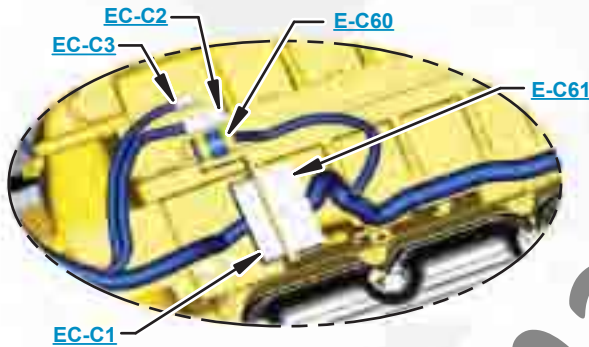


The Bookmarks panel will allow you to quickly navigate to points of interest.

****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.

**Due to different monitor sizes and PDF reader preferences there may be some variance in linked schematic locations*



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



[Click here to save a copy of this interactive schematic to your desktop](#)

VIEW ALL CALLOUTS

When only one callout is showing on a machine view, clicking on 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”

ELECTRICAL SYMBOLS				
Pressure Switch	Temperature Switch	Level Switch	Flow Switch	Circuit Breaker

BASIC HYDRAULIC COMPONENT SYMBOLS	
Pump or Motor	Variability
Fluid Conditioner	Spring (Adjustable)

[Click here to view the Schematic Symbols and Definitions page](#)



SCHEMATIC SYMBOLS AND DEFINITIONS



VALVES		
ENVELOPES		
One Position	Two Position	Three Position
PORTS		
Two-way	Three-Way	Four-Way
CONTROL		
Normal Position	Shifted Position	Infinite Position
CHECK		
Basic Symbol	Spring Loaded	Shuttle
Pilot Controlled		

INTERNAL PASSAGEWAYS			
Flow in One Direction	Flow Allowed in Either Direction	Parallel Flow	Cross Flow
Infinite Positioning	Two Position	Three Position	

PUMPS	
FIXED DISPLACEMENT	
Unidirectional	Bidirectional
VARIABLE DISPLACEMENT NON-COMPENSATED	
Unidirectional	Bidirectional

BASIC HYDRAULIC COMPONENT SYMBOLS	
Pump or Motor	Variability
Fluid Conditioner	Spring (Adjustable)
Spring	Pressure Compensation
Control Valves	Line Restriction (Variable)
Restriction	Line Restriction (Fixed)
Line Restriction Variable and Pressure Compensated	2-Section Pump
Attachment	Pump: Variable and Pressure Compensated
Hydraulic Energy Triangles	Pneumatic Energy Triangles

CYLINDERS	
Single Acting	Double Acting

ACCUMULATORS	
Spring Loaded	Gas Charged

MOTORS	
FIXED DISPLACEMENT	
Unidirectional	Bidirectional
VARIABLE DISPLACEMENT NON-COMPENSATED	
Unidirectional	Bidirectional

ROTATING SHAFTS	
Unidirectional	Bidirectional

PILOT CONTROL	
RELEASED PRESSURE	
External Return	Internal Return
REMOTE SUPPLY PRESSURE	
Simplified	Complete
Internal Supply Pressure	

COMBINATION CONTROLS						
Solenoid	Solenoid or Manual	Solenoid and Pilot	Solenoid and Pilot or Manual	Servo	Thermal	Detent

LINES	
Crossing	Joining

MEASUREMENT		
Pressure	Temperature	Flow

MANUAL CONTROL					
Push-pull Lever	Manual Shutoff	General Manual	Push Button	Pedal	Spring

FLUID STORAGE RESERVOIRS			
Vented	Pressurized	Return Above Fluid Level	Return Below Fluid Level

HYDRAULIC SYMBOLS - ELECTRICAL							
Transducer (Fluid)	Transducer (Gas / Air)	Generator	Electric Motor	Pressure Switch	Pressure Switch (Adjustable)	Temperature Switch	Electrical Wire

ELECTRICAL SYMBOLS				
Pressure Switch	Temperature Switch	Level Switch	Flow Switch	Circuit Breaker

BASIC ELECTRICAL COMPONENT SYMBOLS	
	Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.
	Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.
	Switch (Normally Closed): A switch that will open at a specified point (temp, press, etc.). No circle indicates that the wire cannot be disconnected from the component.
	Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.
	Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.
	Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.
	Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.
	Relay (Magnetic Switch): A relay is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close the switch part of the relay.
	Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.
	Magnetic Latch Solenoid: An electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil circuit open at the time the coil latches.

HARNES AND WIRE SYMBOLS	
Wire, Cable, or Harness Assembly Identification: Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).	
Harness Identification Letter(s): (A, B, C, AA, AB, AC, ...)	
Harness Connector Serialization Code: The "C" stands for "Connector" and the number indicates which connector in the harness (C1, C2, C3, ...)	
Deutsch connector: Typical representation of a Deutsch connector. The plug contains all sockets and the receptacle contains all pins.	
Sure-Seal connector: Typical representation of a Sure-Seal connector. The plug and receptacle contain both pins and sockets.	

Schematic

D6T Track-Type Tractor Hydraulic System

SGA1-UP
RAD1-UP
STE1-UP
MEL1-UP
WRN1-UP
KMR1-UP

WES1-UP
SGT1-UP
TMY1-UP
HTZ1-UP
CR31-UP
CR81-UP

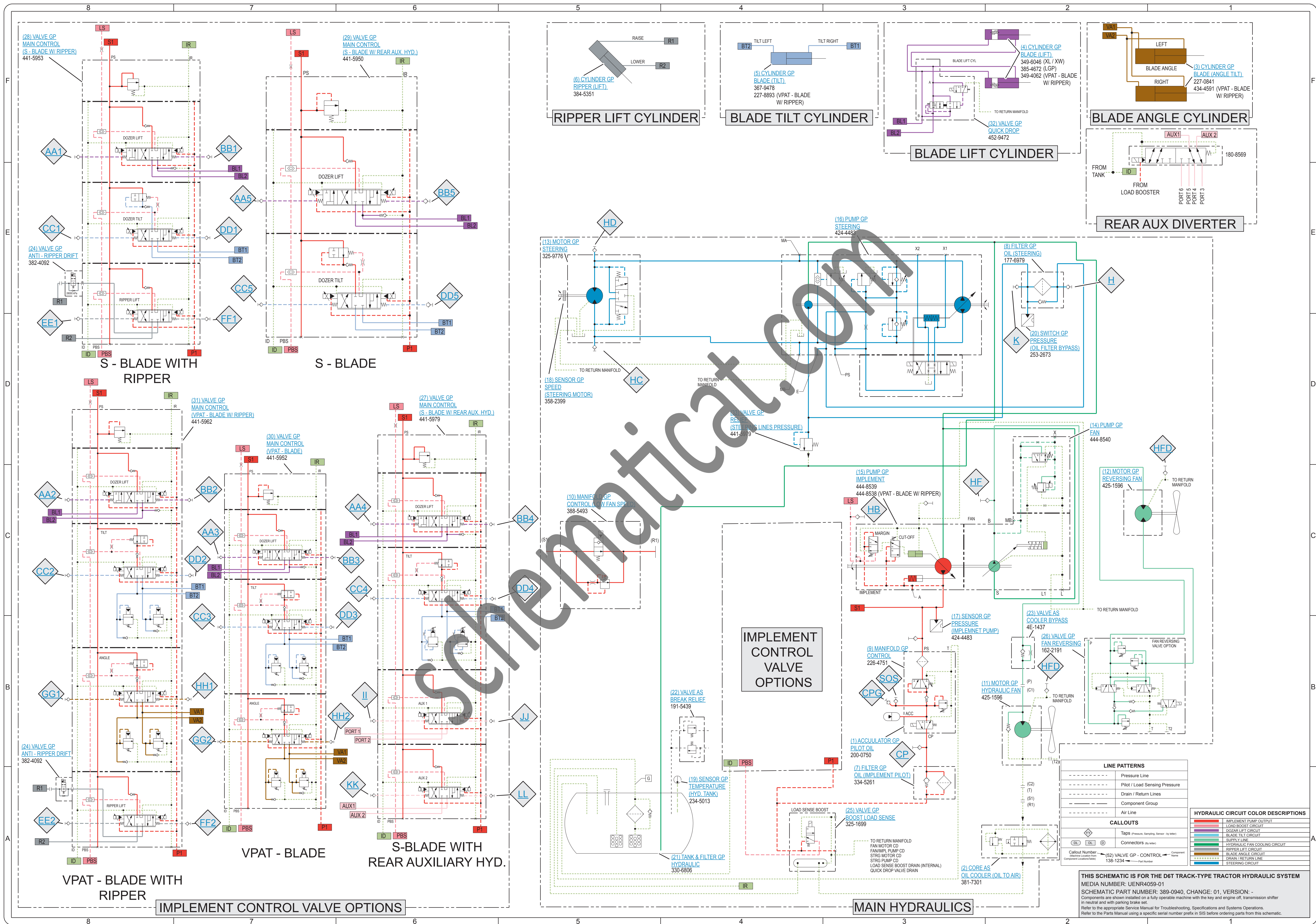
COMPONENT TABLE



Component Locations			
Description	Part Number	Machine Location	Schematic Location
Accumulator Gp - Pilot Oil	200-0750	1	B-3
Core As - Oil Cooler (Oil to Air)	381-7301	2	A-2
Cylinder Gp - Blade (AngleTilt)	227-0841	3	F-1
Cylinder Gp - Blade (Angle Tilt) (VPAT)	434-4591		
Cylinder Gp - Blade (Lift) (XL / XW)	349-6046	4	F-2
Cylinder Gp - Blade (Lift) (LGP)	385-4672		
Cylinder Gp - Blade (Lift) (VPAT - BLADE W/ RIPPER)	349-6042		
Cylinder Gp - Blade (Tilt)	367-9478	5	F-4
Cylinder Gp - Blade (Tilt) (VPAT - BLADE W/ RIPPER)	227-8893		
Cylinder Gp - Ripper (Lift)	384-5351	6	F-5
Filter Gp - Oil (Implement Pilot)	334-5261	7	A-3
Filter Gp - Oil (Steering)	177-6979	8	E-2
Manifold Gp - Control	226-4751	9	B-3
Manifold Gp - Control (Low Fan Speed)	388-5493	10	C-5
Motor Gp - Hydraulic Fan	425-1596	11	B-2
Motor Gp - Reversing Fan	425-1597	12	C-2
Motor Gp - Steering	325-9776	13	E-5
Pump Gp - Fan	444-8540	14	D-2
Pump Gp - Implement	444-8539	15	C-3
Pump Gp - Implement (VPAT - Blade W/ Ripper)	444-8538		
Pump Gp - Steering & Charge	424-4483	16	E-3
Sensor Gp - Pressure (Implement Pump)	296-5270	17	B-3
Sensor Gp - Speed (Steering Motor)	358-2399	18	D-5
Sensor Gp - Temperature (Hyd. Tank)	234-5013	19	A-4
Switch Gp - Pressure (Oil Filter Bypass)	253-2673	20	D-2
Tank & Filter Gp - Hydraulic	330-6806	21	A-4
Valve As - Breaker Relief	191-5439	22	B-4
Valve As - Cooler Bypass	4E-1437	23	B-2
Valve Gp - Anti - Ripper Drift	382-4092	24	B-8
			E-8
Valve Gp - Boost Load Sense	180-8569	25	E-1
Valve Gp - Fan Reversing	162-2191	26	B-2
Valve Gp - Main Control (S - Blade W/ Rear Aux. Hyd.)	441-5979	27	D-6
Valve Gp - Main Control (S-Blade W/ Ripper)	441-5953	28	F-8
Valve Gp - Main Control (S-Blade)	441-5950	29	F-6
Valve Gp - Main Control (VPAT - Blade)	441-5952	30	D-7
Valve Gp - Main Control (VPAT - Blade W/ Ripper)	441-5962	31	D-7
Valve Gp - Quick Drop	452-9472	32	F-2
Valve Gp - Relief (Steering Lines Pressure)	198-9219	33	D-4

Note: Check Part Number In The Part Manual For Your Specific Machine.

Tap Locations Pressure, Sampling, and Sensor		
Tap Number	Description	Schematic Location
AA1	Dozer Lift Pressure (LH) (S-Blade With Ripper)	E-8
AA2	Dozer Lift Pressure (LH) (VPAT - Blade With Ripper)	C-8
AA3	Dozer Lift Pressure (LH) (VPAT - Blade)	C-8
AA4	Dozer Lift Pressure (LH) (S-Blade With Rear Aux. Hyd.)	C-6
AA5	Dozer Lift Pressure (LH) (S-Blade)	F-8
BB1	Dozer Lift Pressure (RH) (S-Blade With Ripper)	E-7
BB2	Dozer Lift Pressure (RH) (VPAT - Blade With Ripper)	C-7
BB3	Dozer Lift Pressure (RH) (VPAT - Blade)	C-7
BB4	Dozer Lift Pressure (RH) (S-Blade With Rear Aux. Hyd.)	C-5
BB5	Dozer Lift Pressure (RH) (S-Blade)	F-7
CC1	Dozer Tilt Pressure (LH) (S-Blade With Ripper)	E-8
CC2	Dozer Tilt Pressure (LH) (VPAT - Blade With Ripper)	C-8
CC3	Dozer Tilt Pressure (LH) (VPAT - Blade)	B-7
CC4	Dozer Tilt Pressure (LH) (S-Blade With Rear Aux. Hyd.)	C-6
CC5	Dozer Tilt Pressure (LH) (S-Blade)	E-8
CP	Pilot Valve Supply Pressure	B-3
CPG	Accumulator Pressure	B-3
DD1	Dozer Tilt Pressure (RH) (S-Blade With Ripper)	E-7
DD2	Dozer Tilt Pressure (RH) (VPAT - Blade With Ripper)	C-7
DD3	Dozer Tilt Pressure (RH) (VPAT - Blade)	B-7
DD4	Dozer Tilt Pressure (RH) (S-Blade With Rear Aux. Hyd.)	C-5
DD5	Dozer Tilt Pressure (RH) (S-Blade)	E-7
EE1	Dozer Ripper Lift Pressure (LH) (S-Blade With Ripper)	D-8
EE2	Dozer Ripper Lift Pressure (VPAT - Blade With Ripper)	A-8
FF1	Dozer Ripper Lift Pressure (RH) (S-Blade With Ripper)	D-7
FF2	Dozer Ripper Lift Pressure (VPAT - Blade With Ripper)	A-7
GG1	Angle Pressure (LH) (VPAT - Blade With Ripper)	B-8
GG2	Angle Pressure (LH) (VPAT - Blade)	B-7
H	Steering Filter Pressure (RH)	E-2
HB	Load Sense Pressure	C-3
HC	Steering Motor Pressure (MB)	D-5
HD	Steering Motor Pressure (MA)	E-5
HF	Fan Pump Pressure	C-3
HFD	Fan Motor Drain Pressure	D-1
		B-2
HH1	Angle Pressure (RH) (VPAT - Blade With Ripper)	B-7
HH2	Angle Pressure (RH) (VPAT - Blade)	B-6
II	Aux 1 Pressure (LH) (S-Blade With Rear Aux. Hyd.)	C-6
JJ	Aux 1 Pressure (RH) (S-Blade With Rear Aux. Hyd.)	C-5
K	Steering Filter Pressure (LH)	D-2
KK	Aux 2 Pressure (LH) (S-Blade With Rear Aux. Hyd.)	C-6
LL	Aux 2 Pressure (RH) (S-Blade With Rear Aux. Hyd.)	C-5
SOS	Oil Sampling Port	B-3

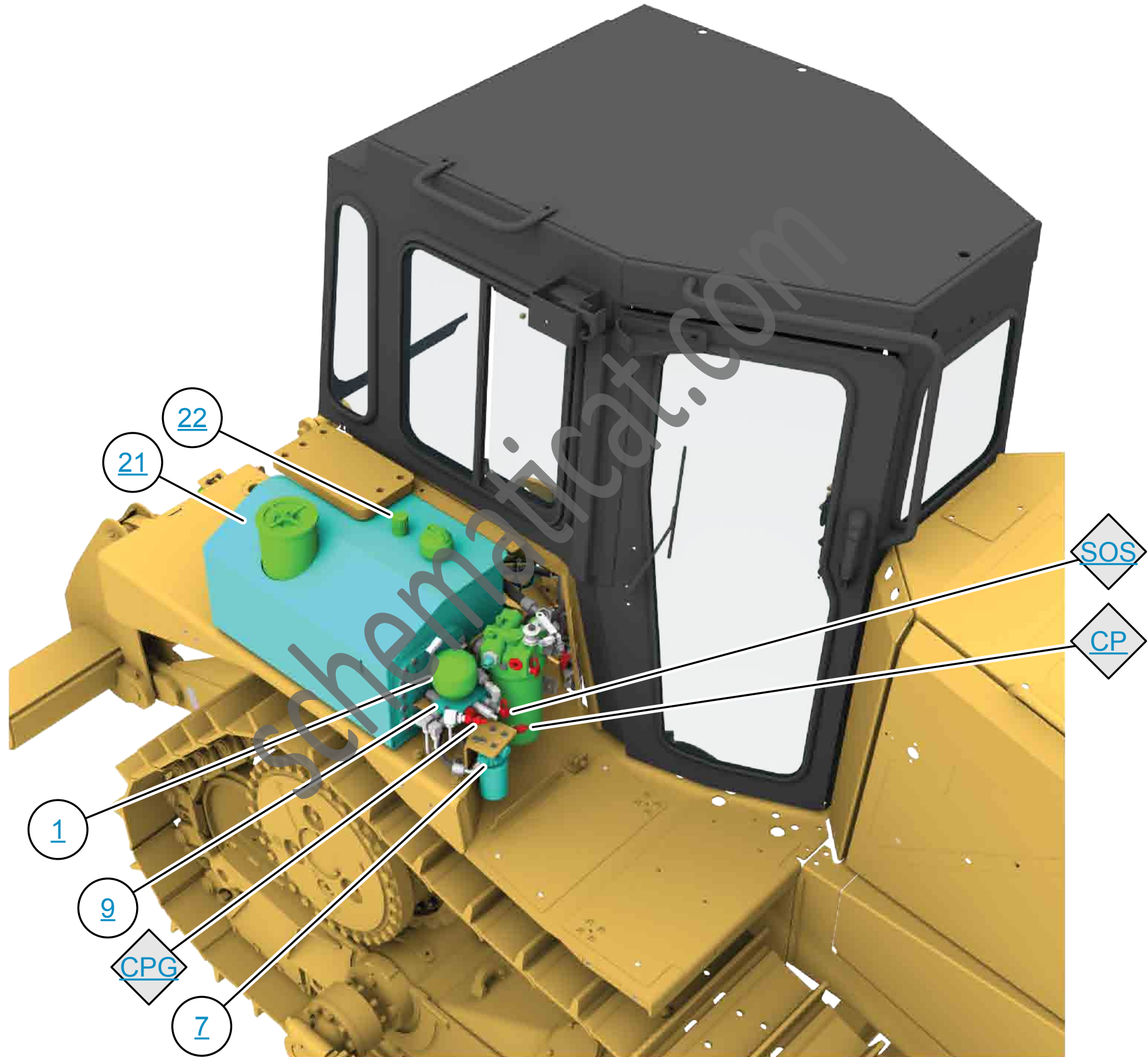


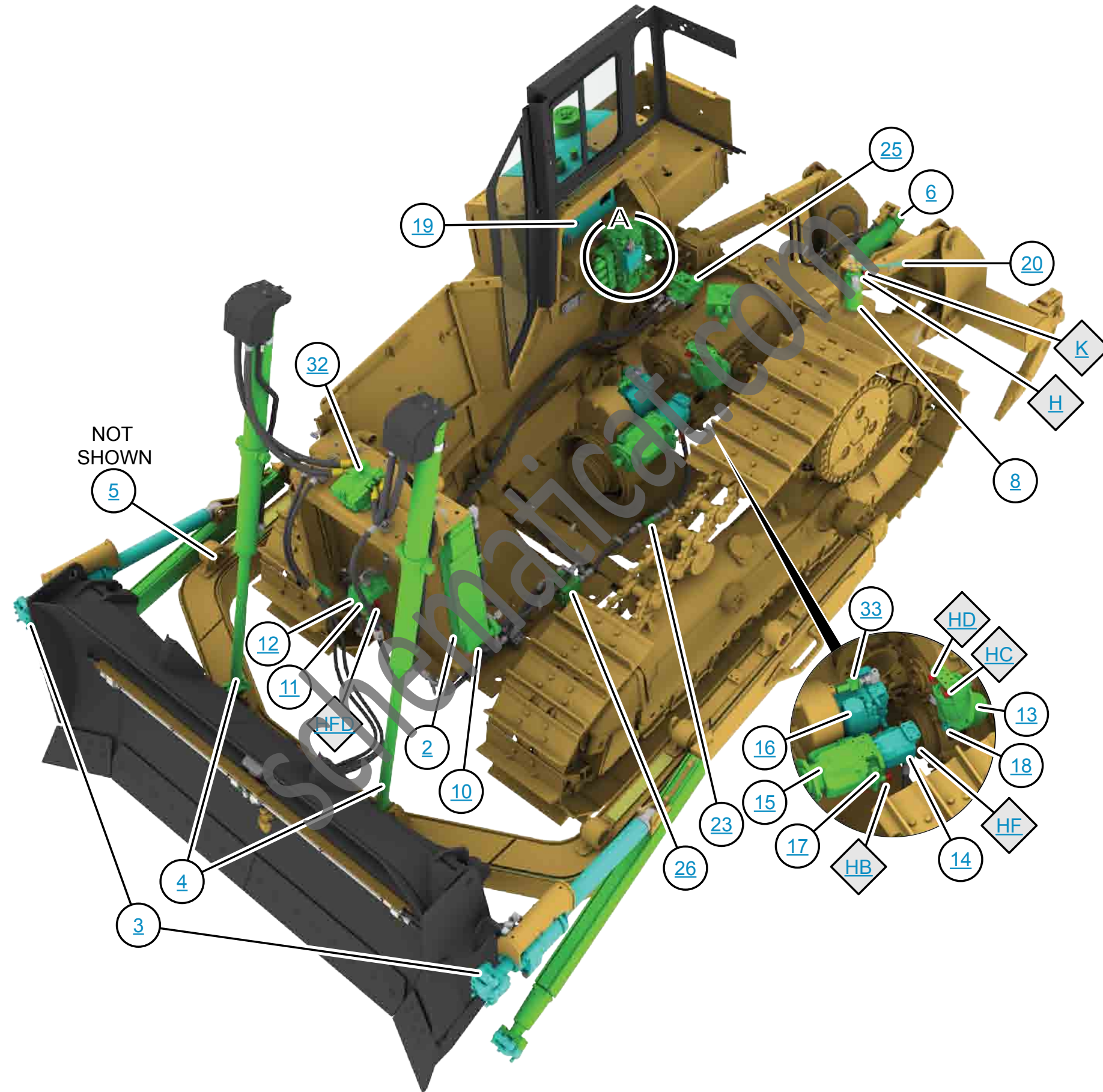
LINE PATTERNS	
---	Pressure Line
---	Pilot / Load Sensing Pressure
---	Drain / Return Lines
---	Component Group
---	Air Line

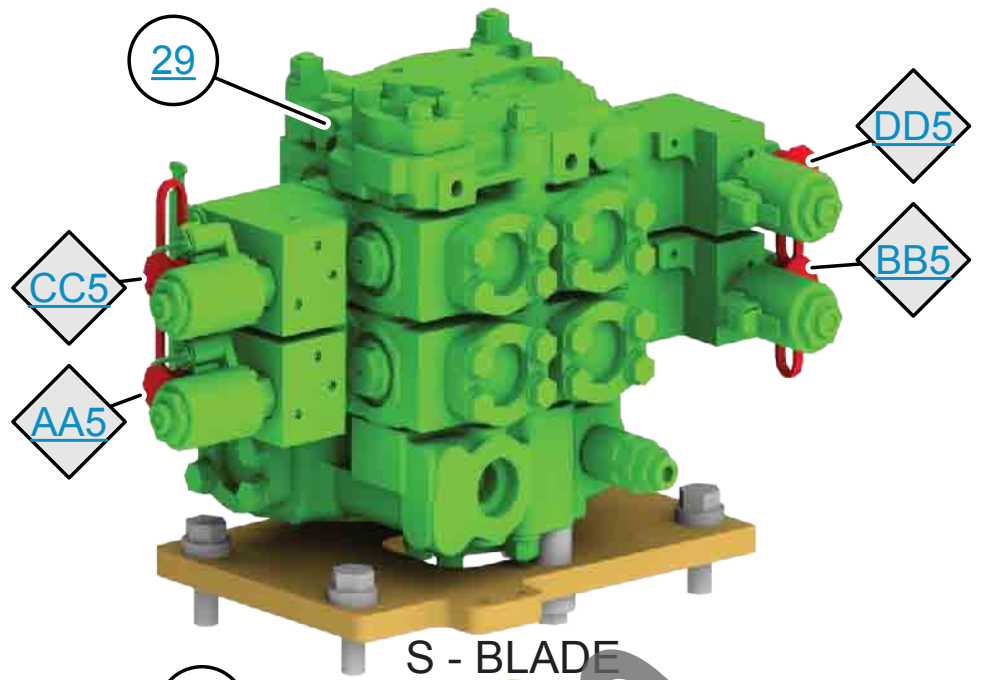
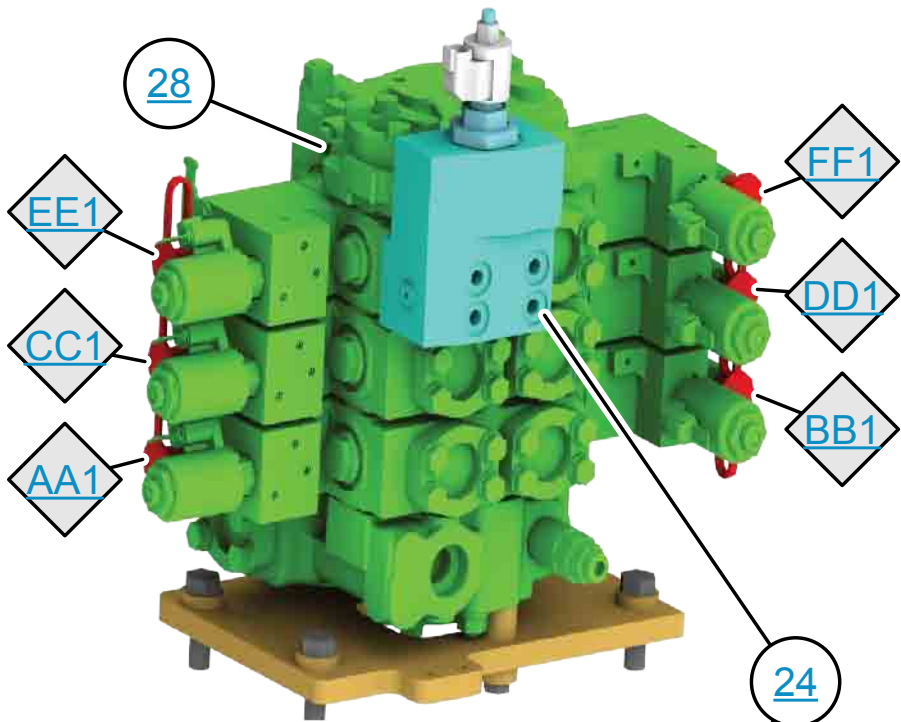
CALLOUTS	
⬢	TAPS (Pressure, Sampling, Sensor - by letter)
⬢	Connectors (by letter)
⬢	(52) VALVE GP - CONTROL

HYDRAULIC CIRCUIT COLOR DESCRIPTIONS	
Red	IMPLEMENT PUMP OUTPUT
Blue	LOAD BOOST CIRCUIT
Green	DOZER LIFT CIRCUIT
Orange	BLADE TILT CIRCUIT
Purple	SUPPLY LINE
Light Blue	HYDRAULIC FAN COOLING CIRCUIT
Light Green	RIPPER LIFT CIRCUIT
Light Purple	BLADE ANGLE CIRCUIT
Light Orange	DRAIN / RETURN LINE
Light Blue	STEERING CIRCUIT

THIS SCHEMATIC IS FOR THE D6T TRACK-TYPE TRACTOR HYDRAULIC SYSTEM
 MEDIA NUMBER: UENR4059-01
 SCHEMATIC PART NUMBER: 389-0940, CHANGE: 01, VERSION: -
 Components are shown installed on a fully operable machine with the key and engine off, transmission shift in neutral and with parking brake set.
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.
 Refer to the Parts Manual using a specific serial number prefix in SIS before ordering parts from this schematic.

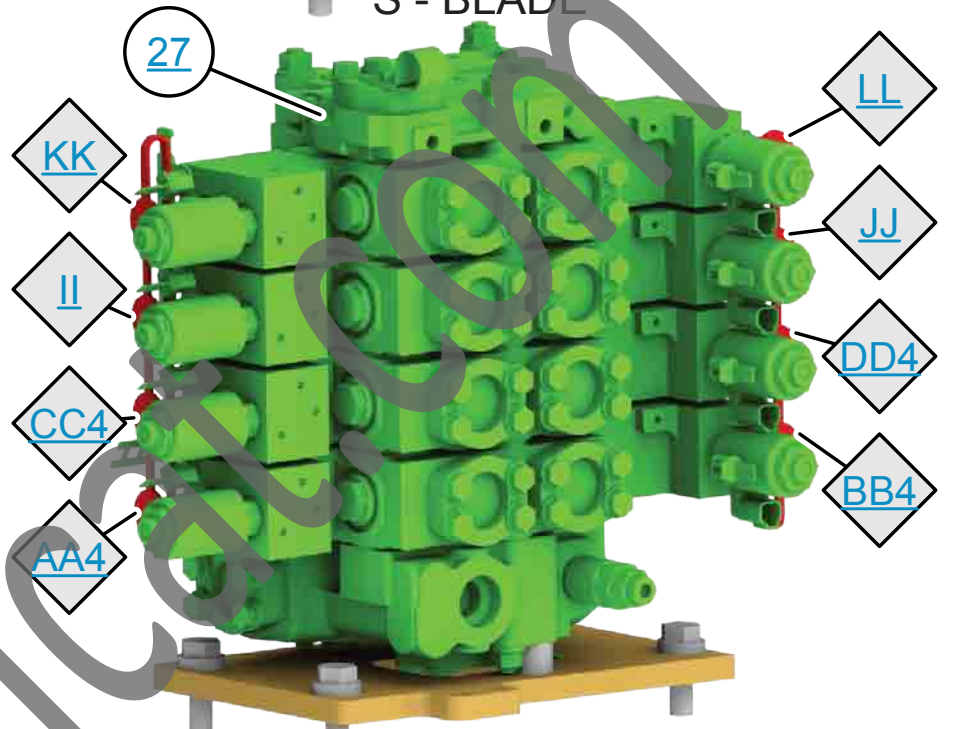
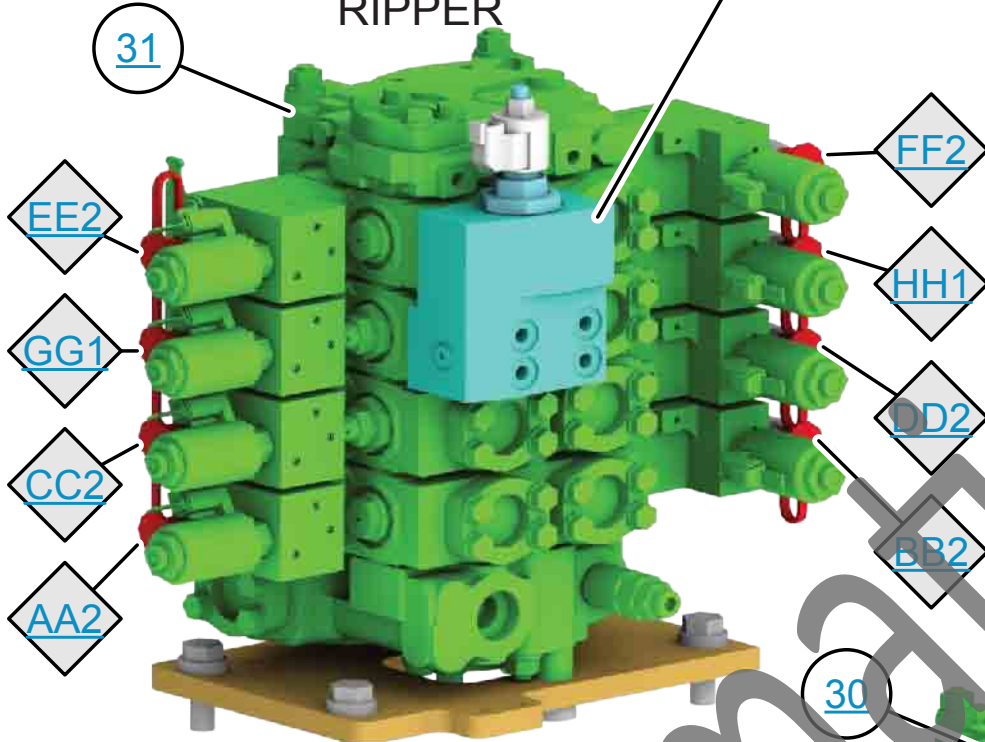






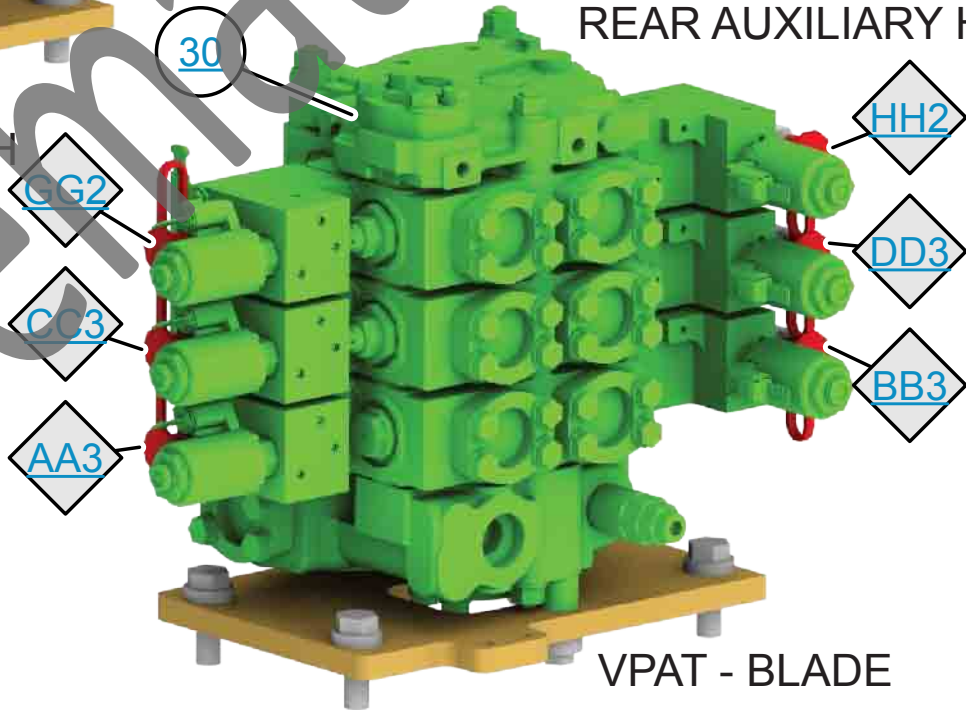
S - BLADE WITH RIPPER

S - BLADE



S-BLADE WITH REAR AUXILIARY HYD.

VPAT - BLADE WITH RIPPER



VPAT - BLADE