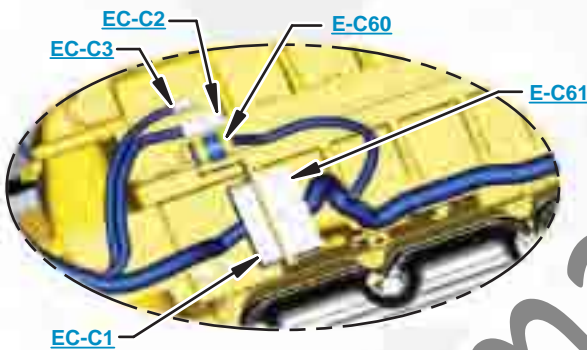


***This document is best viewed at a screen resolution of 1024 X 768.***

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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## **330D and 336D Excavator Hydraulic System - Attachment**

---

**330D:**

GBC1-UP  
GGE1-UP  
THJ1-UP  
LRM1-UP  
ERN1-UP  
RAS1-UP  
T2Y1-UP

**336D:**

JBF1-UP  
LMG1-UP  
MYG1-UP  
KDJ1-UP  
PPN1-UP  
MYP1-UP  
DTS1-UP  
WET1-UP

**System 16: One-Way / Two Pump**

---

# COMPONENT LOCATION



Description	Part Number	Machine Location	Schematic Location
Accumulator Gp - Pilot Manifold	164-6981	<a href="#">1</a>	<a href="#">B-4</a>
Cylinder Gp - Boom	Note A	<a href="#">2</a>	<a href="#">F-5</a>
Cylinder Gp - Bucket	Note A	<a href="#">3</a>	<a href="#">E-5</a>
Cylinder Gp - Stick	Note A	<a href="#">4</a>	<a href="#">F-5</a>
Filter Gp - Case Drain	126-2075	<a href="#">5</a>	<a href="#">A-4</a>
Filter Gp - Pilot Hydraulic	158-8987	<a href="#">6</a>	<a href="#">A-4</a>
Filter Gp - Return Oil	188-4140	<a href="#">7</a>	<a href="#">B-6</a>
Motor Gp - Hydraulic Fan	234-4638	<a href="#">8</a>	<a href="#">C-6</a>
Motor Gp - Left Travel	271-6376	<a href="#">9</a>	<a href="#">E-3</a>
Motor Gp - Right Travel	271-6376	<a href="#">10</a>	<a href="#">E-2</a>
Motor Gp - Swing	200-3373	<a href="#">11</a>	<a href="#">E-7</a>
Pump Gp - Hydraulic Fan	259-0815	<a href="#">12</a>	<a href="#">B-3</a>
Pump Gp - Main and Pilot	283-6116	<a href="#">13</a>	<a href="#">B-2</a>
Sensor As - Left Pump Press.	221-8859	<a href="#">14</a>	<a href="#">A-2</a>
Sensor As - Right Pump Press.	221-8859	<a href="#">15</a>	<a href="#">B-2</a>
Switch As - Left Travel Pilot	167-3466	<a href="#">16</a>	<a href="#">D-7</a>
Switch As - Pilot Pressure	167-3466	<a href="#">17</a>	<a href="#">A-7</a>
Switch As - Right Travel Pilot	167-3466	<a href="#">18</a>	<a href="#">D-6</a>
Swivel Gp	234-4440	<a href="#">19</a>	<a href="#">E-3</a>
Tank As - Hydraulic Oil	239-1661	<a href="#">20</a>	<a href="#">A-5</a>
Valve Gp - Check, Cooler Bypass	190-7745	<a href="#">21</a>	<a href="#">C-7</a>
Valve Gp - Heavy Lift Solenoid	121-6303	<a href="#">28</a>	<a href="#">B-4</a>
Valve Gp - Left Travel Counterbalance	204-2819	<a href="#">29</a>	<a href="#">E-3</a>
Valve Gp - Load Control Boom Cylinder	255-5683	<a href="#">30</a>	<a href="#">D-1</a>
Valve Gp - Load Control Stick Cylinder	255-5680	<a href="#">31</a>	<a href="#">D-5</a>
Valve Gp - Main Control	285-1345	<a href="#">32</a>	<a href="#">C-1</a>
Valve Gp - Pilot Manifold	215-5037	<a href="#">34</a>	<a href="#">B-6</a>
Valve Gp - Pilot, Bucket and Boom	270-5952	<a href="#">35</a>	<a href="#">B-7</a>
Valve Gp - Pilot, Stick and Swing	270-5951	<a href="#">36</a>	<a href="#">B-7</a>
Valve Gp - Press. Red. Boom/ Swing	232-4102	<a href="#">37</a>	<a href="#">B-4</a>
Valve Gp - Press. Red. Bucket/ Stick	232-4102	<a href="#">38</a>	<a href="#">A-6</a>
Valve Gp - Pressure Relief	206-3354	<a href="#">39</a>	<a href="#">A-6</a>
Valve Gp - Right Travel Counterbalance	204-2819	<a href="#">40</a>	<a href="#">E-2</a>
Valve Gp - Shuttle	185-0462	<a href="#">41</a>	<a href="#">A-6</a>
Valve Gp - Shuttle	259-7732	<a href="#">42</a>	<a href="#">B-4</a>
Valve Gp - Swing Cushion	158-9090	<a href="#">43</a>	<a href="#">E-7</a>
Valve Gp - Travel Pilot	270-5947	<a href="#">44</a>	<a href="#">D-6</a>
<b>Attachments</b>			
Valve Gp - Control, Auxiliary	285-1375	<a href="#">50</a>	<a href="#">D-6</a>
Valve Gp - Neg. Flow Control	171-0188	<a href="#">51</a>	<a href="#">E-1</a>
Valve Gp - Relief	177-2653	<a href="#">52</a>	<a href="#">F-4</a>
Valve Gp - Solenoid and Press. Reducing	259-7430	<a href="#">53</a>	<a href="#">E-2</a>

Note A: Refer to service manual for specific cylinder information.

# TAP LOCATION

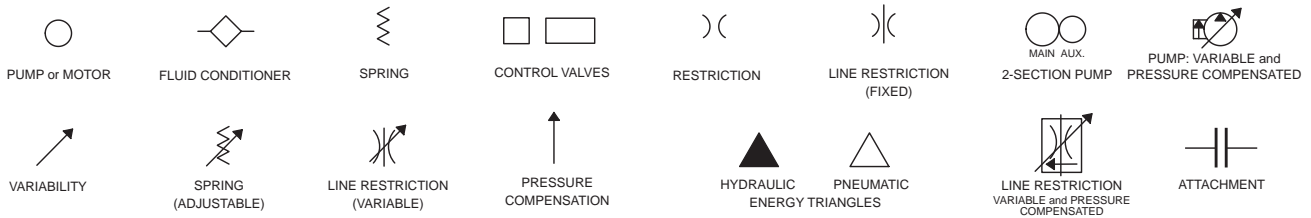


<b>Tap Number</b>	<b>Description</b>	<b>Schematic Location</b>
<a href="#">AA</a>	Left Pump Delivery Pressure	<a href="#">B-1</a>
<a href="#">BB</a>	Right Pump Delivery Pressure	<a href="#">B-1</a>
<a href="#">CC</a>	Pilot Pump Delivery Pressure	<a href="#">A-4</a>
<a href="#">KK</a>	Right Pump Pilot Pressure	<a href="#">E-1</a>
<a href="#">LL</a>	Left Pump Pilot Pressure	<a href="#">E-1</a>
<a href="#">MM</a>	Pilot Pressure Pa1 (B1), Attachment	<a href="#">E-2</a>
<a href="#">NN</a>	Pilot Pressure aR2 (B2), Attachment	<a href="#">E-2</a>
<a href="#">OO</a>	Pump Power Shift Pressure	<a href="#">B-1</a>
<a href="#">SOS</a>	Hydraulic Oil Sampling Port	<a href="#">A-4</a>

# FLUID POWER SYMBOLS



## BASIC COMPONENT SYMBOLS



## VALVE ENVELOPES

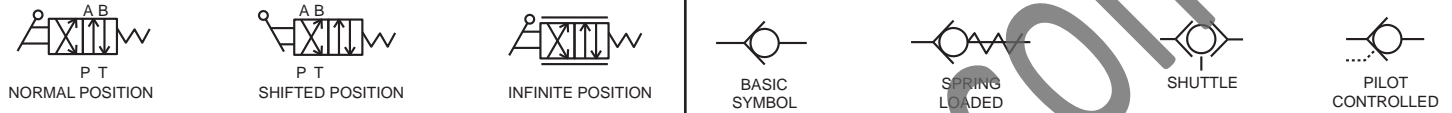
## VALVES

## 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

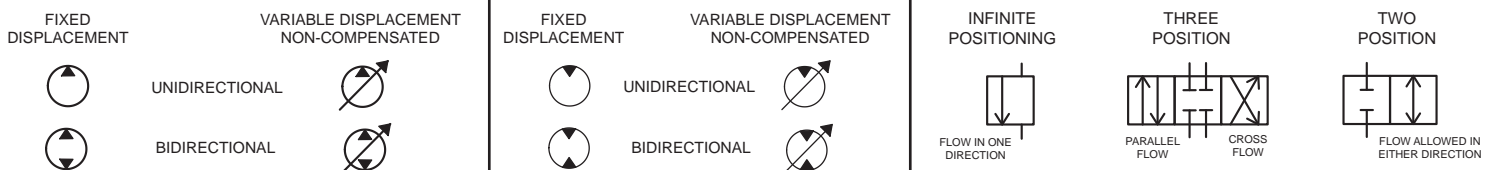
## HYDRAULIC AND PNEUMATIC CYLINDERS



## HYDRAULIC PUMPS

## HYDRAULIC MOTORS

## INTERNAL PASSAGEWAYS



# ELECTRICAL SYMBOLS



## Hydraulic Symbols (Electrical)



Transducer  
(Fluid)



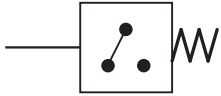
Transducer  
(Gas / Air)



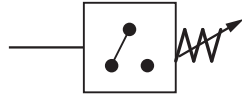
Generator



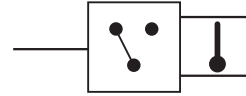
Electric Motor



Pressure Switch



Pressure Switch  
(Adjustable)

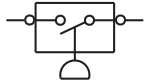


Temperature Switch

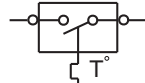


Electrical Wire

## Electrical Symbols (Electrical)



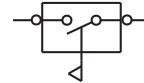
Pressure  
Symbol



Temperature  
Symbol



Level  
Symbol

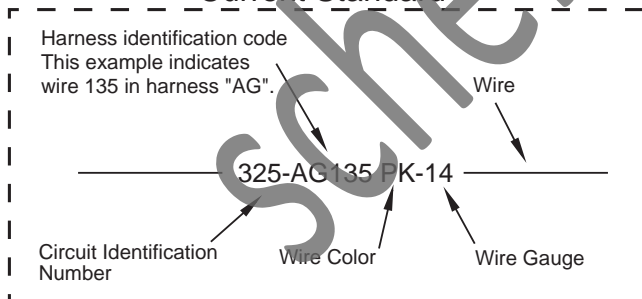


Flow  
Symbol

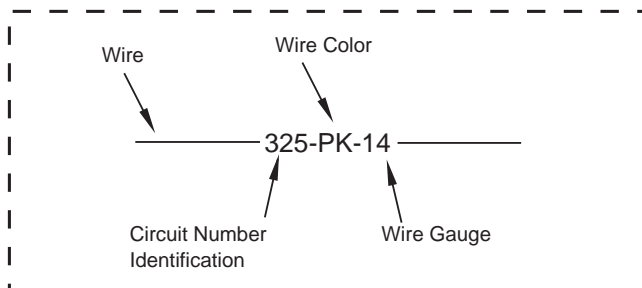
## Wire Number Identification Codes

### Electrical Schematic Example

#### Current Standard

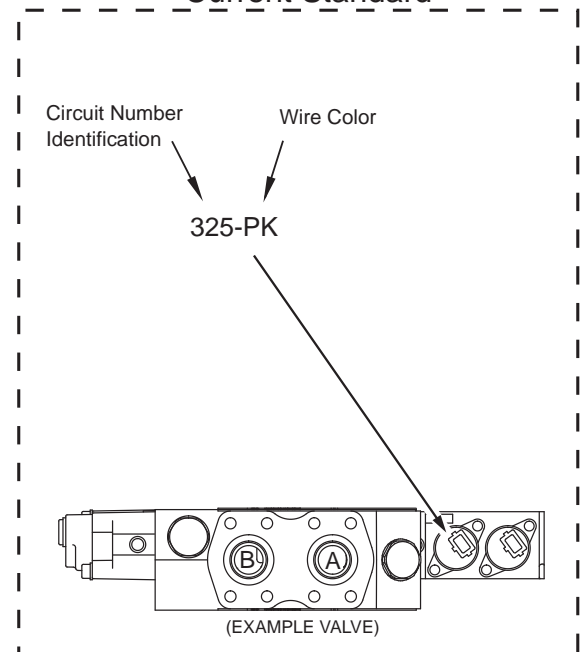


#### Previous Standard

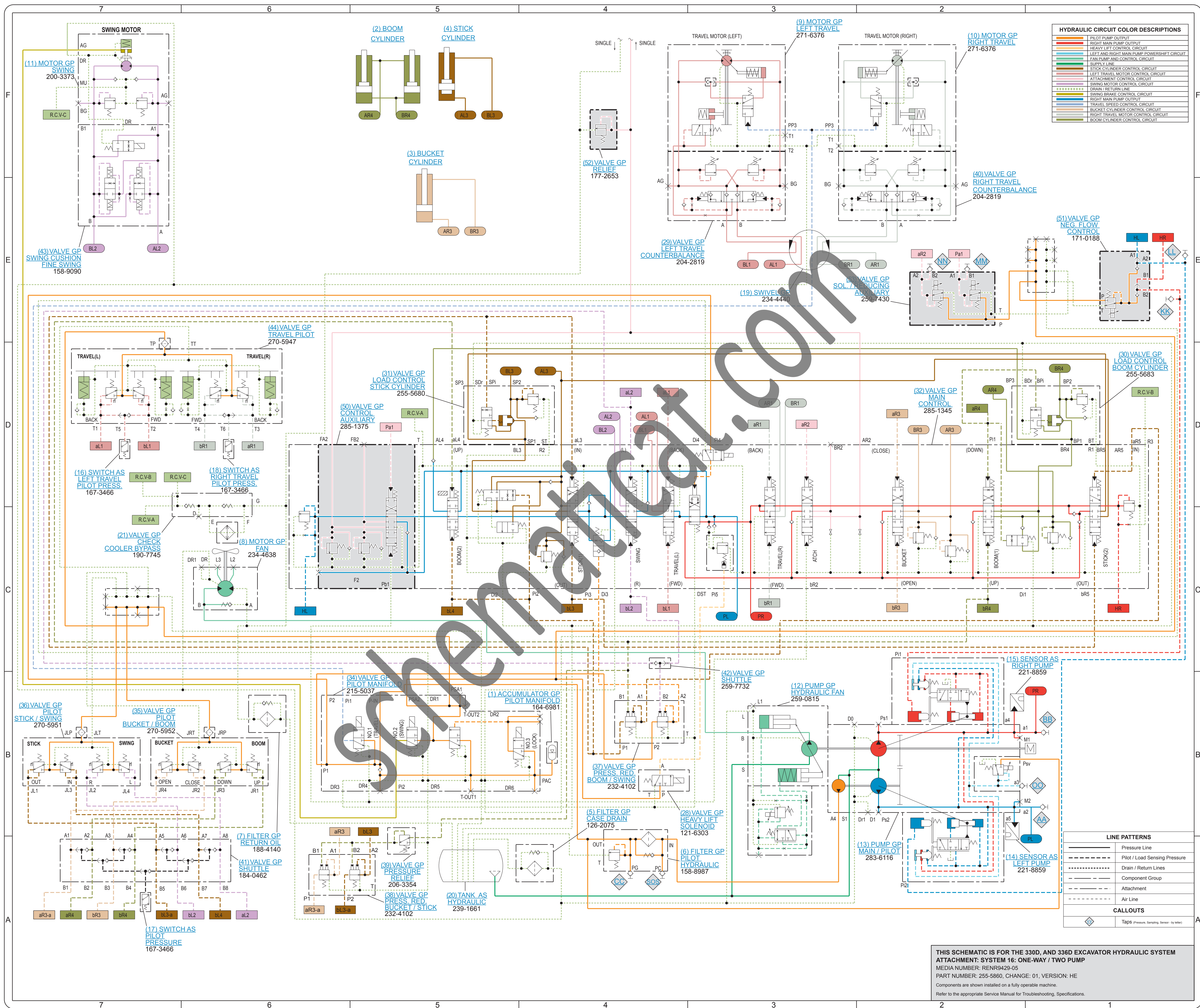


### Hydraulic Schematic Example

#### Current Standard







**HYDRAULIC CIRCUIT COLOR DESCRIPTIONS**

Orange	PILOT PUMP OUTPUT
Red	RIGHT MAIN PUMP OUTPUT
Blue	HEAVY LIFT CONTROL CIRCUIT
Green	LEFT AND RIGHT MAIN PUMP POWERSHIFT CIRCUIT
Yellow	FAN PUMP AND CONTROL CIRCUIT
Purple	SUPPLY LINE
Brown	STICK CYLINDER CONTROL CIRCUIT
Pink	LEFT TRAVEL MOTOR CONTROL CIRCUIT
Light Blue	ATTACHMENT CONTROL CIRCUIT
Light Green	SWING MOTOR CONTROL CIRCUIT
Light Purple	DRUM/RETURN LINE
Light Orange	SWING BRAKE CONTROL CIRCUIT
Light Yellow	RIGHT MAIN PUMP OUTPUT
Light Blue	TRAVEL SPEED CONTROL CIRCUIT
Light Green	BUCKET CYLINDER CONTROL CIRCUIT
Light Purple	RIGHT TRAVEL MOTOR CONTROL CIRCUIT
Light Orange	BOOM CYLINDER CONTROL CIRCUIT

**LINE PATTERNS**

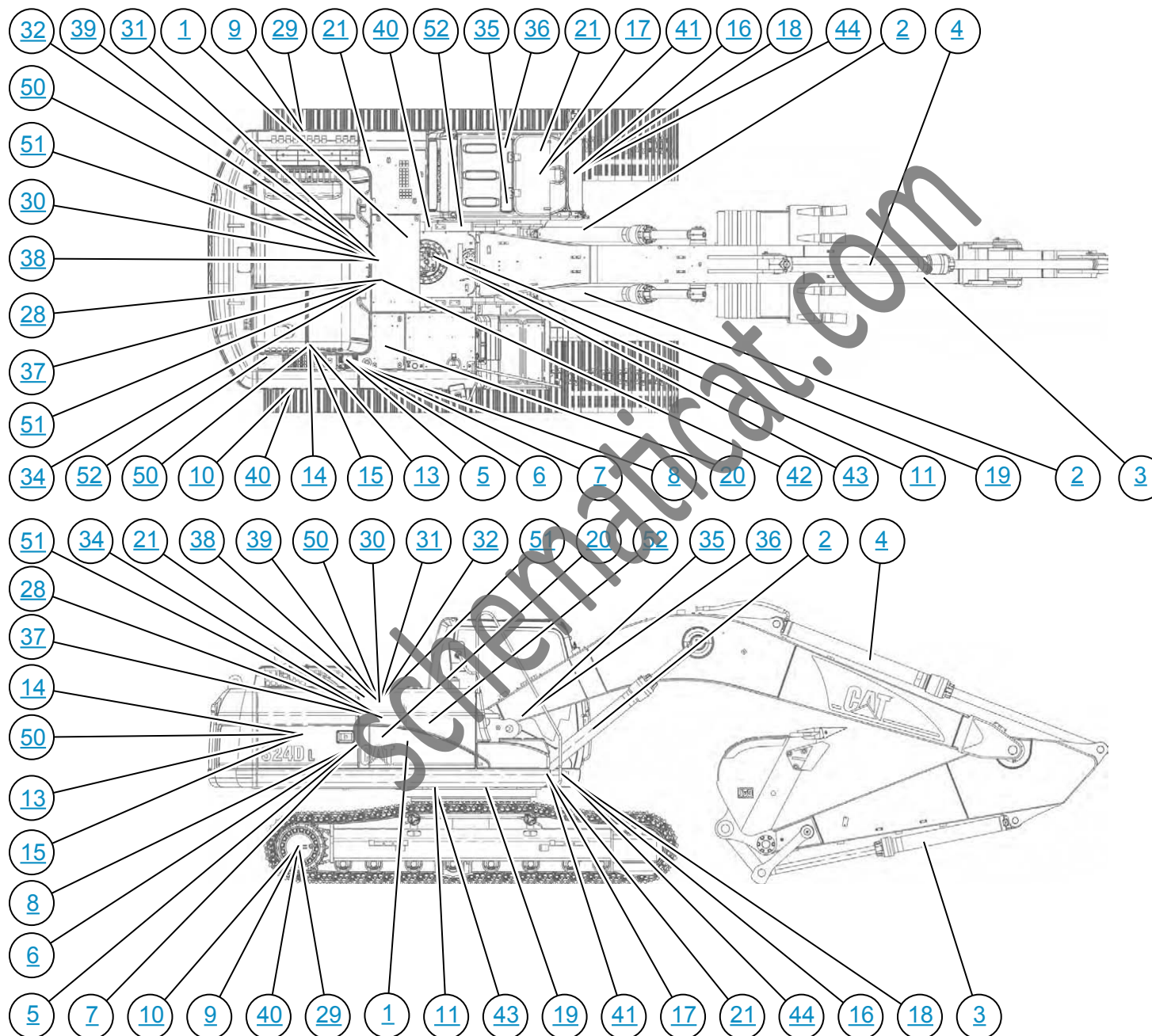
—	Pressure Line
- - -	Pilot / Load Sensing Pressure
---	Drain / Return Lines
---	Component Group
---	Attachment
---	Air Line

**CALLOUTS**

◆	TapS (Pressure, Sampling, Sensor, by other)
---	---

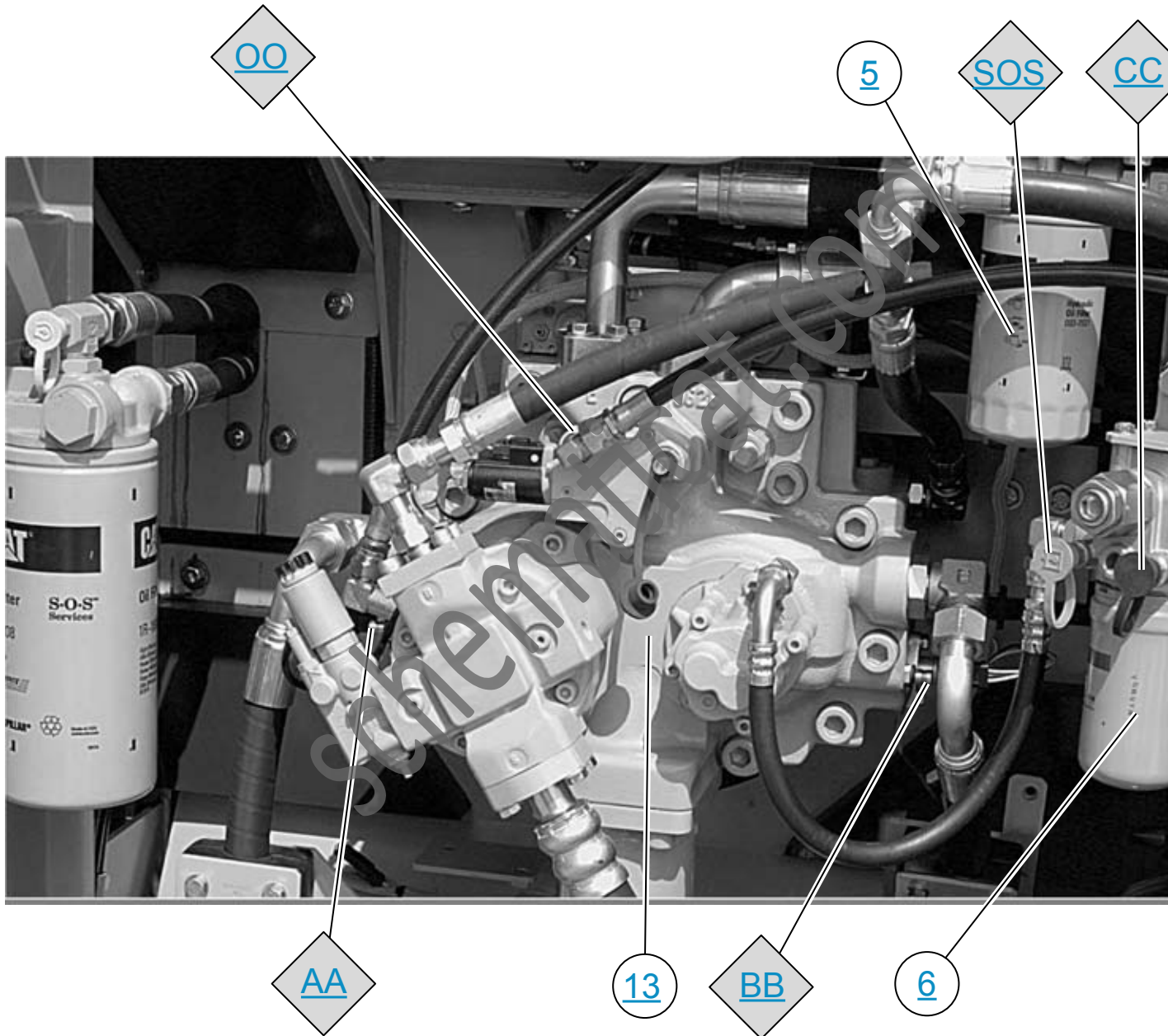
THIS SCHEMATIC IS FOR THE 330D, AND 336D EXCAVATOR HYDRAULIC SYSTEM  
 ATTACHMENT: SYSTEM 16: ONE-WAY / TWO PUMP  
 MEDIA NUMBER: RENR9429-05  
 PART NUMBER: 255-5860, CHANGE: 01, VERSION: HE  
 Components are shown installed on a fully operable machine.  
 Refer to the appropriate Service Manual for Troubleshooting, Specifications.

# MACHINE COMPONENT LOCATIONS





# MAIN AND PILOT PUMP GP (13)



# TAP LOCATIONS

