

**HYDRAULIC/HYDROSTATIC SCHEMATIC
WITH TWO SPEED VALVE
A300 (S/N A5GW20001 AND ABOVE)
(S/N A5GY20001 AND ABOVE)**

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(PRINTED MARCH 2008)

V-1192legend

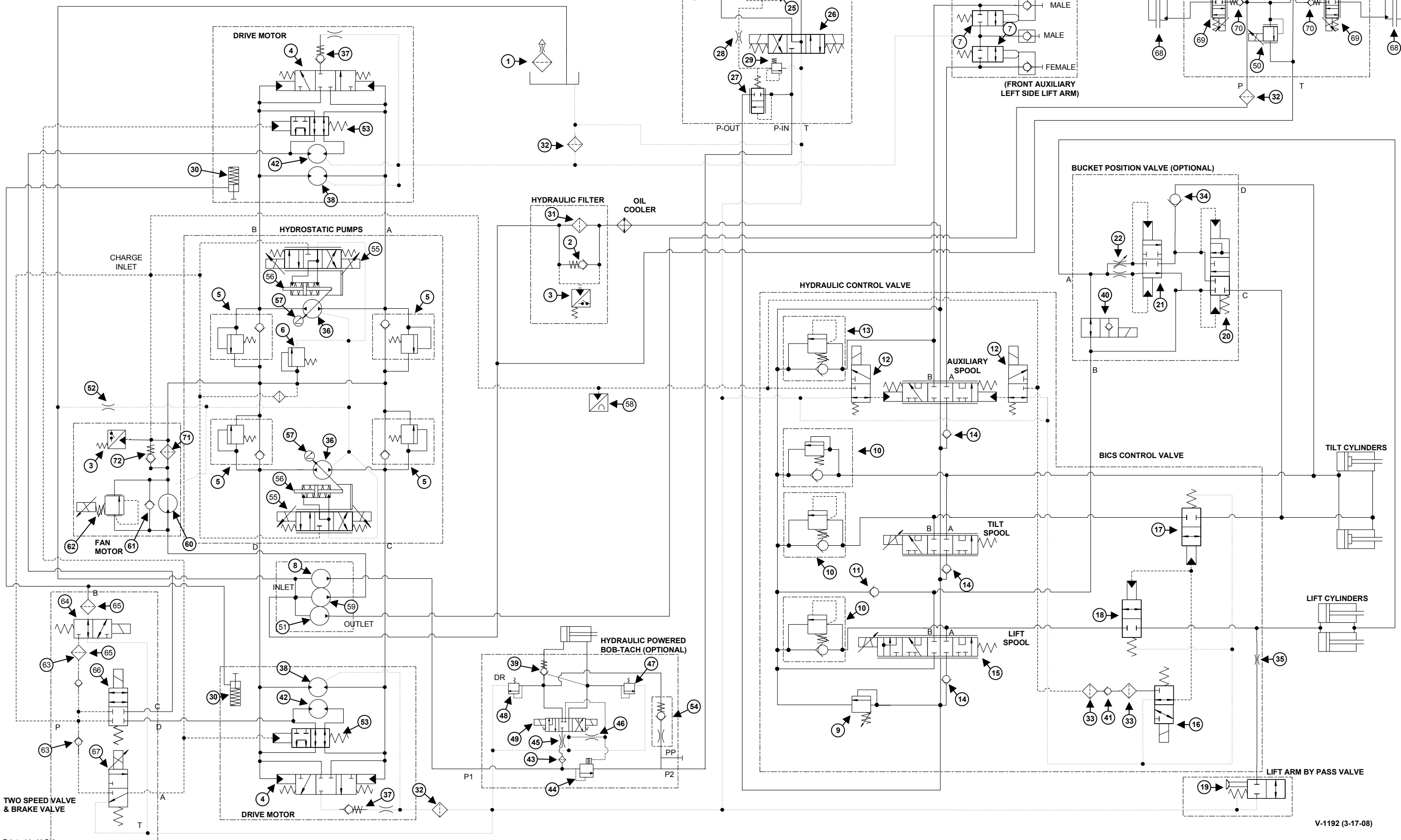
LEGEND

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|---|---|---|--|
| <p>① RESERVOIR:
Capacity 18.8 qt. (17,8 L)</p> <p>② SPRING LOADED FILTER BY-PASS
VALVE: 45-55 PSI (3,1-3,8 bar)</p> <p>③ DIFFERENTIAL PRESSURE SWITCH:
36-44 PSI (2,5-3,0 bar)
Normally Closed</p> <p>④ DRIVE MOTOR SHUTTLE VALVE</p> <p>⑤ RELIEF/REPLENISHING VALVE - HIGH
PRESSURE: 5075 PSI (350 bar)</p> <p>⑥ RELIEF VALVE - CHARGE INLET:
360 PSI (24,8 bar)
at High Engine Idle
With 140 degrees F. (60 degrees C.) Fluid</p> <p>⑦ FRONT AUXILIARY MANUAL
PRESSURE BLEED-OFF VALVE</p> <p>⑧ HYDRAULIC PUMP Gear Type
20.7 GPM (78,4 L/min.) at High Engine Idle</p> <p>⑨ RELIEF VALVE - MAIN:
3250-3350 PSI (224-231 bar)
at Front Quick Couplers</p> <p>⑩ PORT RELIEF/ANTICAVITATION VALVE
4000 PSI (276 bar)</p> <p>⑪ ANTICAVITATION VALVE</p> <p>⑫ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - AUXILIARY</p> <p>⑬ PORT RELIEF/ANTICAVITATION VALVE:
. (Optional)
3500 PSI (241,3 bar)</p> <p>⑭ LOAD CHECK VALVE</p> <p>⑮ LIFT CYLINDER SPOOL - MADE TO
RESTRICT FLOW DURING BOOM
DOWN BUT NOT DURING BOOM UP</p> <p>⑯ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - BICS CONTROL</p> | <p>⑰ PILOTED ACTIVATED DIRECTIONAL
CONTROL VALVE - TILT CONTROL</p> <p>⑱ PILOTED ACTIVATED DIRECTIONAL
CONTROL VALVE - LIFT CONTROL</p> <p>⑲ PULL BUTTON ACTIVATED
DIRECTIONAL CONTROL VALVE -
LIFT ARM BY-PASS</p> <p>⑳ PILOTED ACTIVATED DIRECTIONAL
CONTROL VALVE - UNLOADING
SPOOL</p> <p>㉑ PILOTED ACTIVATED DIRECTIONAL
CONTROL VALVE - FLOW CONTROL
SPOOL</p> <p>㉒ FLOW DIVIDER ADJUSTMENT VALVE</p> <p>㉓ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - BASE</p> <p>㉔ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - ROD</p> <p>㉕ LOAD SHUTTLE VALVE - BLEED OFF</p> <p>㉖ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - TWO COIL</p> <p>㉗ PILOT ACTIVATED DIRECTIONAL
CONTROL VALVE - REAR AUXILIARY</p> <p>㉘ RESTRICTOR - 0.031 inch (0,8 mm)</p> <p>㉙ RELIEF VALVE: 3300 PSI (228 bar)</p> <p>㉚ HYDRAULIC BRAKE - SPRING APPLIED
- PRESSURE RELEASE</p> <p>㉛ FILTER - HYDRAULIC (CANISTER)</p> <p>㉜ FILTER - CASE DRAIN (SINTERED
BRONZE)</p> <p>㉝ FILTER - BICS CONTROL VALVE
(SCREEN)</p> <p>㉞ CHECK VALVE - BUCKET POSITION
VALVE</p> | <p>㉟ RESTRICTION</p> <p>㊱ VARIABLE CAPACITY DISPLACEMENT
BI-DIRECTIONAL HYDROSTATIC PUMP</p> <p>㊲ SHUTTLE RELIEF VALVE
(Not Adjustable - Factory Set)
200 PSI (13,9 bar)</p> <p>㊳ FIXED CAPACITY DISPLACEMENT
BI-DIRECTIONAL HYDROSTATIC
MOTOR – Low Range</p> <p>㊴ CHECK VALVE - With 80 PSI (5,5 bar) Spring</p> <p>㊵ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - BUCKET POSITION
VALVE (ON/OFF)</p> <p>㊶ CHECK VALVE - BICS CONTROL VALVE</p> <p>㊷ FIXED CAPACITY DISPLACEMENT
BI-DIRECTIONAL HYDROSTATIC
MOTOR – High Range</p> <p>㊸ FILTER - Bob-Tach Valve</p> <p>㊹ PILOT ACTIVATED DIRECTIONAL
CONTROL VALVE - HYDRAULIC
POWERED BOB-TACH</p> <p>㊺ RESTRICTION - 0.089 inch (2,26 mm)</p> <p>㊻ RESTRICTION - 0.025 inch (0,6 mm)</p> <p>㊼ RELIEF VALVE - 2000 PSI (137 bar)</p> <p>㊽ RELIEF VALVE - 1200 PSI (83 bar)</p> <p>㊾ SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE (TWO COIL)</p> <p>㊿ SOLENOID ACTIVATED PRESSURE
CONTROL VALVE – 2000 PSI (138 bar)</p> <p>1 STEERING PUMP -
13.6 GPM (51,5 L/min) at High Engine Idle</p> <p>2 RESTRICTION - 0.343 inch (8,7 mm)</p> <p>3 PILOT ACTIVATED DIRECTIONAL
CONTROL VALVE – Two Speed</p> | <p>4 CHECK VALVE - With 300 PSI (20,7 bar) Spring
with 0.016 inch (0,40 mm) orifice</p> <p>5 SOLENOID ACTIVATED CONTROL
VALVE - FORWARD/REVERSE</p> <p>6 SERVO PISTON -Swash Plate</p> <p>7 POSITION SENSOR -Swash Plate</p> <p>8 CHARGE PRESSURE SENSOR</p> <p>9 CHARGE PUMP -
13.6 GPM (51,5 L/min) at High Engine Idle</p> <p>10 FIXED CAPACITY DISPLACEMENT
HYDRAULIC MOTOR</p> <p>11 ANTICAVITATION VALVE</p> <p>12 PROPORTIONAL RELIEF VALVE –
(Fan Speed Regulator):
1566 - 1784 PSI (108 - 123 bar)</p> <p>13 CHECK VALVE</p> <p>14 SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - BRAKE</p> <p>15 FILTER - Brake Valve</p> <p>16 SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE – Make-Up Valve</p> <p>17 SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE – Two Speed</p> <p>18 STEERING CYLINDERS</p> <p>19 SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE – Steering</p> <p>20 CHECK VALVE - 270 PSI (18,6 bar)</p> <p>21 FILTER - HYDRAULIC</p> <p>22 SPRING LOADED FILTER BY-PASS
VALVE: 75-83 PSI (5,2-5,7 bar)</p> |
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NOTE: Unless otherwise specified, springs have NO significant pressure value.

**HYDRAULIC/HYDROSTATIC SCHEMATIC
WITH TWO SPEED
A300 (S/N A5GW20001 AND ABOVE)
(S/N A5GY20001 AND ABOVE)**

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HYDRAULIC/HYDROSTATIC SCHEMATIC WITH TWO SPEED VALVE AND HIGH FLOW A300 (S/N A5GW20001 AND ABOVE) (S/N A5GY20001 AND ABOVE)

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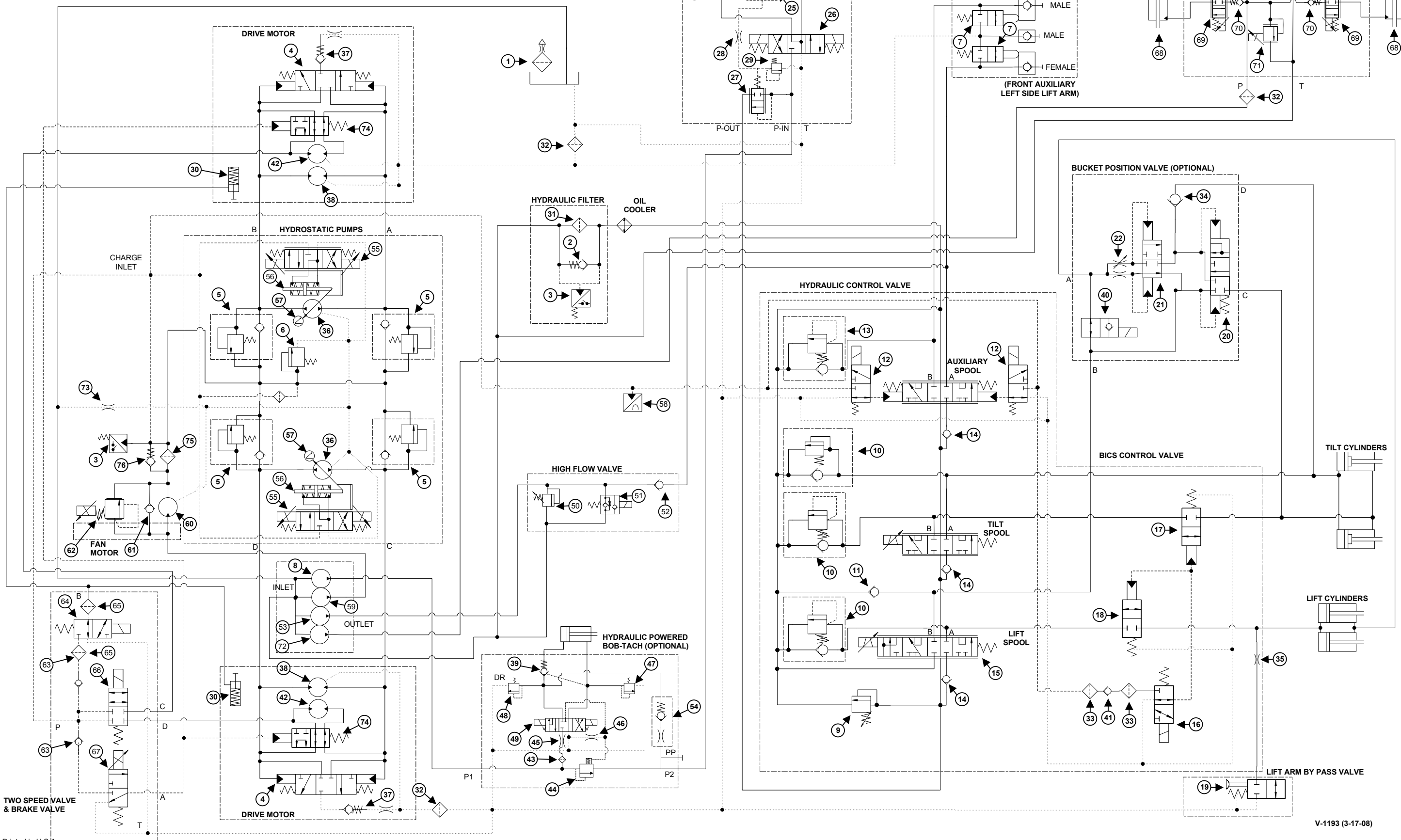
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LEGEND

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|---|---|---|---|
| <p>① RESERVOIR:
Capacity 18.8 qt. (17,8 L)</p> <p>② SPRING LOADED FILTER BY-PASS
VALVE: 45-55 PSI (3,1-3,8 bar)</p> <p>③ DIFFERENTIAL PRESSURE SWITCH:
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Normally Closed</p> <p>④ DRIVE MOTOR SHUTTLE VALVE</p> <p>⑤ RELIEF/REPLENISHING VALVE - HIGH
PRESSURE: 5075 PSI (350 bar)</p> <p>⑥ RELIEF VALVE - CHARGE INLET:
360 PSI (24,8 bar)
at High Engine Idle
With 140 degrees F. (60 degrees C.) Fluid</p> <p>⑦ FRONT AUXILIARY MANUAL
PRESSURE BLEED-OFF VALVE</p> <p>⑧ HYDRAULIC PUMP Gear Type
20.7 GPM (78,4 L/min.) at High Engine Idle</p> <p>⑨ RELIEF VALVE - MAIN:
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at Front Quick Couplers</p> <p>⑩ PORT RELIEF/ANTICAVITATION VALVE
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CONTROL VALVE - AUXILIARY</p> <p>⑬ PORT RELIEF/ANTICAVITATION VALVE:
. (Optional)
3500 PSI (241,3 bar)</p> <p>⑭ LOAD CHECK VALVE</p> <p>⑮ LIFT CYLINDER SPOOL - MADE TO
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CONTROL VALVE (TWO COIL)</p> <p>㊿ RELIEF VALVE - 3300 PSI (228 bar)</p> <p>1 SOLENOID ACTIVATED DIRECTIONAL
CONTROL VALVE - (ON/OFF)</p> <p>2 CHECK VALVE</p> <p>3 AUXILIARY HYDRAULIC PUMP -
16.0 GPM (60,5 L/min) at High Engine Idle</p> <p>4 CHECK VALVE - With 300 PSI (20,7 bar) Spring
with 0.016 inch (0,40 mm) orifice</p> | <p>5 SOLENOID ACTIVATED CONTROL
VALVE - FORWARD/REVERSE</p> <p>6 SERVO PISTON -Swash Plate</p> <p>7 POSITION SENSOR -Swash Plate</p> <p>8 CHARGE PRESSURE SENSOR</p> <p>9 CHARGE PUMP -
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CONTROL VALVE – 2000 PSI (138 bar)</p> <p>22 STEERING PUMP -
13.6 GPM (51,5 L/min) at High Engine Idle</p> <p>23 RESTRICTION - 0.343 inch (8,7 mm)</p> <p>24 PILOT ACTIVATED DIRECTIONAL
CONTROL VALVE – Two Speed</p> <p>25 FILTER - HYDRAULIC</p> <p>26 SPRING LOADED FILTER BY-PASS
VALVE: 75-83 PSI (5,2-5,7 bar)</p> |
|---|---|---|---|

**HYDRAULIC/HYDROSTATIC SCHEMATIC
WITH TWO SPEED AND HIGH FLOW
A300 (S/N A5GW20001 AND ABOVE)
(S/N A5GY20001 AND ABOVE)**

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TWO SPEED VALVE & BRAKE VALVE