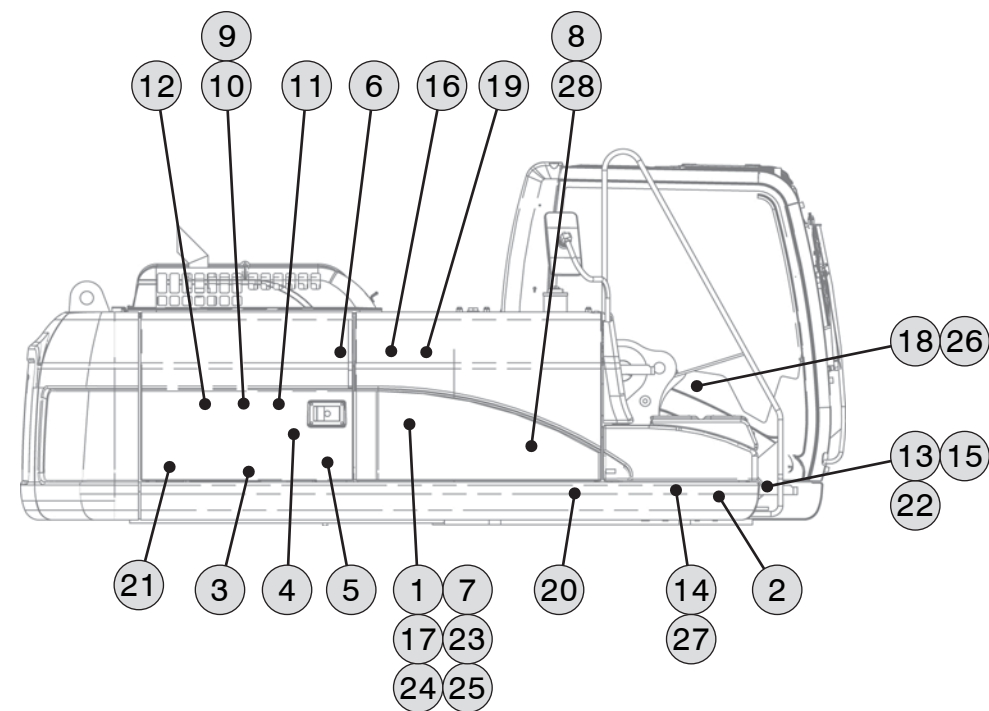
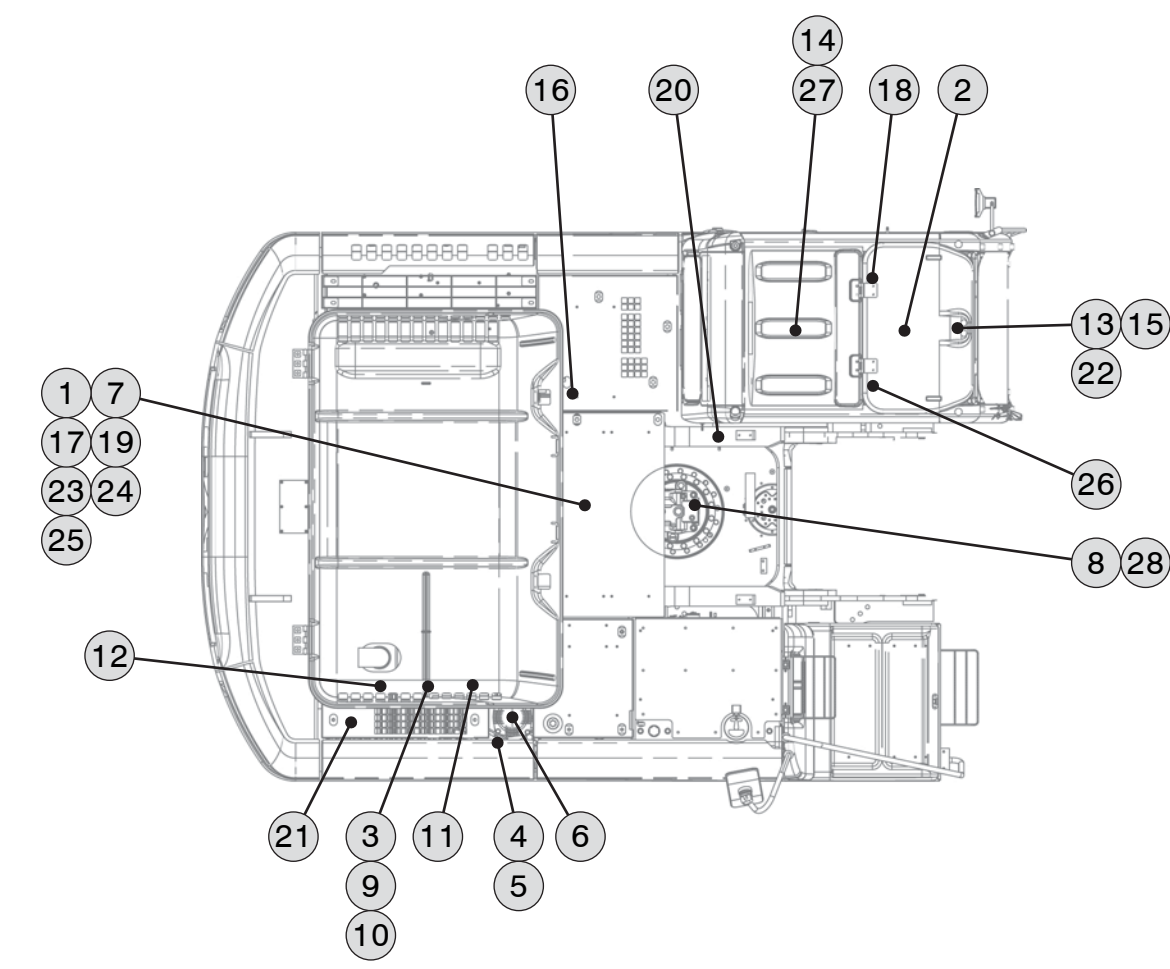
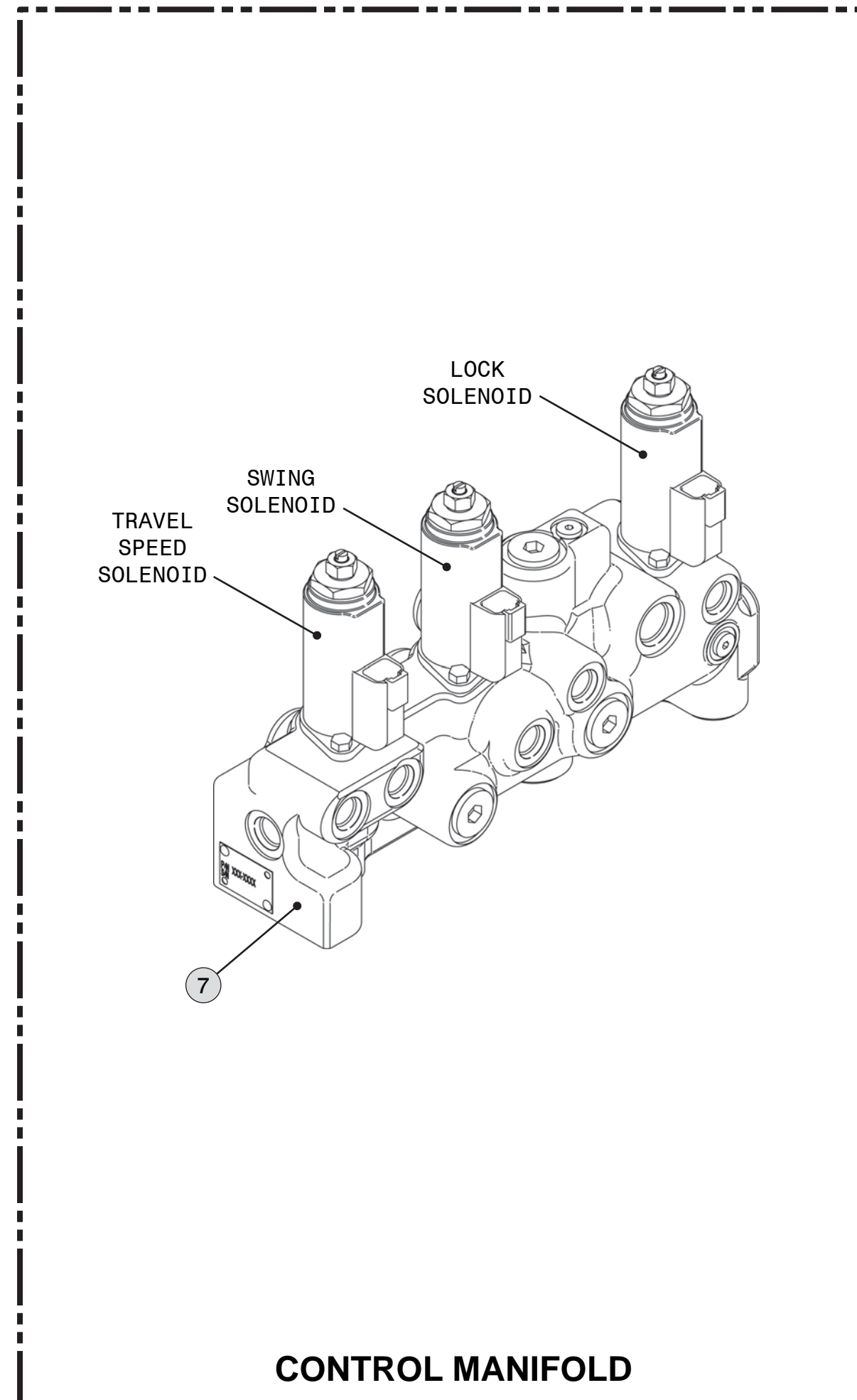


| Component Locations | | | |
|---|-------------|------------------|--------------------|
| Description | Part Number | Machine Location | Schematic Location |
| Accumulator Gp | 164-6981 | 1 | B-5 |
| Block | 187-6716 | 2 | E-7 |
| Block - Initial Circuit | 187-6716 | 3 | B-7 |
| Filter Gp - Case Drain | 126-2075 | 4 | A-5 |
| Filter Gp - Pilot Hydraulic | 188-2084 | 5 | A-4 |
| Filter Gp - Return Oil | 188-4140 | 6 | A-6 |
| Manifold Gp - Control | 232-4053 | 7 | B-5, B-6 |
| Motor Gp - Swing | 266-7919 | 8 | E-6 |
| Pump Gp - Main Hydraulic | 272-6959 | 9 | A-3, B-3 |
| Pump Gp - Medium Pressure | 240-2998 | 10 | A-3 |
| Sensor As - Left Pump Pressure | 221-8859 | 11 | B-3 |
| Sensor As - Right Pump Pressure | 221-8859 | 12 | A-3 |
| Switch As - LH Travel Pressure | 167-3466 | 13 | E-8 |
| Switch As - Pilot Pressure | 167-3466 | 14 | C-7, C-8 |
| Switch As - RH Travel Pressure | 167-3466 | 15 | E-7 |
| Valve Gp - Cooler Bypass | 173-4672 | 16 | A-8 |
| Valve Gp - Heavy Lift Solenoid | 121-6303 | 17 | A-4 |
| Valve Gp - LH Joystick | 232-4100 | 18 | D-8 |
| Valve Gp - Main Control | 285-1341 | 19 | C-1 thru C-6 |
| Valve Gp - Medium Pressure Rotator | 232-4103 | 20 | F-2 |
| Valve Gp - Medium Pressure Rotator Sol. | 259-7430 | 21 | B-8 |
| Valve Gp - Pilot Travel | 158-8250 | 22 | E-7, E-8 |
| Valve Gp - Press Reducing Boom/Swing | 232-4102 | 23 | B-4 |
| Valve Gp - Press Reducing Bucket Priority | 232-4102 | 24 | A-7 |
| Valve Gp - Pressure Reducing | 206-3354 | 25 | B-7 |
| Valve Gp - RH Joystick | 225-4813 | 26 | D-7 |
| Valve Gp - Shuttle | 185-0462 | 27 | C-7, C-8 |
| Valve Gp - Swing Cushion | 158-9090 | 28 | E-5 |

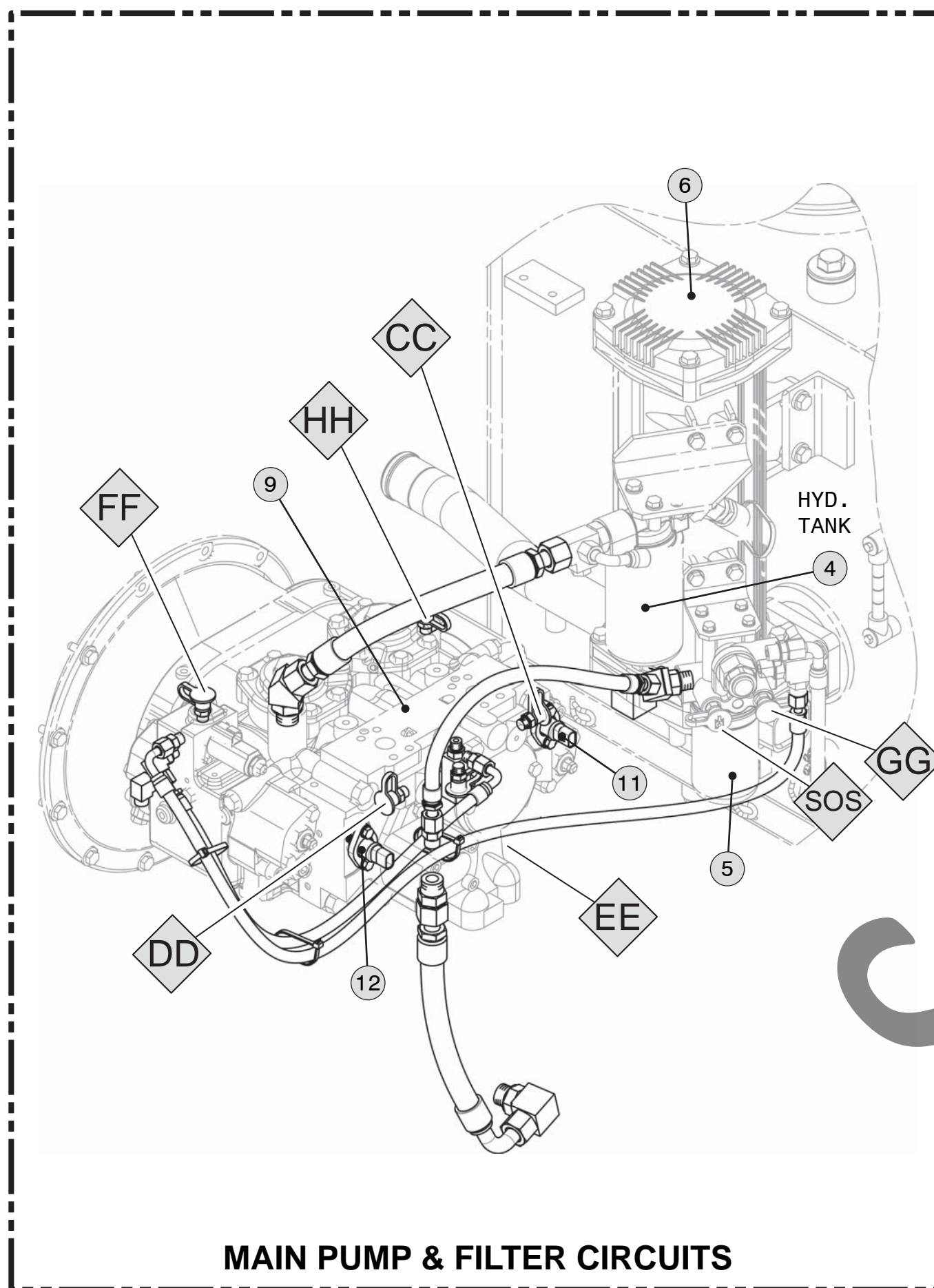


Machine Component/Locations

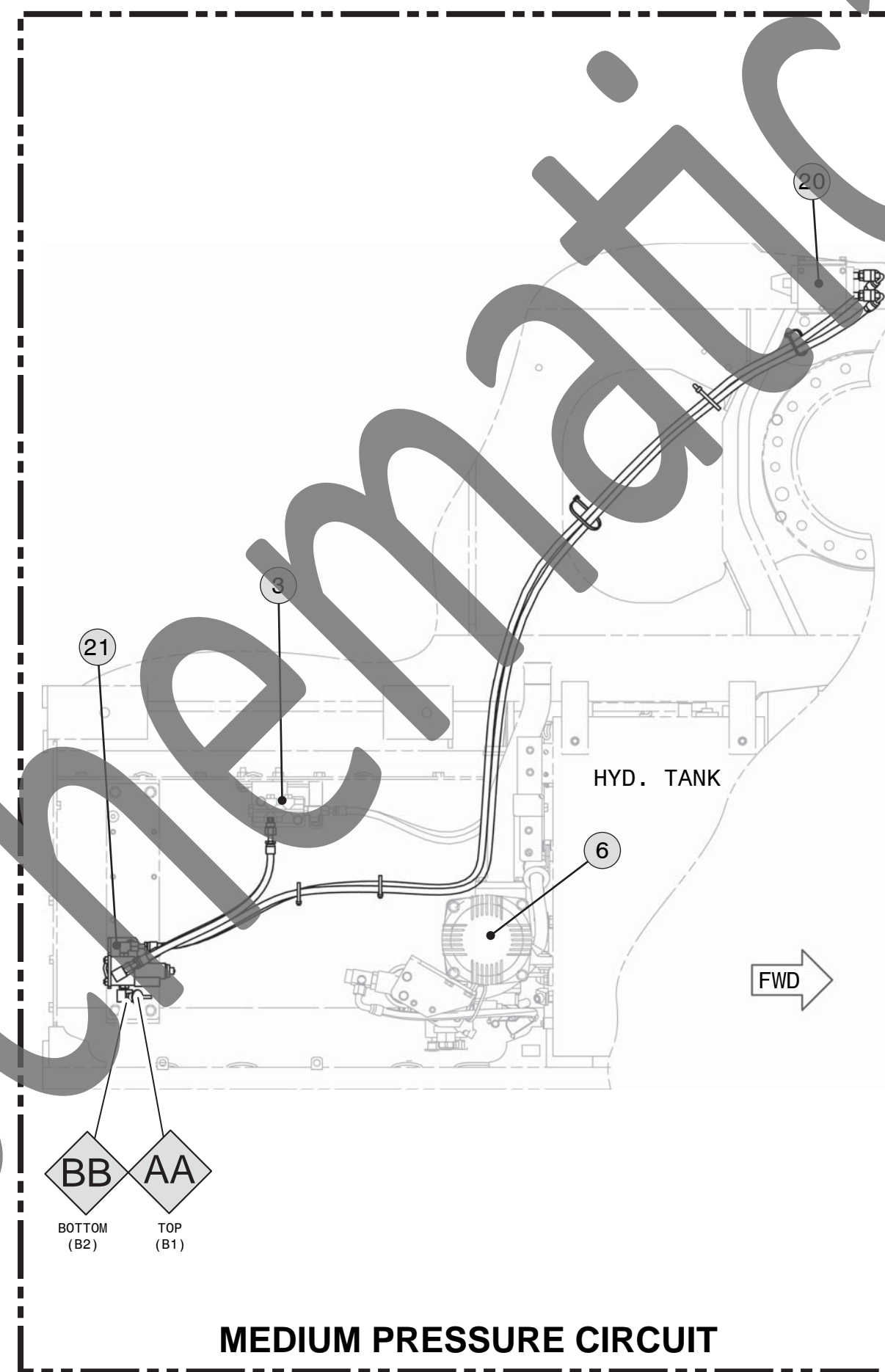


CONTROL MANIFOLD

| Tap Locations Pressure, Sampling, and Sensor | | |
|---|---------------------------------|--------------------|
| Tap Number | Description | Schematic Location |
| AA | Medium Pressure B1 Port | B-8 |
| BB | Medium Pressure A1 Port | B-8 |
| CC | Left Pump Delivery Pressure | B-3 |
| DD | Right Pump Delivery Pressure | A-3 |
| EE | Left Pump Power Shift Pressure | B-2 |
| FF | Right Pump Power Shift Pressure | A-2 |
| GG | Pilot Pump Delivery Pressure | A-4 |
| HH | Case Drain Pressure | B-2 |
| SOS | Hydraulic Oil Sampling Port | A-4 |



MAIN PUMP & FILTER CIRCUITS



MEDIUM PRESSURE CIRCUIT

CATERPILLAR®

KENR5973
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Schematic

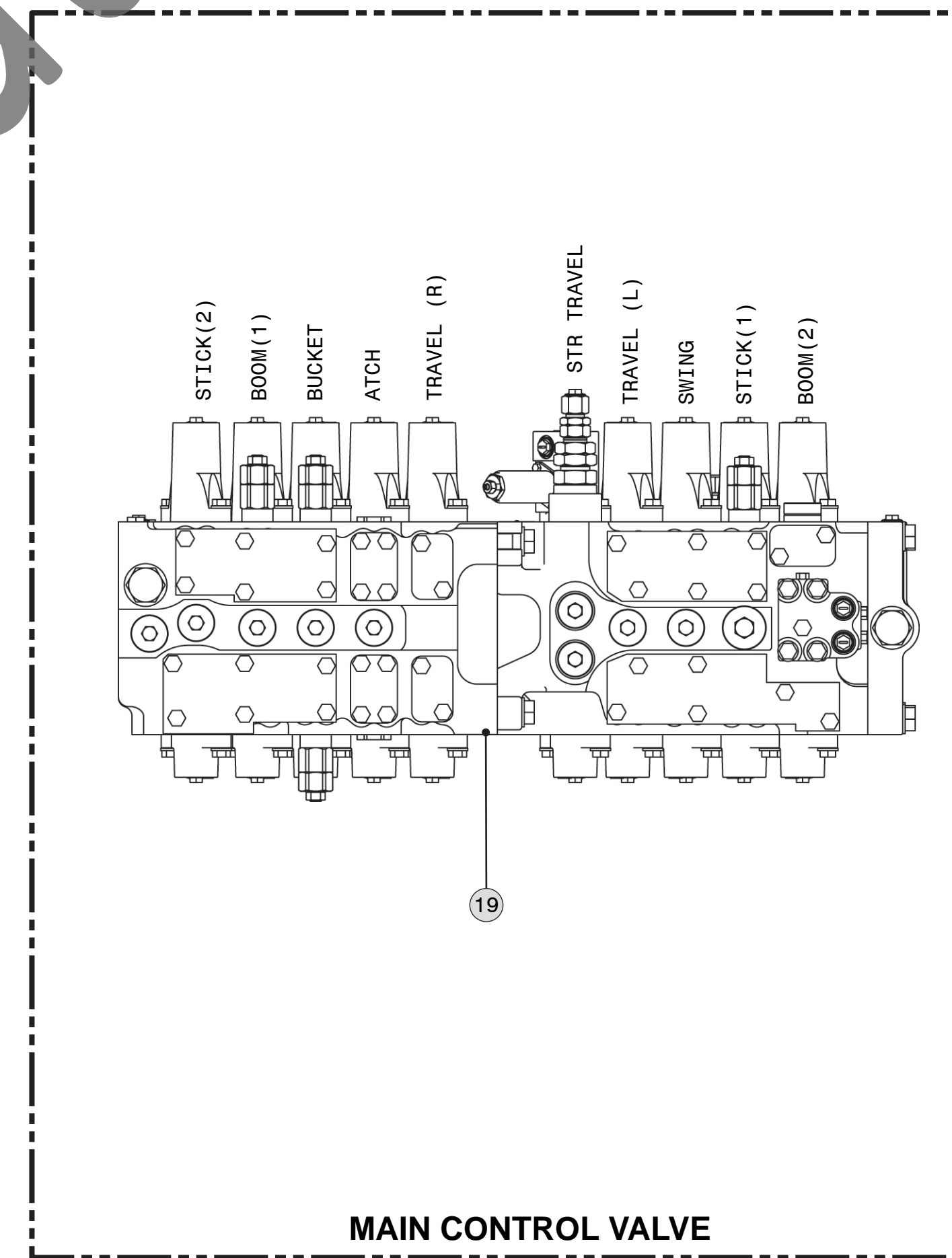
325D For Foundation Drill Applications
Hydraulic System

C3N1-UP

| FLUID POWER SYMBOLS | | | | | |
|--------------------------|---------------------------------------|-----------------------------|---------------------------------------|------------------------------------|--------------------------|
| BASIC COMPONENT SYMBOLS | | | | | |
| PUMP & MOTOR | FLUID CONDITIONER | SPRING | CONTROL VALVES | RESTRICTION | LINE RESTRICTION (FIXED) |
| RESTRICTION | LINE RESTRICTION (ADJUSTABLE) | HYDRAULIC ENERGY TRAP/LEAKS | PRELIMINARY | LINE RESTRICTION (WIRE CONNECTION) | ATTACHMENT |
| VALVE ENVELOPES | VALVES | | VALVE PORTS | | |
| ONE POSITION | TWO POSITION | THREE POSITION | TWO-WAY | THREE-WAY | FOUR-WAY |
| CONTROL VALVES | | | CHECK VALVES | | |
| NORMAL POSITION | SHIFTED POSITION | INFINITE POSITION | BASIC SYMBOL | SPRING LOADED | SHUTTLE |
| MEASUREMENT | | | ROTATING SHAFTS | | |
| PRESSURE | TEMPERATURE | FLOW | UNIDIRECTIONAL | BI-DIRECTIONAL | |
| FLUID STORAGE RESERVOIRS | | | | | |
| VENTED | PRESSURIZED | RETURN ABOVE FLUID LEVEL | RETURN BELOW FLUID LEVEL | | |
| COMBINATION CONTROLS | | | | | |
| SOLENOID | SOLENOID OF MANUAL | SOLENOID and PILOT | SOLENOID and PILOT or MANUAL | SERVO | THERMAL |
| MANUAL CONTROL SYMBOLS | | | | | |
| PUSH/PULL LEVER | MANUAL SHUTOFF | GENERAL MANUAL | PUSH BUTTON | PEDAL | SPRING |
| RELEASED PRESSURE | | | PILOT CONTROL SYMBOLS | | |
| EXTERNAL RETURN | INTERNAL RETURN | DISMPLD | COMPLETE | INTERNAL SUPPLY PRESSURE | INTERNAL SUPPLY PRESSURE |
| ACCUMULATORS | | CROSSING AND JOINING LINES | | HYDRAULIC AND PNEUMATIC CYLINDERS | |
| SPRING LOADED | GAS CHARGED | LINES CROSSING | LINES JOINING | SINGLE ACTING | DOUBLE ACTING |
| HYDRAULIC PUMPS | | HYDRAULIC MOTORS | | INTERNAL PASSAGEWAYS | |
| FIXED DISPLACEMENT | VARIABLE DISPLACEMENT NON-COMPENSATED | FIXED DISPLACEMENT | VARIABLE DISPLACEMENT NON-COMPENSATED | INFINITE POSITIONING | THREE POSITION |
| UNIDIRECTIONAL | BI-DIRECTIONAL | UNIDIRECTIONAL | BI-DIRECTIONAL | TWO POSITION | TWO POSITION |

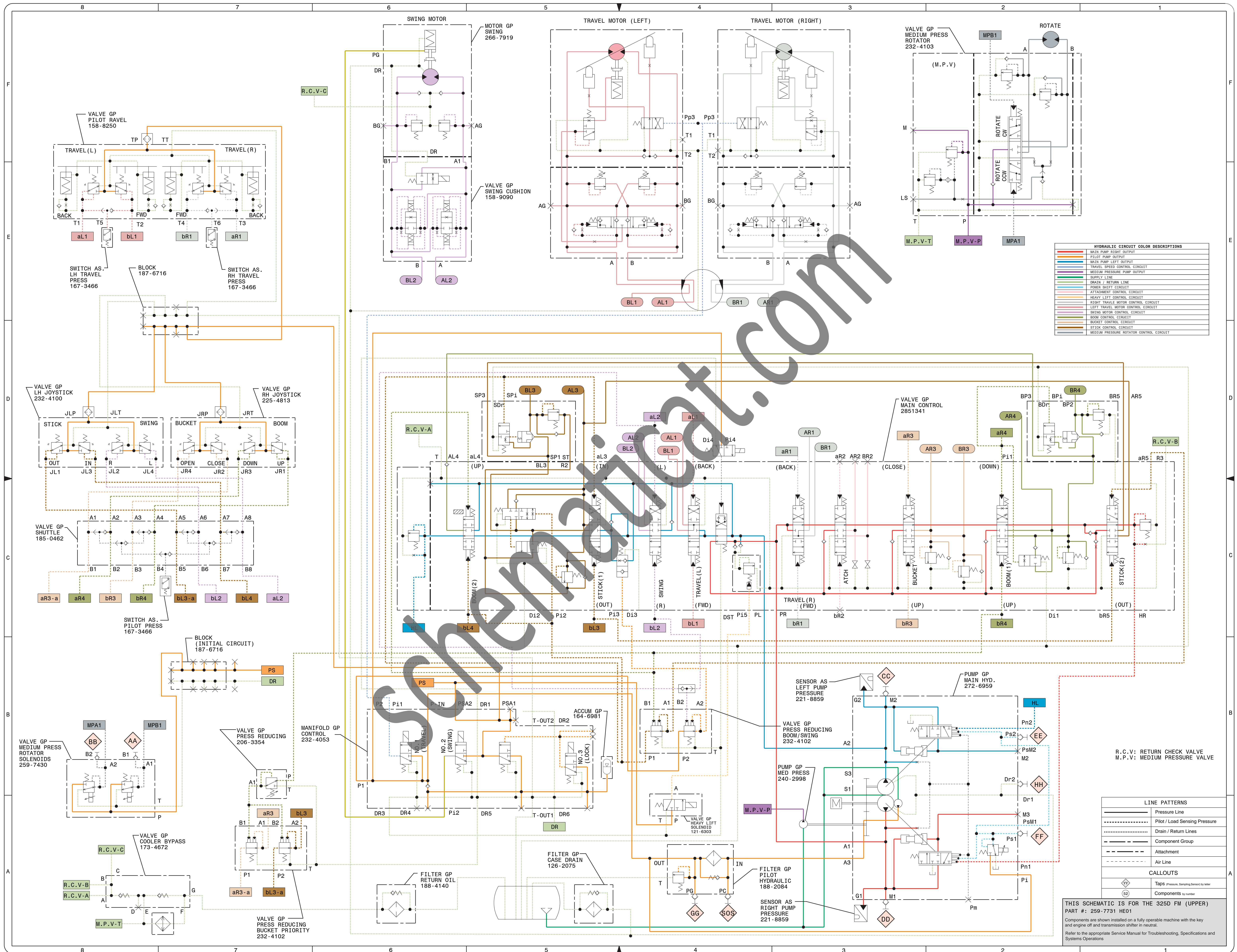
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MAIN CONTROL VALVE

| Electrical Symbols Table | | | |
|--|------------------------------|--|-----------------|
| Hydraulic Symbols (Electrical) | | | |
| Transducer (Fluid) | Transducer (Gas / Air) | Generator | Electric Motor |
| Pressure Switch | Pressure Switch (Adjustable) | Temperature Switch | Electrical Wire |
| Electrical Symbols (Electrical) | | | |
| Pressure Symbol | Temperature Symbol | Level Symbol | Flow Symbol |
| Wire Number Identification Codes | | | |
| Electrical Schematic Example | | Hydraulic Schematic Example | |
| Current Standard | | Current Standard | |
| This example indicates wire 135 in harness "AG". | | This example indicates wire 135 in harness "AG". | |
| 325-AG135 PK-14 | Wire Gauge | 325-PK | Wire Color |
| Previous Standard | Previous Standard | EXAMPLE VALVE | |
| 325-PK-14 | Wire Gauge | | |



R.C.V.: RETURN CHECK VALVE
M.P.V.: MEDIUM PRESSURE VALVE