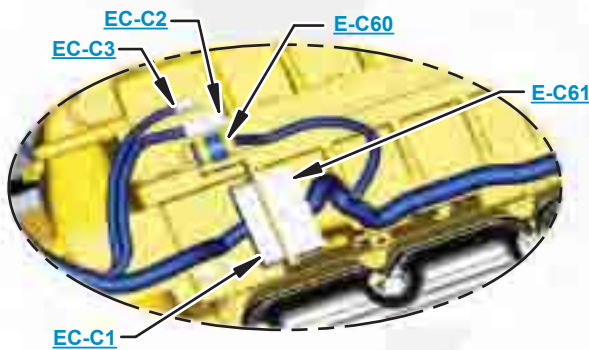


This document is best viewed at a screen resolution of 1024 X 768.

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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.

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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"



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Schematic

330D and 336D Excavator 336D MHPU Electrical System

330D:

GBC1-UP
GGE1-UP
THJ1-UP
LRM1-UP
ERN1-UP
HAS1-UP
RAS1-UP
T2Y1-UP

336D:

JBF1-UP
KDJ1-UP
MYP1-UP
DTS1-UP
WET1-UP

336D MHPU:

M3M1-UP
M3N1-UP

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Volume 1 of 3: Engine and Chassis

Volume 2 of 3: Platform and Console Area

Volume 3 of 3: Cab Area

Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Alarm - Travel	B-11	7	Sensor - Injection Actuation Pressure	A-16	42
Alternator	H-16	23	Sensor - Intake Manifold Air Temperature	B-16	31
Assembly - Block	H-3	2	Sensor - Pressure OLWD	D-6	12
Battery - Front	H-6	4	Sensor - Primary Engine Speed Timing	B-16	27
Battery - Front (Attch)	H-6	4	Sensor - Pump 1 Pressure	B-14	H
Battery - Rear	H-6	4	Sensor - Pump 2 Pressure	B-14	H
Battery - Rear (Attch)	H-6	4	Sensor - Secondary Engine Speed Timing	B-16	28
Breaker - Alternator	I-2	2	Sensor - Squeeze Pressure	C-8	12
Breaker - Heater	H-2	2	Sensor - Turbo Outlet Pressue	B-16	30
Breaker - Main	H-2	2	Sensor - Water Seperator Level	K-12	3
Control - Engine	H-18	25	Solenoid -1 Way / 2 Way Change	C-8	12
Control - Gateway	K-16	1	Solenoid - Ether	K-11	13
Control - Machine	G-2	1	Solenoid - Fine Swing	C-6	12
Diode - Start Relay	I-3	2	Solenoid - Flow Limit	A-14	H
Ground - ECM Mount	I-16	1	Solenoid - Heavy Lift	F-6	5
Ground - Frame 1	G-11	14	Solenoid - Hydraulic Lock	G-6	5
Ground - Frame 2	F-15	15	Solenoid - IAPCV	A-16	41
Ground - Frame 3	G-17	21	Solenoid - Injector Cylinder #1	E-15	35
Ground - Frame 4	A-8	9	Solenoid - Injector Cylinder #2	E-14	36
Ground - Frame 5 1	H-3	2	Solenoid - Injector Cylinder #3	E-14	37
Ground - Frame 5 2	K-18	1	Solenoid - Injector Cylinder #4	E-14	38
Ground - Frame 6	H-6	4	Solenoid - Injector Cylinder #5	E-14	39
Heater - Air (Glow Plug)	A-16	49	Solenoid - Injector Cylinder #6	E-13	40
Horn - Forward Warning LH (Low)	B-6	12	Solenoid - Power Shift Pressure	A-14	H
Horn - Forward Warning LH (High)	B-6	12	Solenoid - Quick Coupler High	E-6	12
Indicator - Air Cleaner	K-11	13	Solenoid - Quick Coupler Low	E-6	12
Indicator - Hydraulic Oil Filter	A-11	E	Solenoid - Radiator Fan Speed Cont.	B-14	H
Lamp - Boom LH	B-6	33	Solenoid - Relief 1	C-8	12
Lamp - Boom RH	B-6	34	Solenoid - Relief 1 Check	C-8	12
Lamp - Chassis	A-6	6	Solenoid - Relief 2	C-8	12
Motor - AC Condenser Fan	J-11	50	Solenoid - Relief 2 Check	C-8	12
Motor - Starter	G-17	22	Solenoid - Reversing Fan Change	G-8	H
Motor - Washer	G-3	2	Solenoid - Stem 1 Extend	A-12, B-12	H
Motor - Washer Lower	G-3	2	Solenoid - Stem 1 Retract	A-12, B-12	H
Motor - Priming Fuel Pump	L-12	3	Solenoid - Stem 2 Extend	A-12	H
Receptacle - Jump Start	H-6	4	Solenoid - Stem 2 Retract	A-12	H
Relay - Air Heater	A-16	16	Solenoid - Stem 3 Extend	A-14	H
Relay - Start	H-3	2	Solenoid - Stem 3 Retract	A-14	H
Resistor - Can 1	C-3	2	Solenoid - Swing Brake	G-6	5
Resistor - Can 2	C-3	2	Solenoid - Travel Speed	G-6	5
Sender - Hydraulic Temperature	A-11	E	Solenoid - Travel Straight	G-6	5
Sensor - Ambient Temperature	K-12	3	Switch - Coolant Level	K-12	3
Sensor - Atmospheric Pressure	A-16	32	Switch - Disconnect	H-3	2
Sensor - Engine Coolant Temperature	B-16	29	Switch - Engine Oil Level	G-17	18
Sensor - Engine Oil Pressure	A-16	26	Switch - Fuel Pressure	L-12	3
Sensor - Engine Speed Pickup	G-17	20	Switch - Hydraulic Oil Level	B-11	11
Sensor - Fuel Level	B-10	10	Switch - Priming Pump	L-12	3
Sensor - Fuel Pressure	K-12	3	Switch - Refueling	A-4	5
Sensor - Fuel Temperature	L-12	3			

Machine locations are repeated for components located close together.

E = Located around hydraulic oil tank.

G = Located under operator's platform

H = Located inside of pump compartment

COMPONENT LOCATION

Volume 2 of 3 - PLATFORM AND CONSOLE AREA



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Converter- 12v-7a 1 (atch)	D-4	G	Switch- Horn	E-3	C
Converter- 12v-7a 2 (atch)	D-4	G	Switch- Idle- One Touch Low	C-3	B
Diode- Accessory	C-7	G	Switch- Joystick- Left Hand 3 (atch)	F-3	C
Diode- Hyd Lock	C-7	G	Switch- Joystick- Right Hand 3 (atch)	C-3	B
Ground- Frame 7	F-12	G	Switch- Key	B-2	B
Ground- Platform	E-9	G	Switch- Neutral Start Limit	F-3	C
Heater - Seat (atch)	C-4	J	Switch- Pressure- Aux Pump (atch)	E-1	G
Indicator- Unit	B-2	B	Switch- Pressure- High (atch)	D-1	G
Joystick- Left Hand (atch)	E-3	C	Switch- Pressure- Medium (atch)	E-1	G
Joystick- Right Hand (atch)	C-3	B	Switch- Pressure- Travel Left	D-1	G
Key Reader- Mss (atch)	C-3	B	Switch- Pressure- Travel Right	D-1	G
Switch- Aux Pedal (atch)	E-1	A	Switch- Pressure-travel Straight (atch)	D-1	G
Switch- Backup Epr Valve	A-4	B	Switch- Secondary Shutdown	A-11	G
Switch- Backup Governor	B-4	B	Switch- Throttle Position	B-2	G
Switch- Exciter Coil (atch)	C-2	B			

Machine locations are repeated for components located close together.

A = Located inside of cab, operator's platform

B = Located inside of right console.

C = Located inside of left console.

D = Located inside cab at rear

G = Located under operator's platform

J = Located in operator's seat

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COMPONENT LOCATION

Volume 3 of 3 - CAB AREA



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Alarm- Action	C-1	A	Relay- Neutral Start	D-9	D
Connector- Et Conn	B-6	B	Relay- Priming Pump (atch)	D-11	D
Control- Monitor	D-1	44	Relay- Qc Hyd Lock 1 (atch)	B-12	D
Control- Switch Panel	C-2	B	Relay- Qc Hyd Lock 2 (atch)	B-12	D
Control- Wiper	B-1	A	Relay- Qc Hyd Lock On (atch)	C-12	D
Converter- Radio	A-9	B	Relay- Qc Hyd Lock Priority (atch)	C-12	D
Diode- Lamp	F-9	D	Relay- Smart Boom Down (atch)	E-11	D
Diode- Main Relay	A-10	D	Relay- Smart Boom Up (atch)	E-11	D
Fuse Block	C-8, C-11	D	Relay- Travel Alarm	D-9	D
Ground- Cab 1	B-4	B	Resistor- Backup	E-8	D
Ground- Cab 2	C-7	B	Resistor- Can 1	B-2	B
Ground- Cab 3	E-3	B	Resistor- Can 2	B-6	B
Lamp- Cab Lh (atch)	F-1	19	Switch- 2nd Filter	B-3	B
Lamp- Cab Rh (atch)	F-1	19	Switch- Beacon (atch)	A-6	D
Lamp- Caution (for Crane)(atch)	B-3	B	Switch- Fine Swing Cont (atch)	A-3	D
Meter- Service	C-1	A	Switch- Fuel Filter	B-3	B
Outlet- 12v-7a A (atch)	C-6	B	Switch- Over Load Warning (atch)	A-5	D
Outlet- 12v-7a B (atch)	C-7	B	Switch- Radio Mute (atch)	A-4	D
Relay- Beacon (atch)	D-9	D	Switch- Rocker (option)	B-3	B
Relay- Boom Float Disable (atch)	E-11	D	Switch- Seat Heater (atch)	A-6	D
Relay- Boom Lamp	E-9	D	Switch- Smart Boom Select (atch)	A-5	D
Relay- Cab Lamp	E-9	D	Switch- Stg (option)	B-3	B
Relay- Chasis Lamp	E-9	D	Switch- Under Window Limit	E-1	A
Relay- Ether (atch)	C-9	D	Switch- Universal Qc (atch)	A-2	B
Relay- Horn	E-9	D	Switch- Upper Window Limit	E-1	19
Relay- Main	A-10	D	Timer- Lamp Delay (atch)	B-11	D

Machine locations are repeated for components located close together.

A = Located inside of cab, operator's platform

B = Located inside of right console.

D = Located inside cab at rear

G = Located under operator's platform

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Connector Number	Schematic Location	Machine Location
CONN 1	I-18	1
CONN 2	J-17	1
CONN 3	J-17	1
CONN 4	J-17	1
CONN 5	C-16	25
CONN 6	L-15	2
CONN 7	J-9	2
CONN 8	E-8	H
CONN 9	E-8	H
CONN 10	F-8	H
CONN 11	F-8	H
CONN 12	C-7	12
CONN 13	B-7, C-7	33
CONN 14	B-7	12
CONN 15	A-6	5
CONN 16	A-6	5
CONN 17	A-4	5
CONN 18	A-4	5
CONN 19	L-1	4
CONN 20	J-1	4
CONN 21	J-1	4
CONN 22	J-1	4
CONN 23	I-1	1
CONN 24	I-1	1
CONN 25	H-1	G
CONN 53	F-15	48
CONN 54	A-10	10

The connectors shown in this chart are for harness to harness connectors. Connectors that join a harness to a component are generally located at or near the component. See the Component Location Chart.

PLATFORM AND CONSOLE AREA

Connector Number	Schematic Location	Machine Location
CONN 19	E-12	4
CONN 20	D-12	4
CONN 21	C-12	4
CONN 22	C-12	4
CONN 26	A-11	G
CONN 27	A-10	D
CONN 28	A-10	D
CONN 29	A-9	D
CONN 30	D-9	G
CONN 31	A-8	D
CONN 32	A-7	D
CONN 33	A-7	D
CONN 34	B-7, C-6	G
CONN 35	D-6	G
CONN 36	C-6	G
CONN 37	C-6	G
CONN 38	B-6	G
CONN 39	A-6, B-6	G
CONN 40	F-5	G
CONN 41	F-5	G
CONN 42	B-4	B

The connectors shown in this chart are for harness to harness connectors. Connectors that join a harness to a component are generally located at or near the component. See the Component Location Chart.

Connector Number	Schematic Location	Machine Location
CONN 23	E-12	1
CONN 24	E-12	1
CONN 25	D-12	G
CONN 27	F-8	D
CONN 28	F-8	D
CONN 29	F-7	D
CONN 31	F-6	D
CONN 32	F-5	D
CONN 33	F-5	D
CONN 43	B-10	B
CONN 44	F-7	D
CONN 45	B-6	B
CONN 46	B-6	B
CONN 47	A-3	B
CONN 48	F-2	19
CONN 49	F-2	19
CONN 50	F-2	19
CONN 51	F-2	19
CONN 52	B-2	B

The connectors shown in this chart are for harness to harness connectors. Connectors that join a harness to a component are generally located at or near the component. See the Component Location Chart.

Component Identifiers (CID) ¹ Module Identifier (MID ²)	
Engine Control System (MID No. 036)	
CID	Component
0001	Injector Cylinder #1
0002	Injector Cylinder #2
0003	Injector Cylinder #3
0004	Injector Cylinder #4
0005	Injector Cylinder #5
0006	Injector Cylinder #6
0041	Sensor Supply Voltage
0042	Injector Actuation Valve
0091	Throttle Position Sensor
0094	Fuel Pressure Sensor
0100	Engine Oil Pressure Sensor
0110	Engine Coolant Temperature Sensor
0164	Injector Actuation Pressure Sensor
0168	Electrical System Voltage
0172	Intake Manifold Air Temp Sensor
0174	Engine Temperature Sensor
0190	Engine Speed/timing Sensor
0253	Personality Module Mismatch
0261	Engine Timing Calibration
0262	5 Volt Dc Sensor Power Supply
0268	Check Programmable Parameters
0274	Atmospheric Pressure Sensor
0286	Low Oil Pressure Lamp
0342	Secondary Engine Speed/timing Sensor
0617	Inlet Air Heater Relay
1639	Machine Security System
1785	Intake Manifold Pressure Sensor
2417	Ether Injection Control Solenoid
Machine Control System (MID No. 039)	
CID	Component
0041	Sensor Supply Voltage
0096	Fuel Level Sensor
0110	Engine Coolant Temperature Sensor
0167	Alternator Charging Voltage Sensor
0168	Electrical System Voltage
0171	Ambient Air Temperature Sensor
0190	Engine Speed/timing Sensor
0246	Can Data Link
0247	J1939 Data Link
0248	Cat Data Link
0254	Electronic Control Module
0262	5 Volt Dc Sensor Power Supply
0271	Action Alarm
0362	Radiator Fan Speed Solenoid
0374	Swing Brake Solenoid
0544	Engine Cooling Fan Speed Sensor
0581	Power Shift Pressure Solenoid
0586	Engine Speed Dial Switch
0588	Monitoring System Display
0598	Travel Speed Solenoid Valve
0600	Hydraulic Oil Temperature Sensor
0735	Heavy Lift Solenoid Valve
1130	Left Side Attachment Pedal Sensor
1160	Hydraulic Lock Solenoid
1178	Boom Overload Pressure Sensor
1522	Relief Check Valve-2 Solenoid
1523	Relief Check Valve-1 Solenoid
1525	Travel Straight Solenoid
1590	Main Pump Flow Limitation Pressure Solenoid
1593	Attachment Valve #1 Extend Pressure Solenoid
1594	Attachment Valve #2 Extend Pressure Solenoid
1595	Attachment Valve #3 Extend Pressure Solenoid
1596	Attachment Valve #1 Retract Pressure Solenoid
1597	Attachment Valve #2 Retract Pressure Solenoid
1598	Attachment Valve #3 Retract Pressure Solenoid
1609	Squeeze Pressure Sensor
1657	Left Joystick Thumbwheel
1658	Right Joystick Thumbwheel
1665	Variable Relief Valve #1 Pressure Solenoid
1666	Variable Relief Valve #2 Pressure Solenoid
1931	Auxiliary Circuit Flow Combining Solenoids
2265	Hydraulic Pump 1 Outlet Pressure Sensor
2266	Hydraulic Pump 2 Outlet Pressure Sensor
2280	The Travel Alarm Relay
2300	Switch Panel
Product Link Radio (MID No. 122)	
CID	Component
0168	Electrical System Voltage
0254	Electronic Control Module
0269	Sensor Power Supply
1251	Alternator R-terminal Signal

¹ The CID is a diagnostic code that indicates which circuit is faulty.

² The MID is a diagnostic code that indicates which electronic control module diagnosed the fault.

Failure Mode Identifiers (FMI) ¹	
FMI No.	Failure Description
0	Data valid but above normal operational range.
1	Data valid but below normal operational range.
2	Data erratic, intermittent, or incorrect.
3	Voltage above normal or shorted high.
4	Voltage below normal or shorted low.
5	Current below normal or open circuit.
6	Current above normal or grounded circuit.
7	Mechanical system not responding properly.
8	Abnormal frequency, pulse width, or period.
9	Abnormal update.
10	Abnormal rate of change.
11	Failure mode not identifiable.
12	Bad device or component.
13	Out of calibration.
14	Parameter failures.
15	Parameter failures.
16	Parameter not available.
17	Module not responding.
18	Sensor supply fault.
19	Condition not met.
20	Parameter failures.

¹The FMI is a diagnostic code that indicates what type of failure has occurred.

Event Codes Engine Control	
Event Code	Condition
E096	High Fuel Pressure
E162	High Boost Pressure
E198	Low Fuel Pressure
E265	User Defined Shutdown
E360	Low Engine Oil Pressure
E361	High Engine Coolant Temperature
E362	Engine Overspeed
E363	High Fuel Temperature
E390	Fuel Filter Restriction
E539	High Intake Manifold Air Temperature

PLATFORM AND CONSOLE AREA

Component Identifiers (CID ¹) Module Identifier (MID ²)	
Engine Control System (MID No. 036)	
CID	Component
0001	Injector Cylinder #1
0002	Injector Cylinder #2
0003	Injector Cylinder #3
0004	Injector Cylinder #4
0005	Injector Cylinder #5
0006	Injector Cylinder #6
0041	Sensor Supply Voltage
0042	Injector Actuation Valve
0091	Throttle Position Sensor
0094	Fuel Pressure Sensor
0100	Engine Oil Pressure Sensor
0110	Engine Coolant Temperature Sensor
0164	Injector Actuation Pressure Sensor
0168	Electrical System Voltage
0172	Intake Manifold Air Temp Sensor
0174	Engine Temperature Sensor
0190	Engine Speed/timing Sensor
0253	Personality Module Mismatch
0261	Engine Timing Calibration
0262	5 Volt Dc Sensor Power Supply
0268	Check Programmable Parameters
0274	Atmospheric Pressure Sensor
0286	Low Oil Pressure Lamp
0342	Secondary Engine Speed/timing Sensor
0617	Inlet Air Heater Relay
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Machine Control System (MID No. 039)	
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0581	Power Shift Pressure Solenoid
0586	Engine Speed Dial Switch
0588	Monitoring System Display
0598	Travel Speed Solenoid Valve
0600	Hydraulic Oil Temperature Sender
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E539	High Intake Manifold Air Temperature

Product Link Radio (MID No. 122)	
CID	Component
0168	Electrical System Voltage
0254	Electronic Control Module
0269	Sensor Power Supply
1251	Alternator R-terminal Signal

¹ The CID is a diagnostic code that indicates which circuit is faulty.

² The MID is a diagnostic code that indicates which electronic control module diagnosed the fault.

Component Identifiers (CID) ¹ Module Identifier (MID ²)	
Engine Control System (MID No. 036)	
CID	Component
0001	Injector Cylinder #1
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0003	Injector Cylinder #3
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2	Data erratic, intermittent, or incorrect.
3	Voltage above normal or shorted high.
4	Voltage below normal or shorted low.
5	Current below normal or open circuit.
6	Current above normal or grounded circuit.
7	Mechanical system not responding properly.
8	Abnormal frequency, pulse width, or period.
9	Abnormal update.
10	Abnormal rate of change.
11	Failure mode not identifiable.
12	Bad device or component.
13	Out of calibration.
14	Parameter failures.
15	Parameter failures.
16	Parameter not available.
17	Module not responding.
18	Sensor supply fault.
19	Condition not met.
20	Parameter failures.

¹The FMI is a diagnostic code that indicates what type of failure has occurred.

Event Codes Engine Control	
Event Code	Condition
E096	High Fuel Pressure
E162	High Boost Pressure
E198	Low Fuel Pressure
E265	User Defined Shutdown
E360	Low Engine Oil Pressure
E361	High Engine Coolant Temperature
E362	Engine Overspeed
E363	High Fuel Temperature
E390	Fuel Filter Restriction
E539	High Intake Manifold Air Temperature

¹ The CID is a diagnostic code that indicates which circuit is faulty.

² The MID is a diagnostic code that indicates which electronic control module diagnosed the fault.

SPECIFICATIONS AND RELATED MANUALS

Volume 1 of 3 - ENGINE AND CHASSIS



Related Electrical Service Manuals		
Title		Form Number
Alternator:	1855294 (DENSO HDB)	SENR4130
Electric Starting Motor:	2371962 (DELCO 50 MT) 2071556	SENR3860
Consist:	6V5582 (DENSO F8.0)	SENR4975
Consist:	2071557 (DELCO 42 MT)	SENR3581
Engine Control:		REN5089
Machine Control:		REN9848
Product Link Radio:		REN7911

Off Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
167-3466	ATCH Boom Down Pressure Switch	490 ± 49 Kpa (71 ± 7.1 psi)	290 Kpa min (42 psi min)	Normally Open
202-9002	ATCH Boom Up Down Pressure Switch	13780 Kpa max (1999 psi max)	10335 ± 889 Kpa (1499 ± 129 psi)	Normally Closed
212-2768	Fuel Pressure Switch	103.4 ± 13.8 Kpa (15 ± 2 psi)	69 Kpa min (10 psi min)	Normally Closed

Resistor, Sender and Solenoid Specifications		
Part No.	Component Description	Resistance (Ohms) ¹
4I-5394	Sender: Hyd Temp	6134 - 7496
121-1491	Solenoid: ATCH - Reversing Fan Change ATCH - Quick Coupler High ATCH - Quick Coupler Low Travel Start Travel Speed Swing Brake Hyd Lock	32.0 ± 3.2
163-6700	Sender: Fuel Level	Empty 83.5 ± 1.5 Half 33.8 ± 2.0 Full 8.0 ± 1
171-0188	Solenoid: ATCH - Flow Limit	11.7 ± 1.2
174-3016	Resistor: Can 1 Data Link Can 2 Data Link	120 ± 10%
239-1134	Solenoid: ATCH - Ether	20

¹ At room temperature unless otherwise noted.

SPECIFICATIONS AND RELATED MANUALS

Volume 2 of 3 -

PLATFORM AND CONSOLE AREA



Related Electrical Service Manuals		
Title		Form Number
Alternator:	1855294 (DENSO HDB)	SENR4130
Electric Starting Motor:	2371962 (DELCO 50 MT) 2071556	SENR3860
Consist:	6V5582 (DENSO F8.0)	SENR4975
Consist:	2071557 (DELCO 42 MT)	SENR3581
Engine Control:		REN5089
Machine Control:		REN9848
Product Link Radio:		REN7911

Off Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
1673466	ATCH Aux Pulp Pressure Switch (Stem 4) ATCH Midium Pressure Switch (Stem 3) ATCH High Pressure Switch (Stem 1) ATCH Travel Straight Pressure Switch Travel Left Pressure Switch Travel Right Pressure Switch	490 ± 49 Kpa (71 ± 7.1 psi)	290 Kpa min (42 psi min)	Normally Open

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SPECIFICATIONS AND RELATED MANUALS

Volume 3 of 3 - CAB AREA



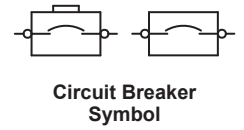
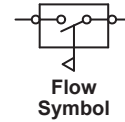
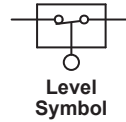
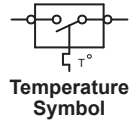
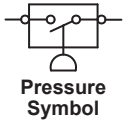
Related Electrical Service Manuals		
Title		Form Number
Alternator:	1855294 (DENSO HDB)	SENR4130
Electric Starting Motor:	2371962 (DELCO 50 MT) 2071556	SENR3860
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Consist:	2071557 (DELCO 42 MT)	SENR3581
Engine Control:		RENR5089
Machine Control:		RENR9848
Product Link Radio:		RENR7911

Resistor Specifications		
Part No.	Component Description	Resistance (Ohms) ¹
1028016	Resistor: Backup	47 ± 5%
1743016	Resistor: Can 1 Data Link Can 2 Data Link	120 ± 10%

¹ At room temperature unless otherwise noted.

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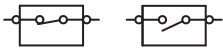
Symbols



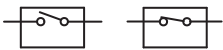
Symbols and Definitions



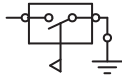
Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.



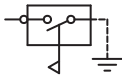
Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



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.



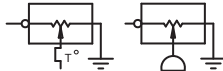
Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



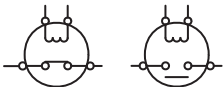
Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



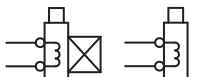
Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



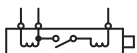
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



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.



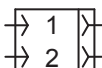
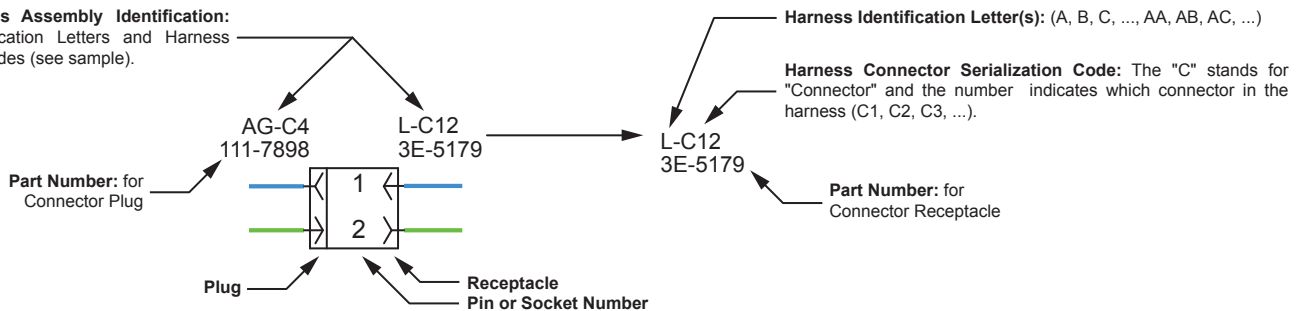
Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



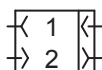
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil circuit open at the time the coil latches.

Harness and Wire Symbols

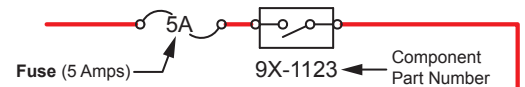
Wire, Cable, or Harness Assembly Identification: Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).



Deutsch connector: Typical representation of a Deutsch connector. The plug contains all sockets and the receptacle contains all pins.

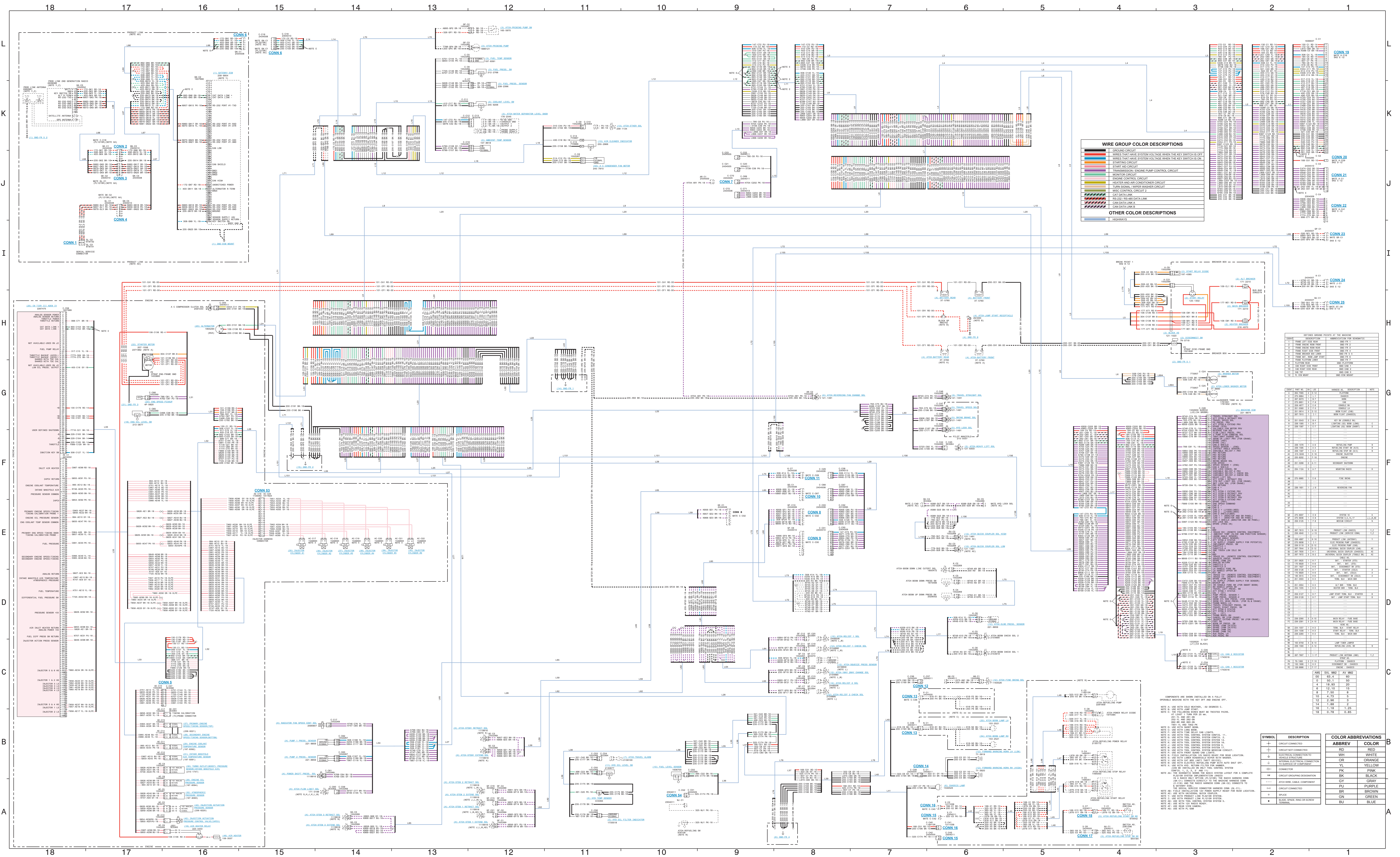


Sure-Seal connector: Typical representation of a Sure-Seal connector. The plug and receptacle contain both pins and sockets.

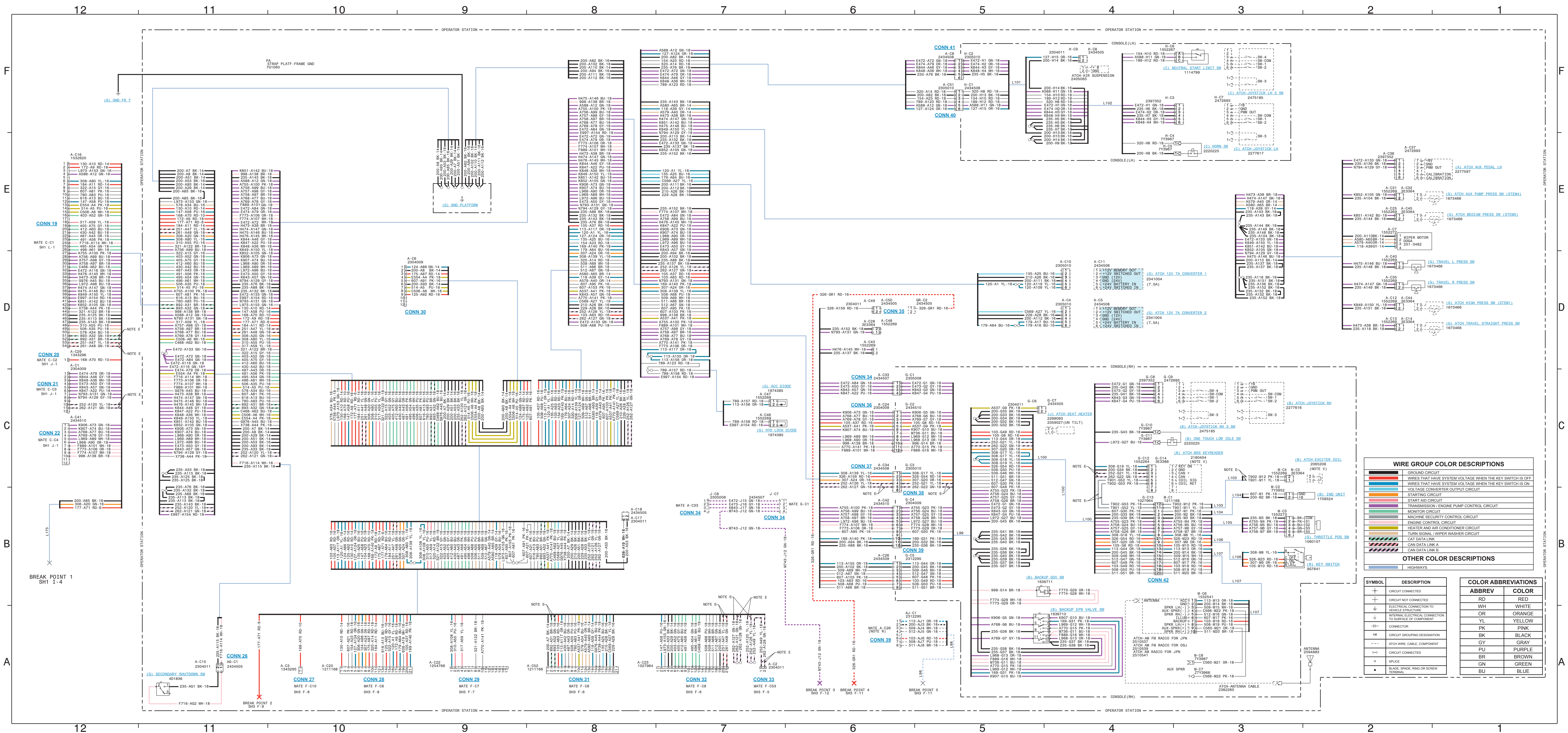


Harness identification code: This example indicates wire group 325, wire 135 in harness "AG".

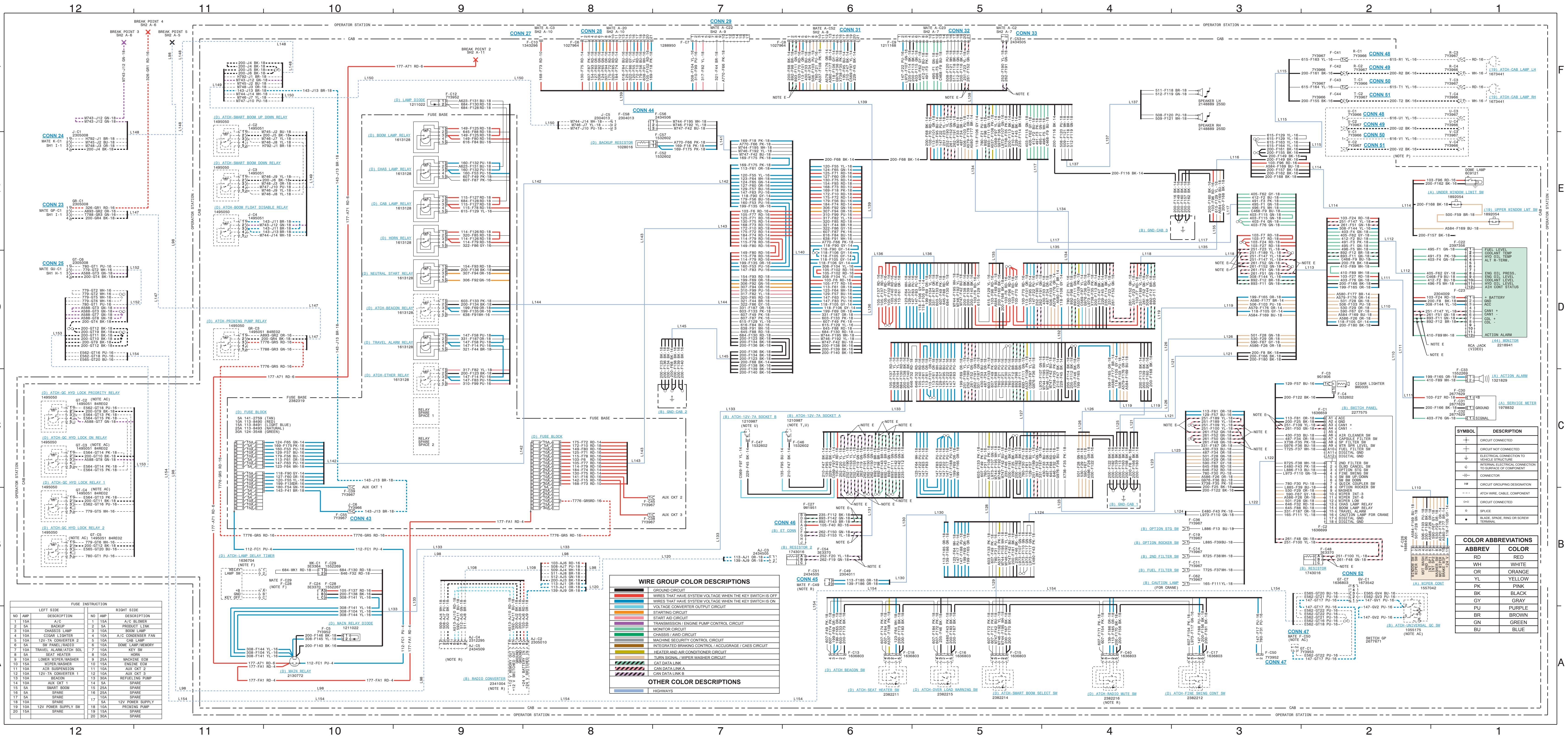
Labels include: Fuse (5 Amps), Component Part Number (9X-1123), Wire Gauge (325-AG135), and Wire Color (PK-14).



THIS SCHEMATIC IS FOR THE 330D AND 336D EXCAVATOR ELECTRICAL SYSTEM
 VOLUME 1 of 3: ENGINE AND CHASSIS
 MEDIA NUMBER: RENR9599-05
 SCHEMATIC PART NUMBER: 251-0617, CHANGE: 01, VERSION: (H, VE)
 Components are shown installed on a fully operable machine with the key engine off, transmission in
 neutral and with parking brake set.
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and System Operations.



THIS SCHEMATIC IS FOR THE 330D AND 336D EXCAVATOR ELECTRICAL SYSTEM
 VOLUME 2 of 3: PLATFORM AND CONSOLE AREA
 MEDIA NUMBER: RENR9599-05
 SCHEMATIC PART NUMBER: 251-0617, CHANGE: 01, VERSION: (HE, V)
 Components are shown installed on a fully operable machine with the key and engine off, transmission shifter
 in neutral and with parking brake set.
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.

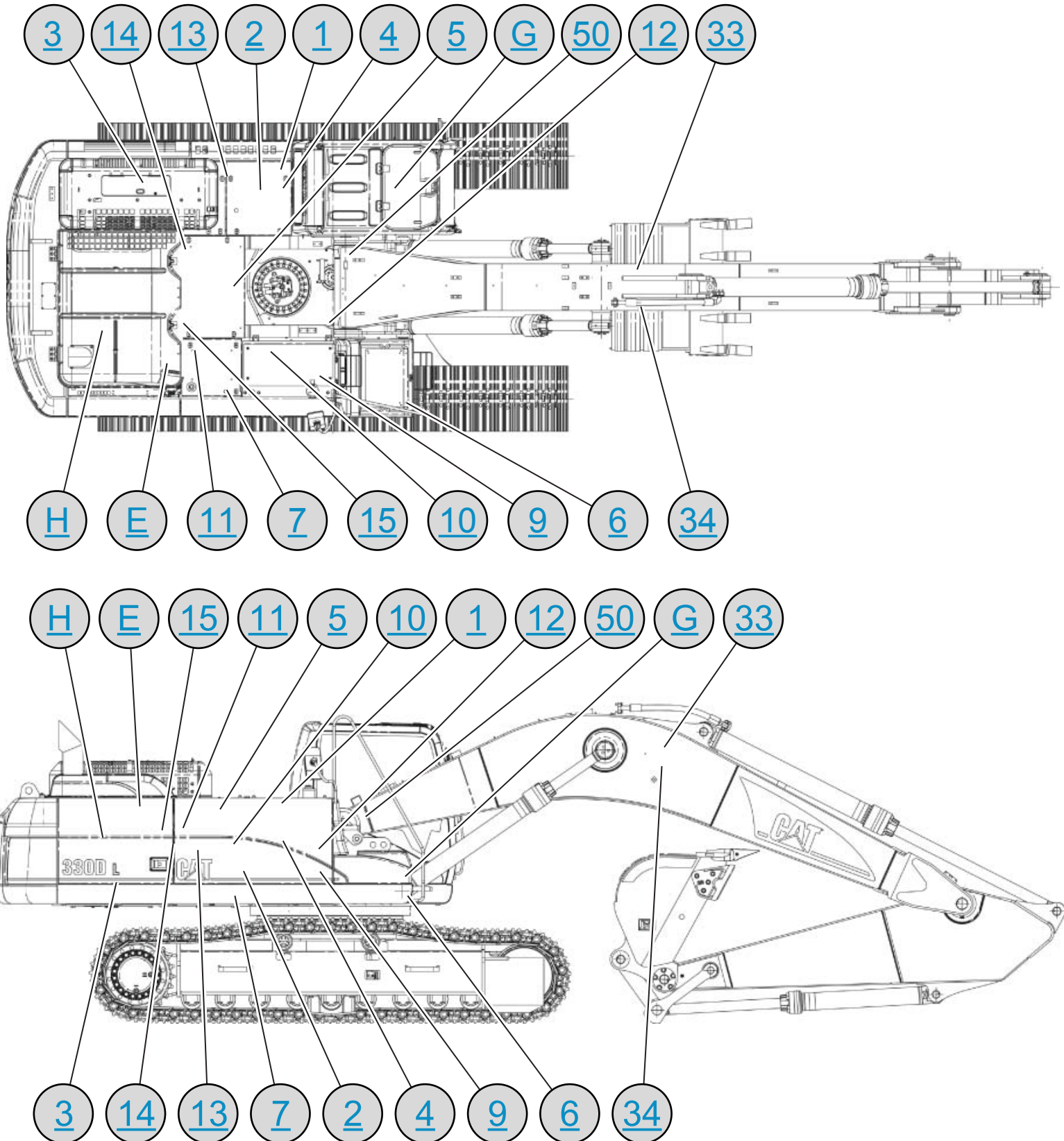


THIS SCHEMATIC IS FOR THE 330D AND 336D EXCAVATOR ELECTRICAL SYSTEM
 VOLUME 3 of 3: CAB AREA
 MEDIA NUMBER: RENR9599-05
 SCHEMATIC PART NUMBER: 251-0617, CHANGE: 01, VERSION: (HE, V)
 Components are shown installed on a fully operable machine with the key and engine off, transmission shifter
 in neutral and with parking brake set.
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.

MACHINE HARNESS CONNECTOR AND COMPONENT LOCATIONS



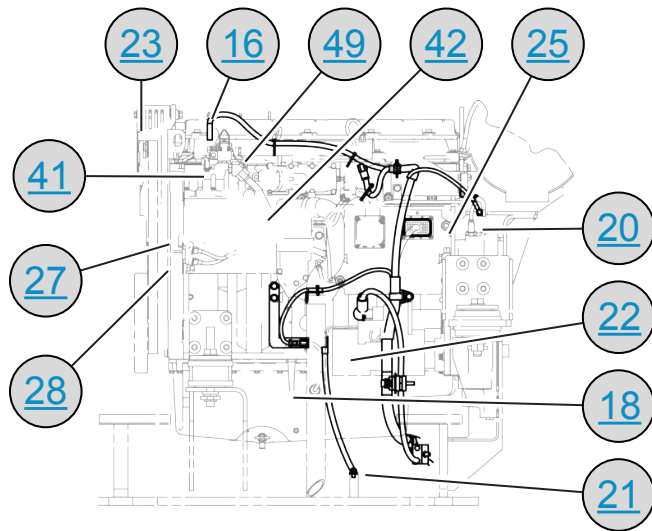
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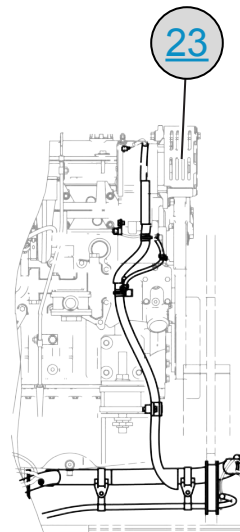
ENGINE HARNESS CONNECTOR AND COMPONENT LOCATIONS



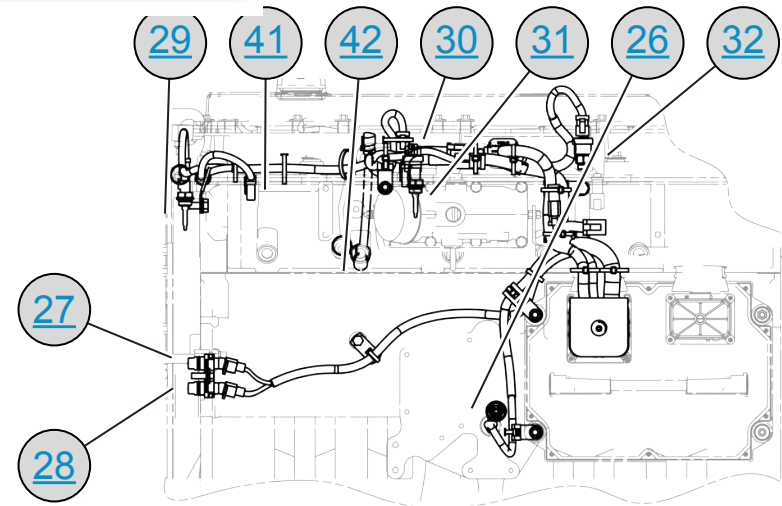
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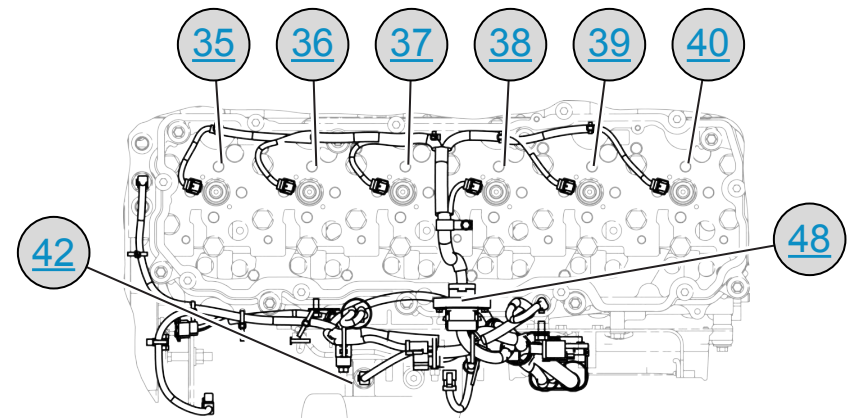
LEFT SIDE VIEW



RIGHT SIDE VIEW



LEFT SIDE VIEW



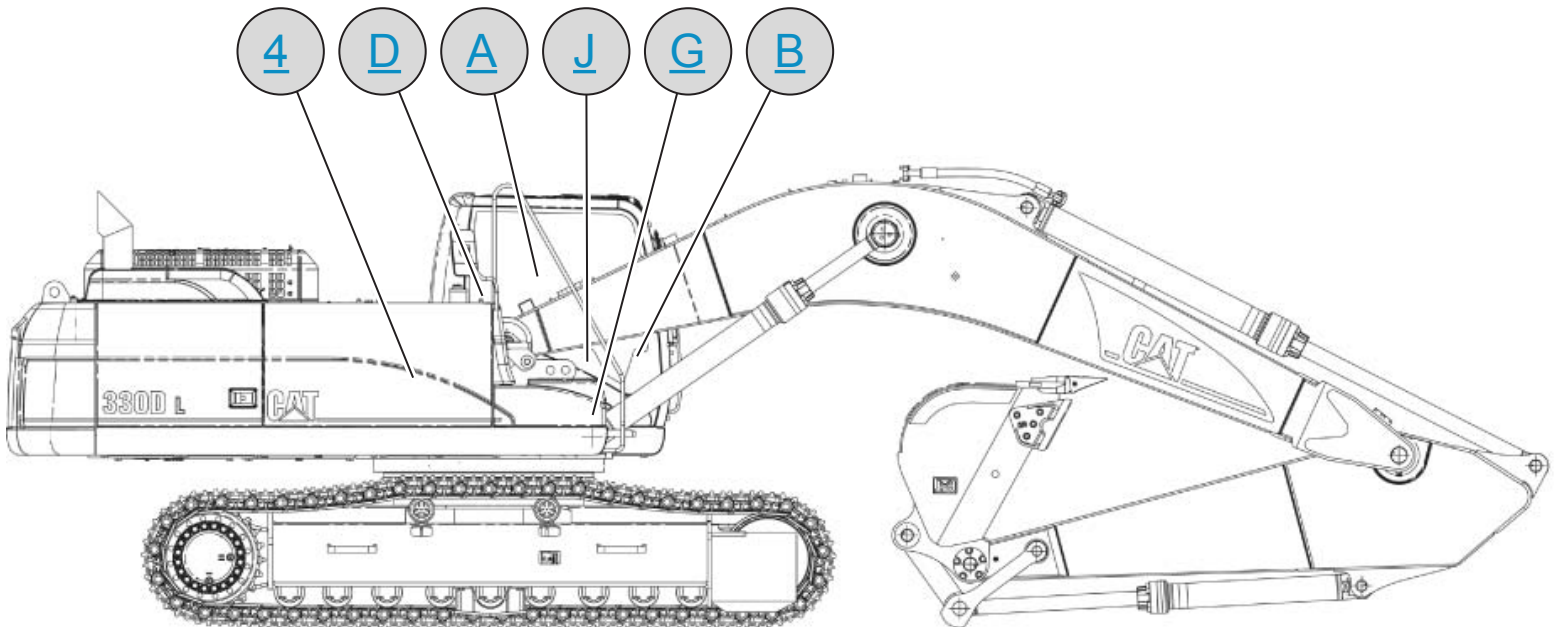
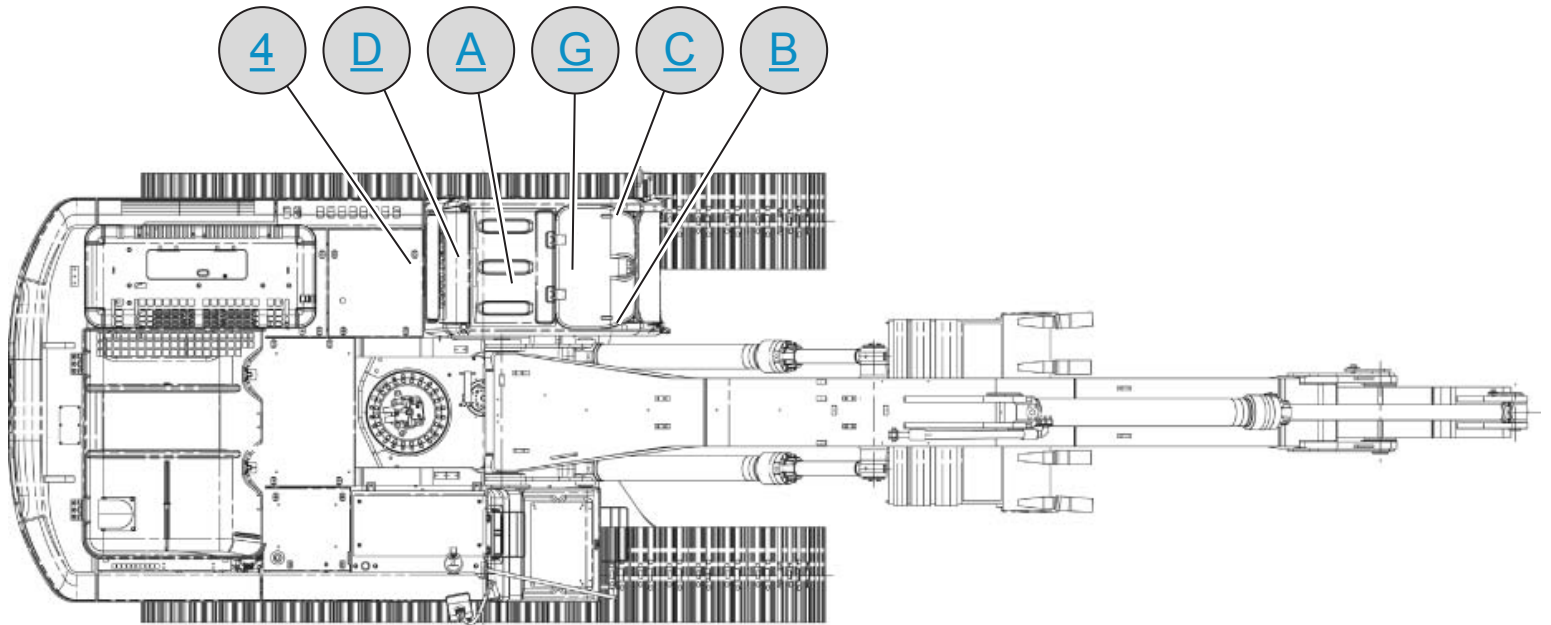
FWD

TOP VIEW

MACHINE HARNESS CONNECTOR AND COMPONENT LOCATIONS



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