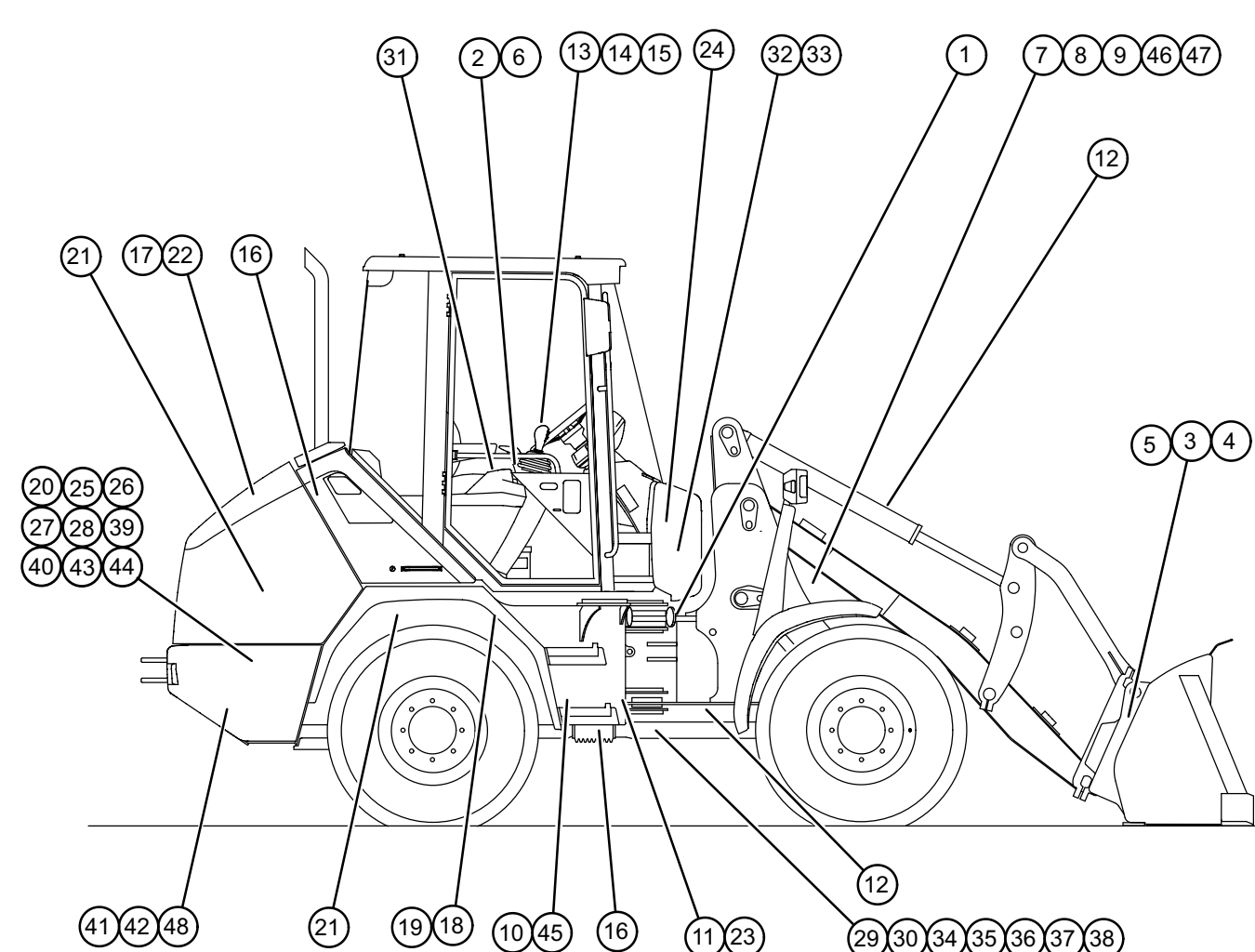
902, 906 and 908 Compact Wheel Loader Hydraulic System

902: 7ES1-UP 906: 6ZS1-UP 908: TAR1-UP
 MER1-UP



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