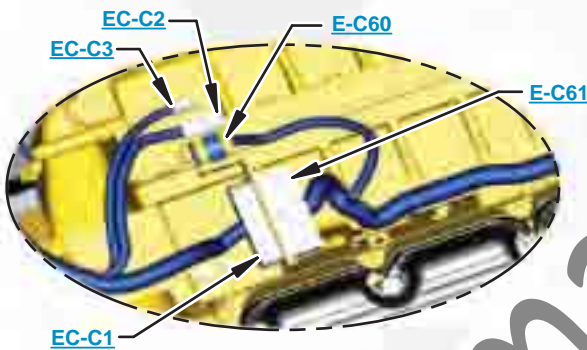




***This document is best viewed at a screen resolution of 1024 X 768.***

To set your screen resolution do the following:  
**RIGHT CLICK** on the **DESKTOP**.  
 Select **PROPERTIES**.  
**CLICK** the **SETTINGS TAB**.  
**MOVE THE SLIDER** under **SCREEN RESOLUTION** until it shows **1024 X 768**.  
**CLICK OK** to apply the resolution.

The Bookmarks panel will allow you to quickly navigate to points of interest.



Click on any text that is BLUE and underlined. These are hyperlinks that can be used to navigate the schematic and machine views.

**VIEW ALL CALLOUTS**

When only one callout is showing on a machine view this button will make all of the callouts visible. This button is located in the top right corner of every machine view page.

HOTKEYS (Keyboard Shortcuts)		
	FUNCTION	KEYS
	Zoom In	"CTRL" / "+"
	Zoom Out	"CTRL" / "-"
	Fit to Page	"CTRL" / "0" (zero)
	Hand Tool	"SPACEBAR" (hold down)
	Find	"CTRL" / "F"



# Schematic

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## **329D, 330D, 336D and 340D Excavator 336D MHPU Hydraulic System**

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**329D:  
JBF1-UP**

**330D:  
GBC1-UP  
GGE1-UP  
THJ1-UP  
ERN1-UP  
RAS1-UP**

**336D:  
LMG1-UP  
MYG1-UP  
PPN1-UP  
JWR1-UP  
DTS1-UP**

**336D MHPU:  
L5K1-UP  
M3M1-UP  
M3N1-UP  
MDS1-UP**

**340D:  
JTN1-UP**

**Heavy Lift and Fine Swing**

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# COMPONENT LOCATION



Description	Part Number	Machine Location	Schematic Location
Accumulator Gp - Hydraulic (Charged)	164-6981	<a href="#">1</a>	<a href="#">B-5</a>
Cylinder Gp - Boom	NOTE A	<a href="#">2</a>	<a href="#">F-2</a>
Cylinder Gp - Bucket	NOTE A	<a href="#">3</a>	<a href="#">F-8</a>
Cylinder Gp - Stick	NOTE A	<a href="#">4</a>	<a href="#">F-7</a>
Filter & Valve Gp - Pilot (Hydraulic Oil)	158-8987	<a href="#">5</a>	<a href="#">A-4</a>
Filter Gp - Oil (Hydraulic Return)	188-4140	<a href="#">6</a>	<a href="#">A-6</a>
Filter Gp - Oil (Hydraulic, Case Drain)	289-8194	<a href="#">7</a>	<a href="#">A-5</a>
Manifold Gp - Control (Pilot Oil)	215-5037	<a href="#">8</a>	<a href="#">A-6</a>
Motor Gp - Piston (Fan)	234-4638	<a href="#">9</a>	<a href="#">A-8</a>
Motor Gp - Swing	200-3373	<a href="#">10</a>	<a href="#">F-6</a>
Motor Gp - Travel	Left Right	<a href="#">11</a>	<a href="#">F-5</a>
		<a href="#">12</a>	<a href="#">F-4</a>
Pump Gp - Piston (Hydraulic Fan)	259-0815	<a href="#">13</a>	<a href="#">B-3</a>
Pump Gp - Piston (with Pilot Gear Pump)	322-8733	<a href="#">14</a>	<a href="#">B-2</a>
Swivel Gp	234-4440	<a href="#">15</a>	<a href="#">E-4</a>
Valve Gp - Check (Oil Cooler Bypass) (Control Valve)	190-7745	<a href="#">16</a>	<a href="#">A-8</a>
Valve Gp - Load Control (Boom Drift Red, Line Relief)	255-5683	<a href="#">17</a>	<a href="#">D-2</a>
Valve Gp - Load Control (Stick Drift Red, Line Relief)	255-5680	<a href="#">18</a>	<a href="#">D-6</a>
Valve Gp - Main Control	285-1345	<a href="#">19</a>	<a href="#">C-1</a>
Valve Gp - Pilot (Joystick, LH)	297-0533	<a href="#">20</a>	<a href="#">C-8</a>
Valve Gp - Pilot (Joystick, RH)	297-0532	<a href="#">21</a>	<a href="#">C-7</a>
Valve Gp - Pilot (Travel)	310-0414	<a href="#">22</a>	<a href="#">E-8</a>
Valve Gp - Pressure Reducing (Boom Priority)	232-4102	<a href="#">23</a>	<a href="#">A-7</a>
Valve Gp - Pressure Reducing (Boom Up Priority) (Stick-In Priority)	206-3354	<a href="#">24</a>	<a href="#">B-7</a>
Valve Gp - Pressure Reducing (Boom, Swing Priority)	232-4102	<a href="#">25</a>	<a href="#">B-4</a>
Valve Gp - Shuttle	185-0462 123-2430	<a href="#">26</a>	<a href="#">B-8</a>
		<a href="#">27</a>	<a href="#">B-4</a>
Valve Gp - Solenoid (Heavy Lift)	121-6303	<a href="#">28</a>	<a href="#">A-4</a>
Valve Gp - Cushion Crossover Relief	158-9085	<a href="#">29</a>	<a href="#">E-6</a>
Valve Gp - Travel Counterbalance	Left Right	<a href="#">30</a>	<a href="#">E-5</a>
		<a href="#">31</a>	<a href="#">E-4</a>

Note A: Refer to Parts Manual for your specific machine.

# TAP LOCATION



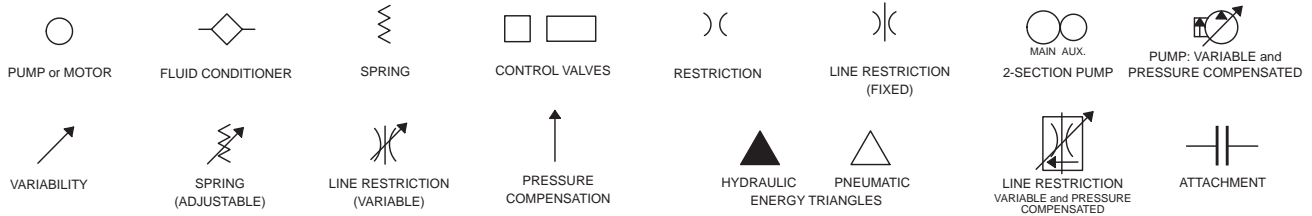
Tap Number	Description	Schematic Location
<a href="#">AA</a>	Pilot Filter Pressure Test Port	<a href="#">A-4</a>
<a href="#">BB</a>	Drive Pump Pressure Test Port	<a href="#">B-2</a>
<a href="#">CC</a>	Power Shift Pressure Test Port	<a href="#">A-2</a>
<a href="#">DD</a>	Idler Pump Pressure Test Port	<a href="#">A-2</a>
<a href="#">SOS</a>	Hydraulic Oil Sampling Port	<a href="#">A-4</a>

SchematicCat.com

# FLUID POWER SYMBOLS



## BASIC COMPONENT SYMBOLS



## VALVE ENVELOPES

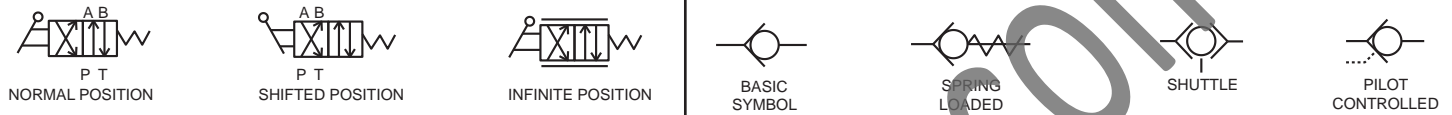
## VALVES

## VALVE PORTS



## CONTROL VALVES

## CHECK VALVES



## FLUID STORAGE RESERVOIRS



## MEASUREMENT

## ROTATING SHAFTS



## COMBINATION CONTROLS



## MANUAL CONTROL SYMBOLS



## RELEASED PRESSURE

## PILOT CONTROL SYMBOLS

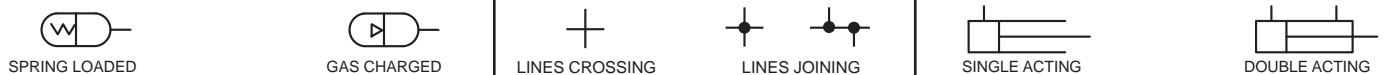
## REMOTE SUPPLY PRESSURE



## ACCUMULATORS

## CROSSING AND JOINING LINES

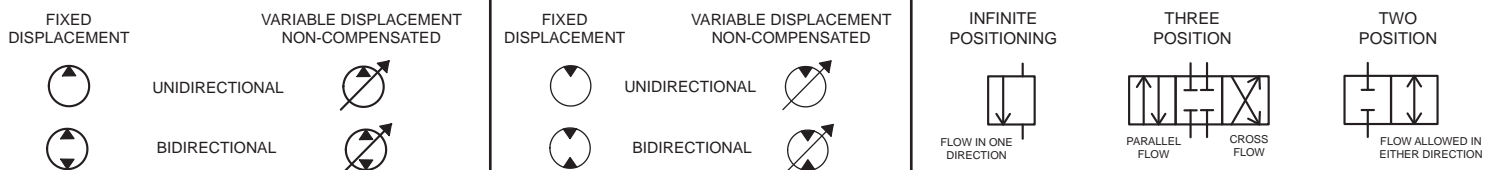
## HYDRAULIC AND PNEUMATIC CYLINDERS



## HYDRAULIC PUMPS

## HYDRAULIC MOTORS

## INTERNAL PASSAGEWAYS



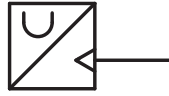
# ELECTRICAL SYMBOLS



## Hydraulic Symbols (Electrical)



Transducer  
(Fluid)



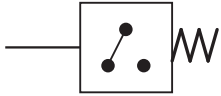
Transducer  
(Gas / Air)



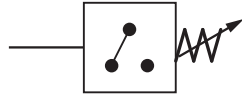
Generator



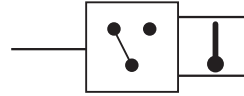
Electric Motor



Pressure Switch



Pressure Switch  
(Adjustable)

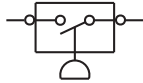


Temperature Switch

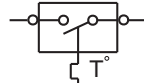


Electrical Wire

## Electrical Symbols (Electrical)



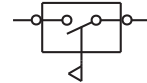
Pressure  
Symbol



Temperature  
Symbol



Level  
Symbol

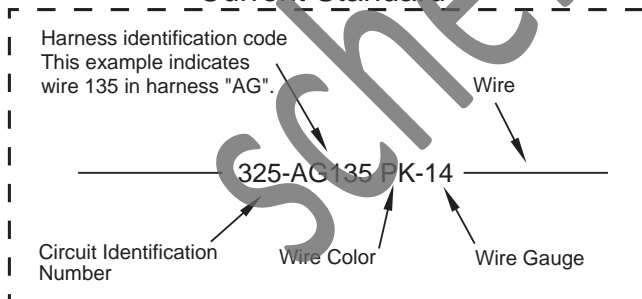


Flow  
Symbol

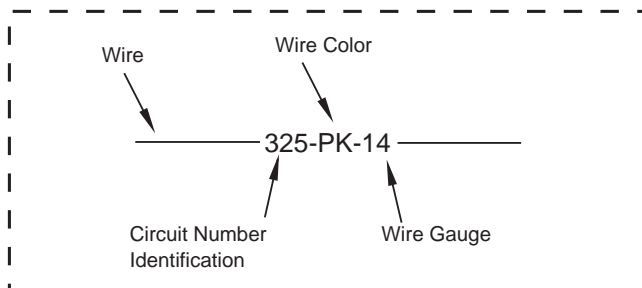
## Wire Number Identification Codes

### Electrical Schematic Example

#### Current Standard

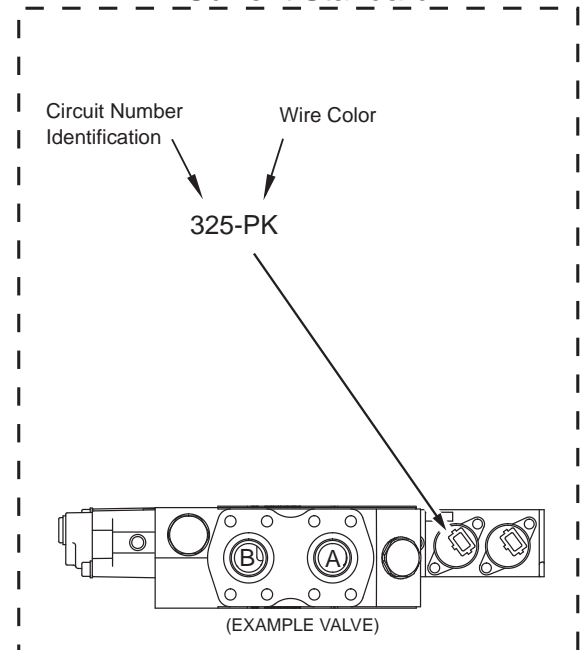


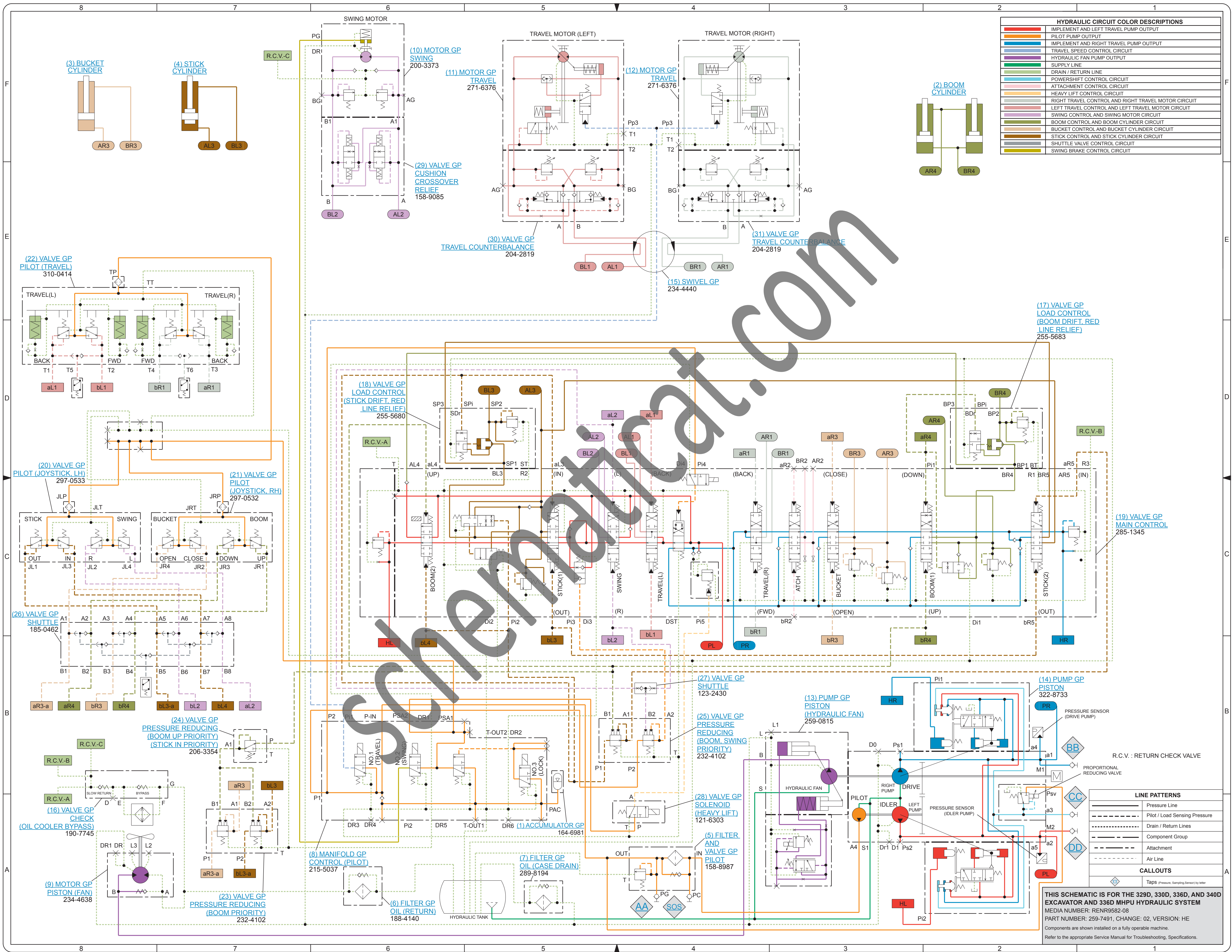
#### Previous Standard



### Hydraulic Schematic Example

#### Current Standard





HYDRAULIC CIRCUIT COLOR DESCRIPTIONS	
[Red Line]	IMPLEMENT AND LEFT TRAVEL PUMP OUTPUT
[Orange Line]	PILOT PUMP OUTPUT
[Blue Line]	IMPLEMENT AND RIGHT TRAVEL PUMP OUTPUT
[Light Blue Line]	TRAVEL SPEED CONTROL CIRCUIT
[Green Line]	HYDRAULIC FAN PUMP OUTPUT
[Light Green Line]	SUPPLY LINE
[Dark Green Line]	DRAIN / RETURN LINE
[Cyan Line]	POWERSHIFT CONTROL CIRCUIT
[Pink Line]	ATTACHMENT CONTROL CIRCUIT
[Light Pink Line]	HEAVY LIFT CONTROL CIRCUIT
[Light Purple Line]	RIGHT TRAVEL CONTROL AND RIGHT TRAVEL MOTOR CIRCUIT
[Light Blue-Gray Line]	LEFT TRAVEL CONTROL AND LEFT TRAVEL MOTOR CIRCUIT
[Light Green-Gray Line]	SWING CONTROL AND SWING MOTOR CIRCUIT
[Light Yellow-Gray Line]	BOOM CONTROL AND BOOM CYLINDER CIRCUIT
[Light Orange-Gray Line]	BUCKET CONTROL AND BUCKET CYLINDER CIRCUIT
[Light Purple-Gray Line]	STICK CONTROL AND STICK CYLINDER CIRCUIT
[Light Blue-Gray Line]	SHUTTLE VALVE CONTROL CIRCUIT
[Light Green-Gray Line]	SWING BRAKE CONTROL CIRCUIT

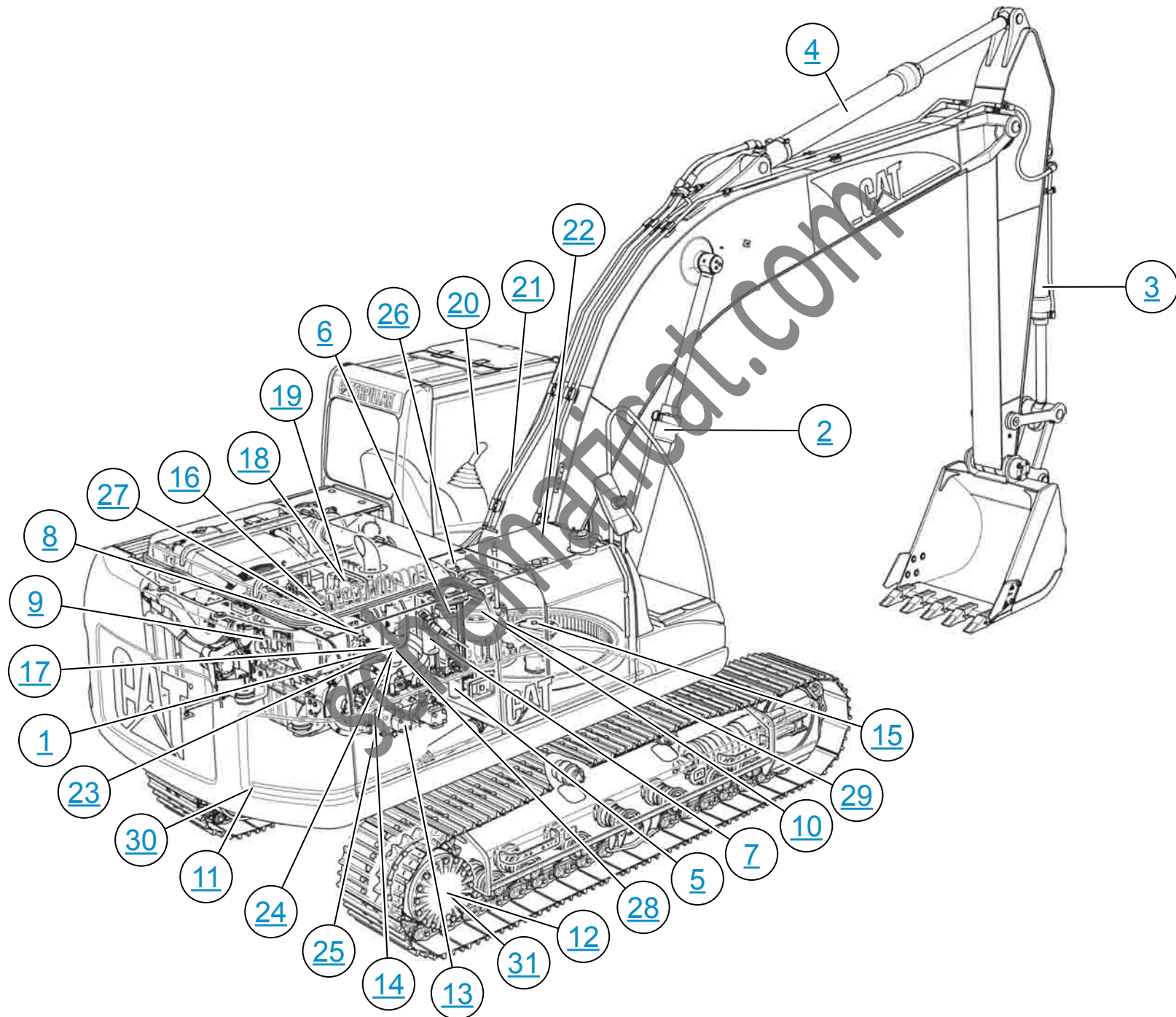
LINE PATTERNS	
[Solid Line]	Pressure Line
[Dashed Line]	Pilot / Load Sensing Pressure
[Dotted Line]	Drain / Return Lines
[Dashed Line with Box]	Component Group
[Dashed Line with Triangle]	Attachment
[Dashed Line with Circle]	Air Line

CALLOUTS	
[Diamond]	Taps (Pressure, Sampling Sensor) by Meter

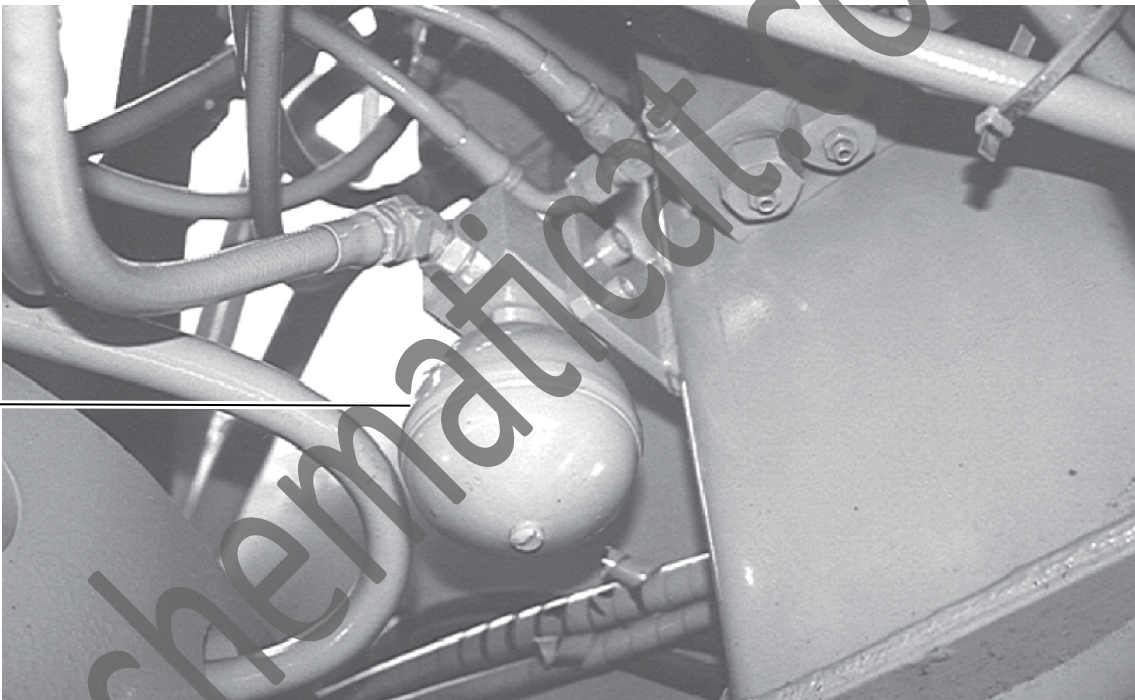
THIS SCHEMATIC IS FOR THE 329D, 330D, 336D, AND 340D EXCAVATOR AND 336D MHPU HYDRAULIC SYSTEM  
 MEDIA NUMBER: RENR9582-08  
 PART NUMBER: 259-7491, CHANGE: 02, VERSION: HE  
 Components are shown installed on a fully operable machine.  
 Refer to the appropriate Service Manual for Troubleshooting, Specifications.

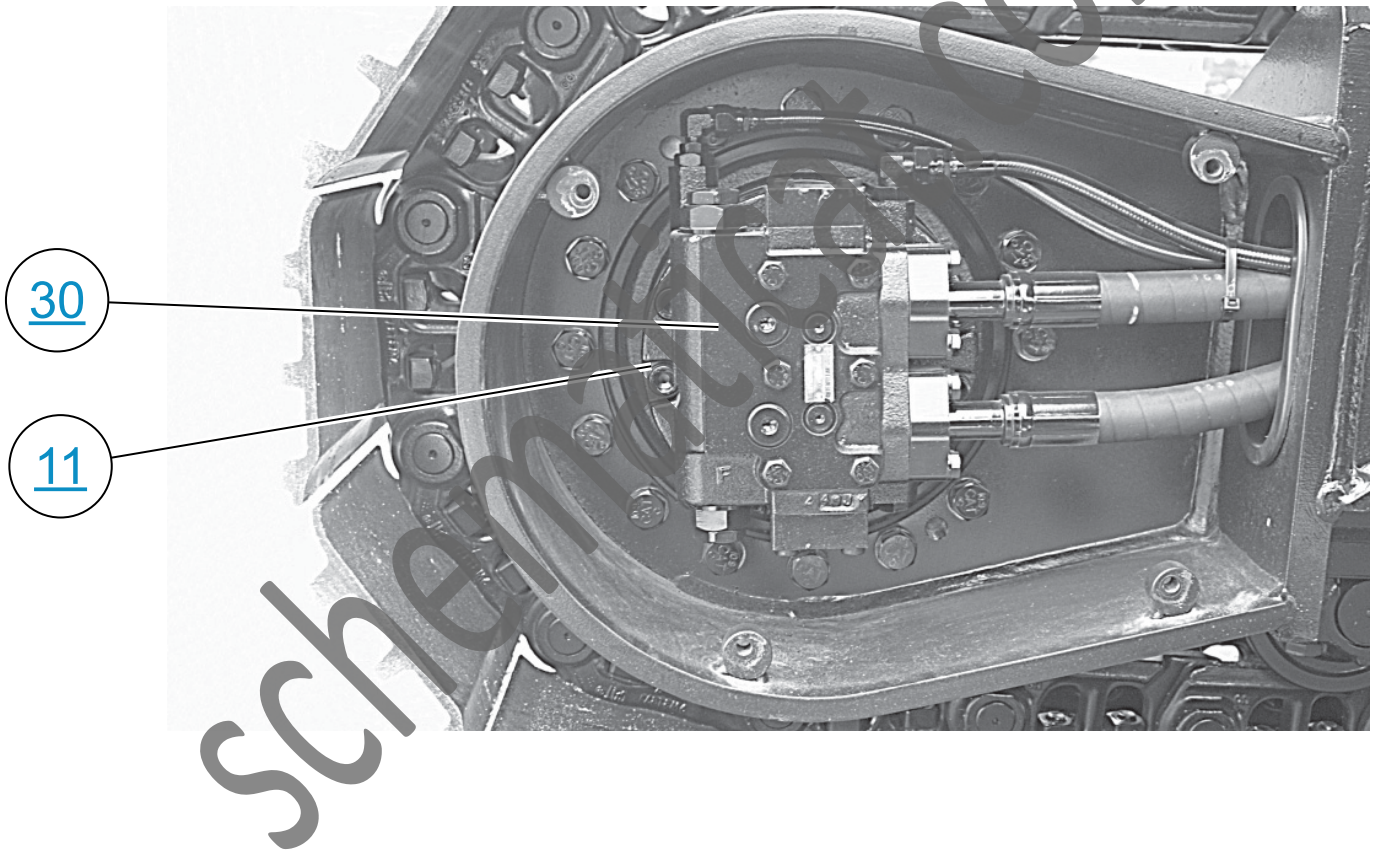
# MACHINE COMPONENT LOCATIONS

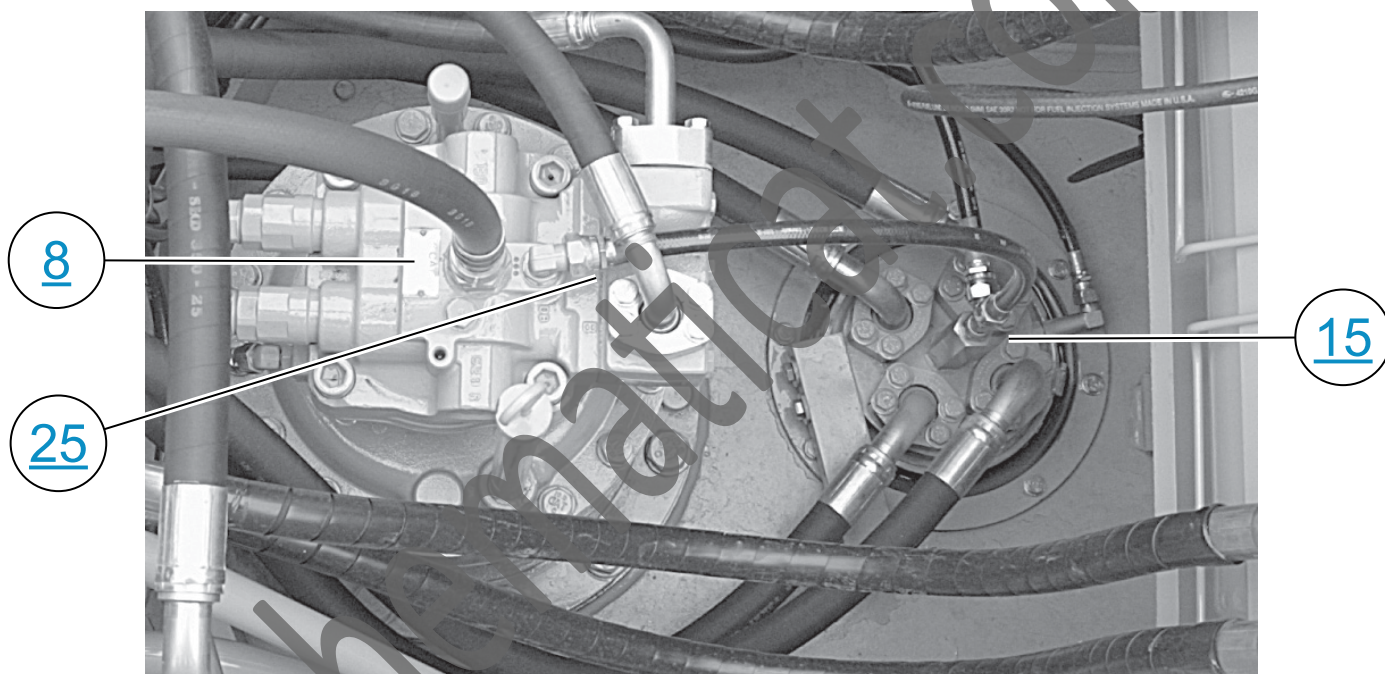




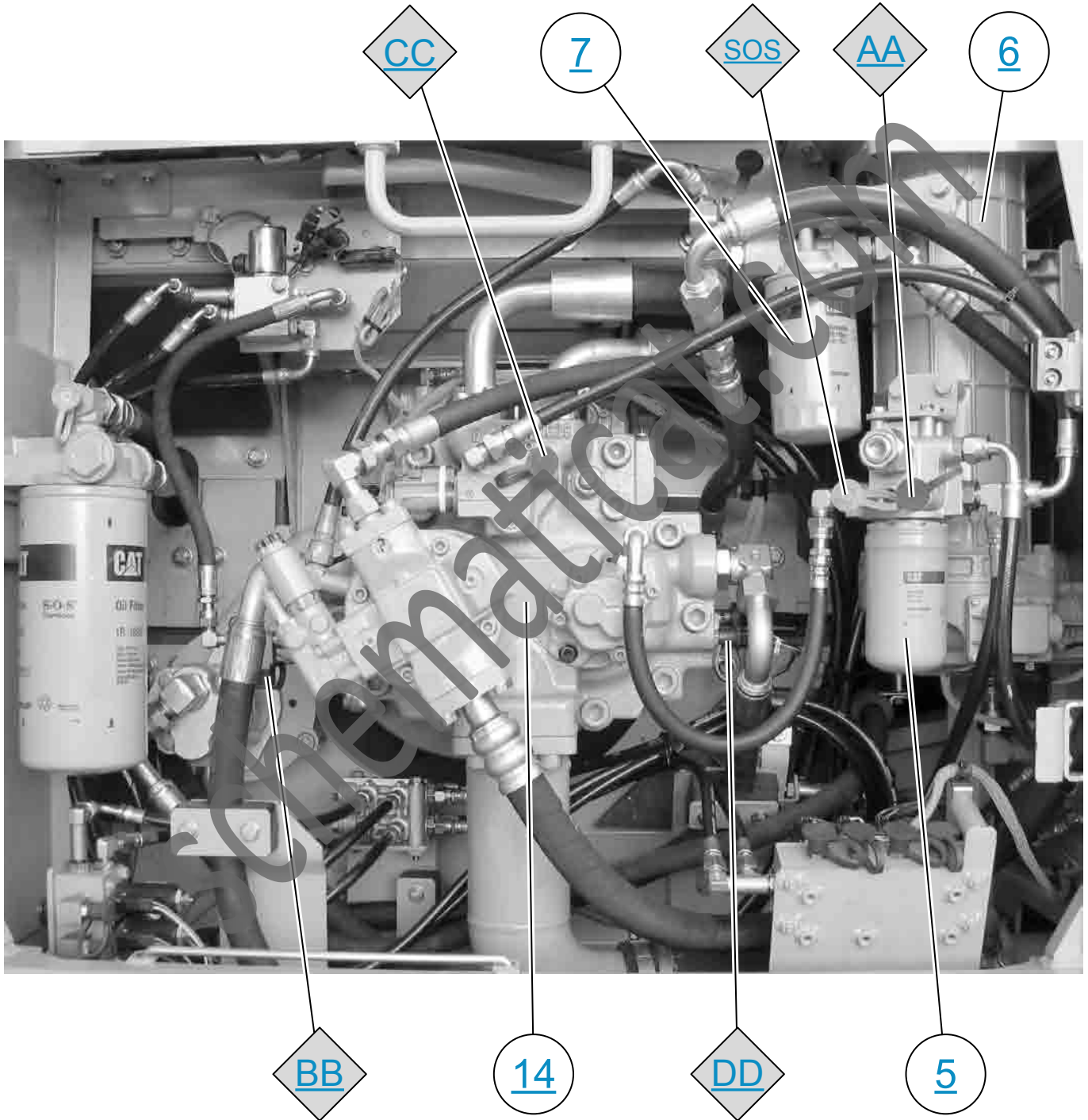
1

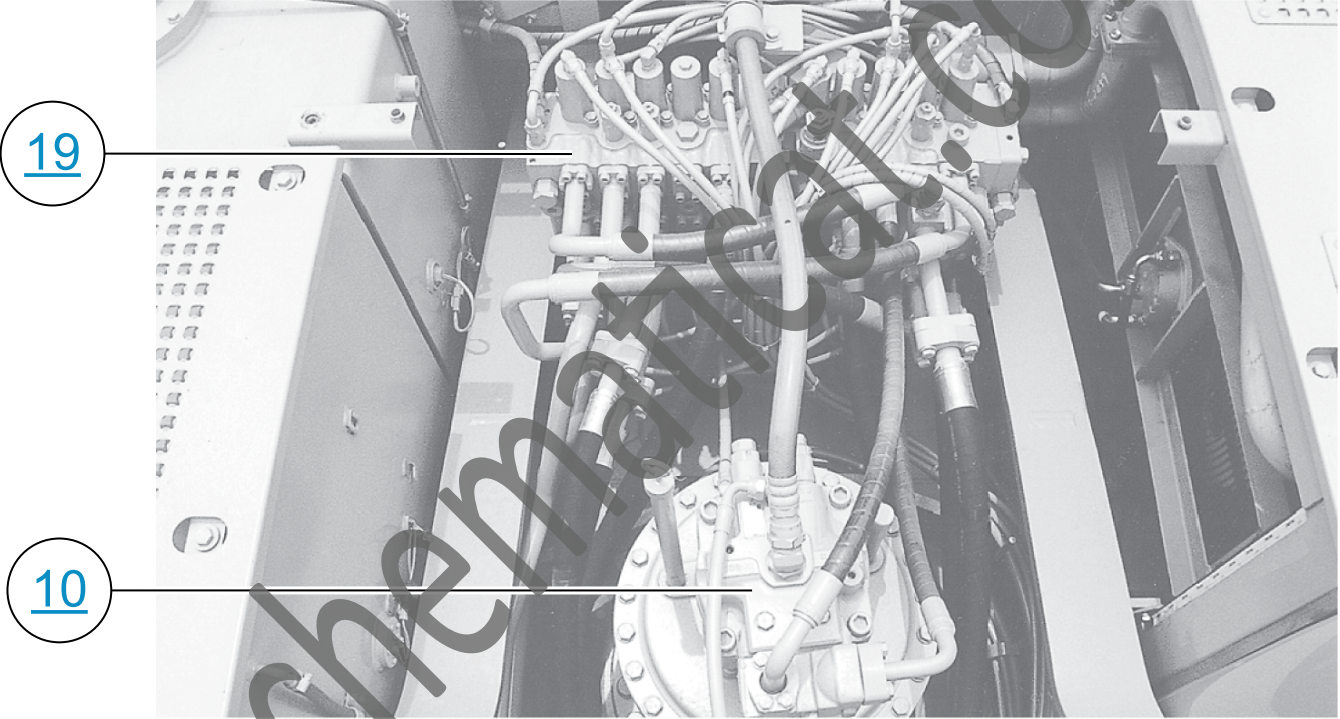






# PUMP GP - PISTON (MAIN)





19

10