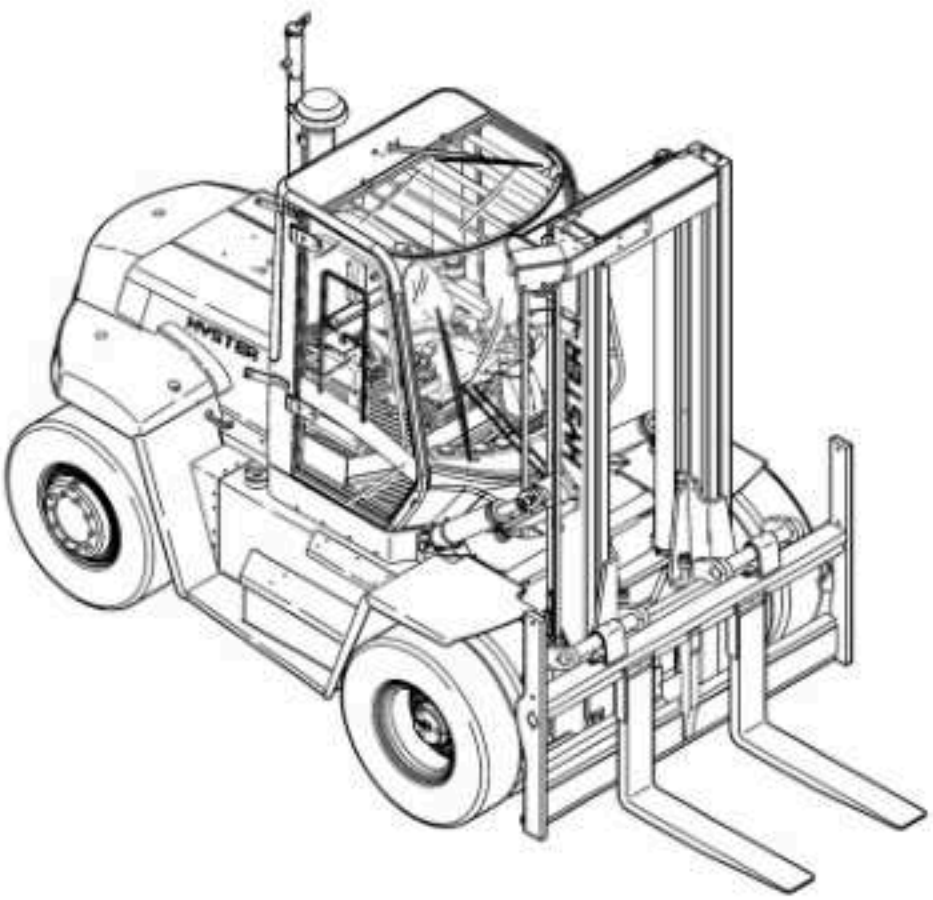
SERVICE MANUAL

K007 (H190HD2, H210HD2, H230HD2, H230HDS2, H250HD2, H280HD2)



Rev. 08/14

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Table 5. Error Code Descriptions (Continued)

Warning Lights		Fault Code Readout	
Diagnostic Warning Light	Engine Stop Warning Light	Engine Fault Code	Description
ON		E1876	Aftertreatment Exhaust Gas Temperature 3 Circuit - Voltage Above Normal, or Shorted to High Source
ON		E1877	Aftertreatment Exhaust Gas Temperature 3 Circuit - Voltage Below Normal, or Shorted to Low Source
ON		E1878	Aftertreatment Exhaust Gas Temperature 3 - Data Erratic, Intermittent or Incorrect
ON		E1879	Aftertreatment Particulate Filter Differential Pressure Sensor Circuit - Voltage Above Normal, or Shorted to High Source
ON		E1881	Aftertreatment Particulate Filter Differential Pressure Sensor Circuit - Voltage Below Normal, or Shorted to Low Source
ON		E1883	Aftertreatment Particulate Filter Differential Pressure Sensor - Data Erratic, Intermittent or Incorrect
ON		E1885	Aftertreatment 1 Intake NOX Sensor Circuit - Voltage Below Normal or Shorted to Low Source
ON		E1887	Aftertreatment 1 Outlet NOX Sensor Circuit - Voltage Below Normal or Shorted to Low Source
ON		E1896	EGR Valve Controller - Out of Calibration
ON		E1898	VGT Actuator Controller - Out of Calibration
ON		E1911	Injector Metering Rail 1 Pressure - Data Valid but Above Normal Operational Range - Most Severe Level
ON		E1921	Aftertreatment Particulate Filter Differential Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level
ON		E1922	Aftertreatment Particulate Filter Differential Pressure - Data Valid But Above Normal Operational Range - Most Severe Level
ON		E1938	ECU Power Output Supply Voltage 1 - Data Valid But Below Normal Operating Range - Moderately Severe Level
ON		E1939	ECU Power Output Supply Voltage 1 - Voltage Above Normal, or Shorted to High Source
ON		E1941	ECU Power Output Supply Voltage 1 - Voltage Below Normal, or Shorted to Low Source
ON		E1942	Crankcase Pressure - Data Erratic, Intermittent, or Incorrect

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Schematics

NOTE: For the correct schematics and wiring diagram for the Elme spreaders, see Table 5.

Table 5. Elme Schematic Overview

Elme Model	Hydraulic Schematic	Electrical Schematic	Wiring Diagram
582-5352	782557	782680	782681
582-5364	782312	783749	783750
582-5393	782312	782368	782369
582-5479	782312	782368	782369
584-5376	781679	782374	782375
584-5388	781679	782374	782375
584-5391	781679	782374	782375
584-5398	781679	784840	784841
584-5407	781679	784840	784841
584-5414	781679	786274	786275
584-5460	781679	787420	787421
584-5464	781679	787765	787766
584-5469	781679	787420	787421
584-5485	781679	784840	784841
584-5422	781679	784840	784841
585-5415	782314	782377	782378
585-5416	782314	785601	785602
585-5447	782314	785601	785602
586-5394	781679	781903	781904
586-5411	781679	785219	785220
586-5423	781679	781903	781904
588-5340	781679	781903	781904
588-5382	781679	781903	781904
588-5392	781679	781903	781904
588-5410	781679	785082	785083
588-5431	781679	781903	781904
588-5454	782649	787373	787374
588-5462	781679	787760	787761
588-5465	787414	787769	787770
589-5413	785684	785707	785708
589-5430	785684	785707	785708

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Table 4. Cummins QSB6.7

Item	Specification
Type	Cummins QSB6.7
Number of Cylinders	6
Firing Order	1-5-3-6-2-4
Bore	102 mm (4.02 in.)
Stroke	120 mm (4.62 in.)
Displacement	6.7 liter (409 $in.^3$)
Compression Ratio	17.2:1
Oil Pressure (Minimum, at 2500 rpm and normal operating temperature)	345 kPa (50 psi)
Oil Pressure (At low idle)	69 kPa (10 psi)
Governed Speed (Full power at Normal Operating Temperature)	2300 rpm with load 2450 ±30 no load
Idle Speed	800 rpm ±2%
Stall Speed (Broken-in Engine)	1950 to 2100 rpm
Thermostat	
Begin to open	83°C (181°F)
Fully open	91°C (196°F)
Valve Clearance (Cold)	
Intake	0.25 mm (0.01 in.)
Exhaust	0.51 mm (0.02 in.)
Minimum Cranking Speed	125 rpm
Weight (Dry)	485 kg (1069 lb)

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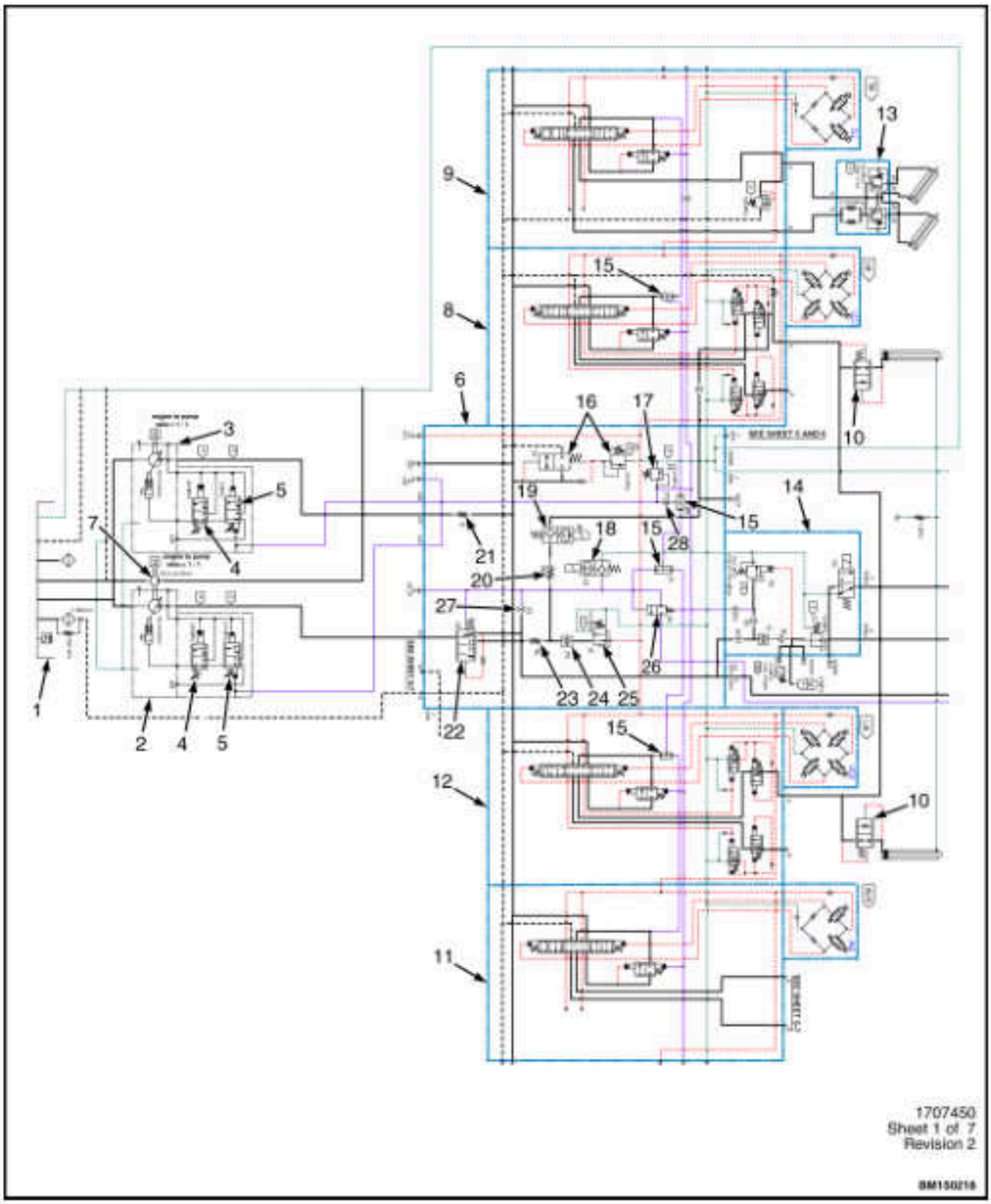


Figure 16. Hydraulic Component Location, Wet Brakes, Dual Pump Configuration

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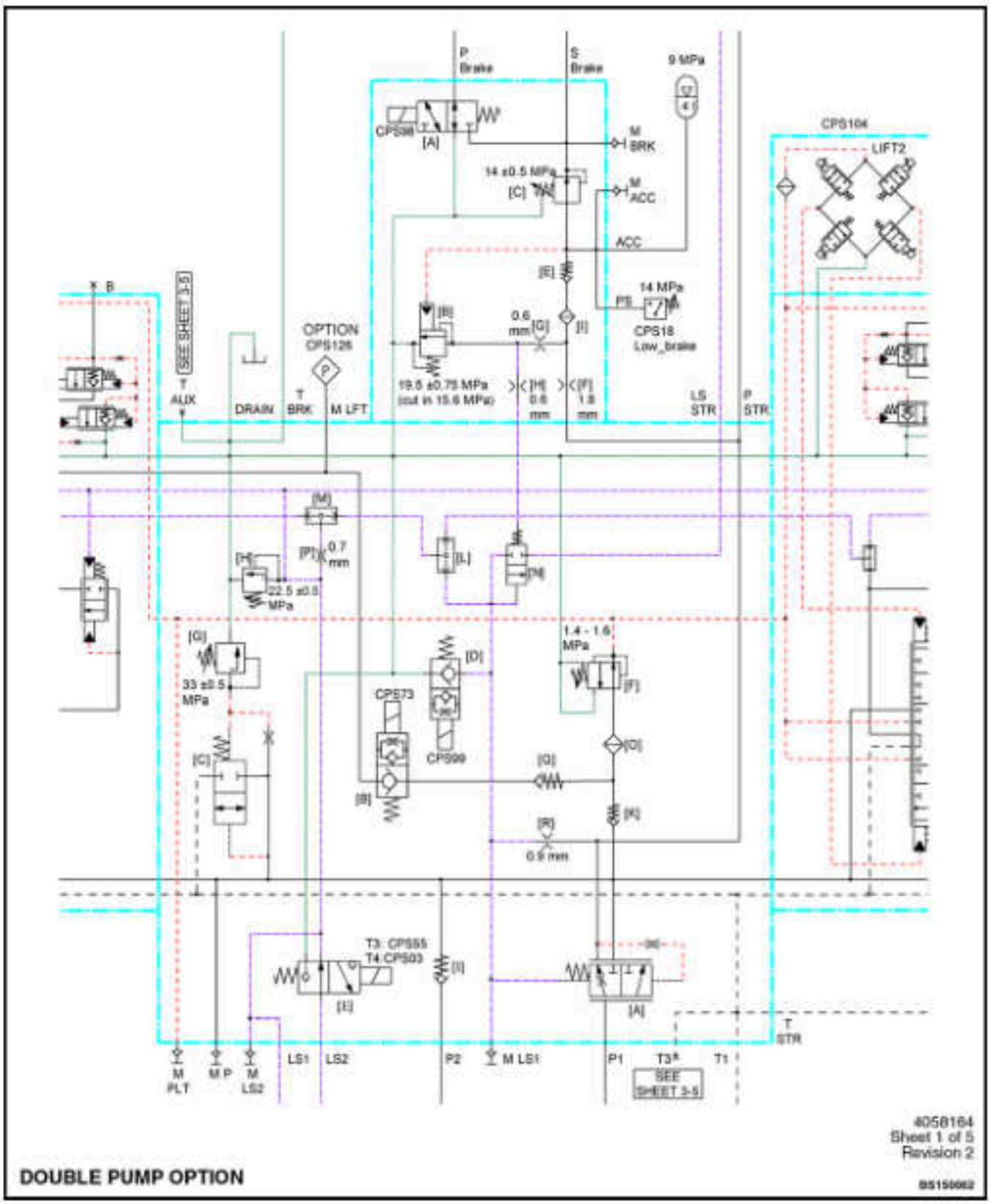
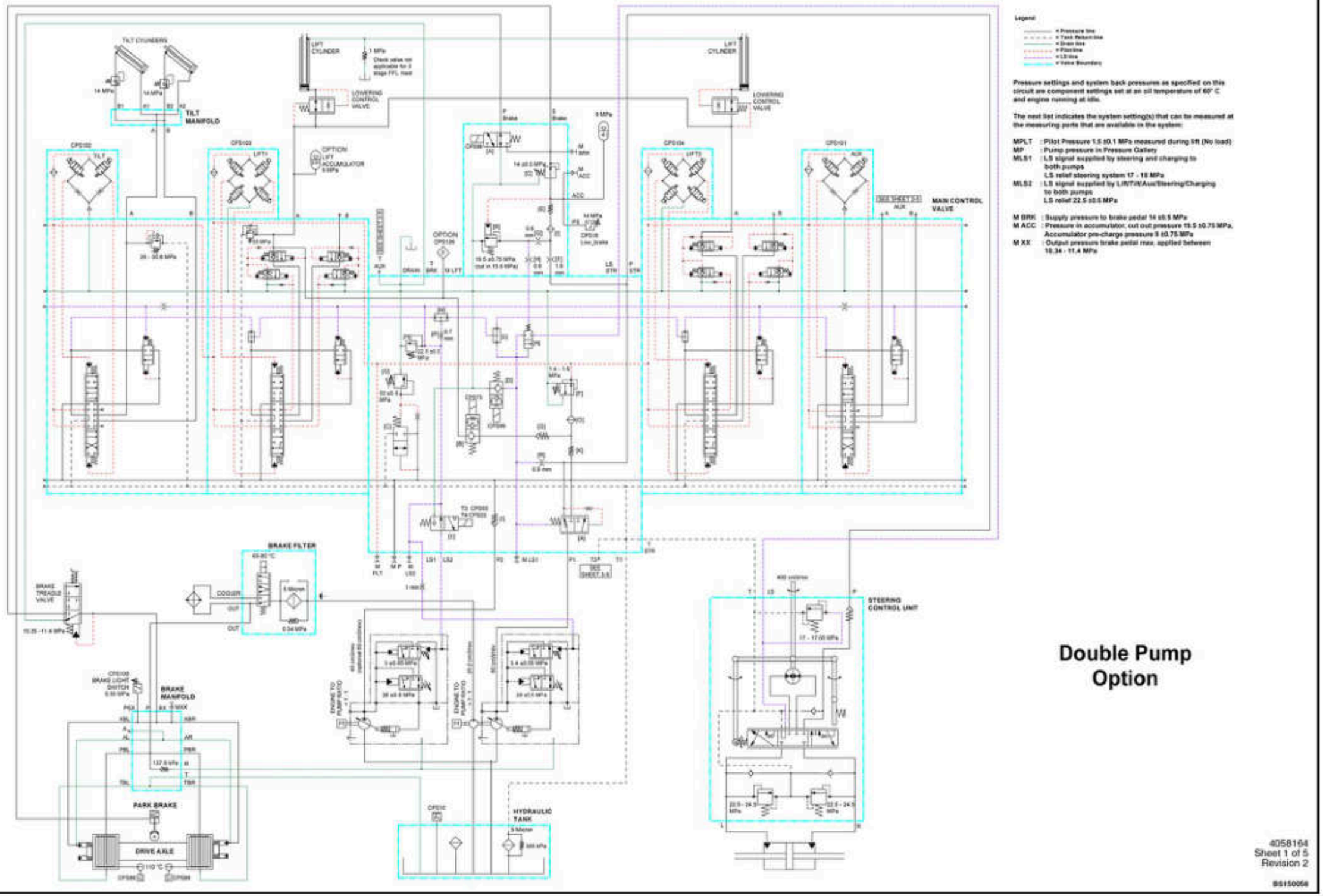


Figure 5. Hydraulic Schematic, Wet Brakes (Sheet 3 of 8)

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Legend

- = Pressure line
- = Tank Return line
- = Drain line
- = Pilot line
- = LS line
- = Valve Boundary

Pressure settings and system back pressures as specified on this circuit are component settings set at an oil temperature of 60° C and engine running at idle.

The next list indicates the system setting(s) that can be measured at the measuring ports that are available in the system:

MPLT : Pilot Pressure 1.5 ±0.1 MPa measured during lift (No load)
MP : Pump pressure in Pressure Gallery
MLS1 : LS signal supplied by steering and charging to both pumps
LS relief steering system 17 - 18 MPa
MLS2 : LS signal supplied by Lift/Tilt/Aux/Steering/Charging to both pumps
LS relief 22.5 ±0.5 MPa

M BRK : Supply pressure to brake pedal 14 ±0.5 MPa
M ACC : Pressure in accumulator, cut out pressure 19.5 ±0.75 MPa, Accumulator pre-charge pressure 9 ±0.75 MPa
M XX : Output pressure brake pedal max. applied between 10.34 - 11.4 MPa

Figure 3. Hydraulic Schematic, Wet Brakes - Double Pump Option

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