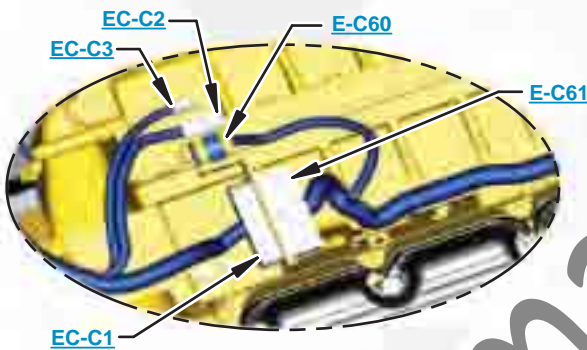




This document is best viewed at a screen resolution of 1024 X 768.

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

769D Off-Highway Truck
and 771D Quarry Truck
Electrical System

769D:
BBB326-474

771D:
BCA234-326

COMPONENT LOCATION

Page 1 of 2



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Alarm -Backup	C-15	22	Lamp - Shift Lever Backlighting	G-6	50
Alternator	B-8	19	Lamp - Suppl Steering	F-2	50
Battery	A-7	38	Lamp -Body Up IND	F-2	50
Beacon	C-10	48	Lamp -CMS Action	E-2	50
Breaker - Alternator	H-9	48	Lamp -Dome	E-6	52
Breaker - Engine Control	H-9	48	Lamp -GN TPMS	I-11	29
Breaker - Key Switch	H-8	48	Lamp -High Beam IND	F-2	50
Breaker - Spare	H-8	48	Lamp -LH Backlighting	E-2	50
Breaker - Suppl Ster	H-9	48	Lamp -LH Backup	B-15	22
Breaker - Turn Signal	H-8	48	Lamp -LH High Beam Headlamp	H-1	7
Breaker -A/C	H-9	48	Lamp -LH Low Beam Headlamp	H-1	42
Breaker -Dome Lamp	G-8	48	Lamp -LH Park/Turn	H-1	20
Breaker -Hdlamp	H-9	48	Lamp -LH RR Park Turn	C-15	22
Breaker -Power Window	H-9	48	Lamp -LH Stop Tail	C-15	22
Bus Bar	A-8	13	Lamp -LH Turn IND	F-2	50
Cigar Lighter	G-2	50	Lamp -Machine Lockout	E-1	43
Connector - Serv Tool	I-8	50	Lamp -RD TPMS	I-11	29
Control - Engine ECM	A-2	30	Lamp -Retarder	F-2	50
Control - Integrated Braking Control	F-13	30	Lamp -RH Backlighting	E-2	50
Control -CMS	G-2	30	Lamp -RH Backup	B-15	22
Control -TPMS	D-15	47	Lamp -RH GN TPMS	D-1	44
Control -XMSN / Chassis	D-12	47	Lamp -RH High Beam Headlamp	E-1	40
Converter -24V / 12V	I-12	47	Lamp -RH Low Beam Headlamp	E-1	40
Flasher	I-15	52	Lamp -RH Park/Turn	E-1	21
Fuse - Bkup Alarm	H-10	48	Lamp -RH RD TPMS	D-1	44
Fuse - Brake Cont	H-9	48	Lamp -RH RR Park Turn	B-15	22
Fuse - Eng PreLube	H-10	48	Lamp -RH Stop Tail	B-15	50
Fuse - Gage Lamp	H-9	48	Lamp -RH Turn IND	E-2	22
Fuse - Spare	H-10	48	Lamp -TCS Activated	F-2	50
Fuse -Air Dryer	H-9	48	Lamp -XMSN Rev IND	F-2	50
Fuse -Cigar Lighter	H-9	48	Module - Speedo/Tech	I-3	50
Fuse -CMS Monitor System	H-10	48	Module -Dimmer	I-15	30
Fuse -Payload	H-10	48	Module -Quad Gage	H-3	30
Fuse -PWR Conv	H-9	48	Module -Wiper Delay	I-15	50
Fuse -Start AID	H-10	48	Monitor - Action Alarm	E-7	53
Fuse -Wiper	H-10	48	Monitor -TPMS Operator	G-7	50
Fuse -XMSN Cont	H-9	48	Motor -A/C Blower	E-5	50
Ground - Engine	A-2	2	Motor -LH Window	I-10	50
Ground - Engine	A-9	17	Motor -Secondary Steering EVAC	A-7	54
Ground - Engine	B-6	17	Motor -Starter	A-8	17
Ground - Engine	A-6	18	Motor -Windshield Washer	B-10	36
Ground - Frame	B-10	17	Motor -Wiper	I-5	42
Ground - Frame	C-11	17	Outlet -Power +12V	H-9	50
Ground - Frame	A-5	43	Port -Payload Download	I-5	50
Ground -Cab	D-11	17	Receptacle - Aux Start	A-8	17
Ground -Rear Cab Boss	E-15	47	Relay - Backup	F-15	30
Ground -Rear Cab Boss	F-11	47	Relay - Service Lamp	F-14	47

COMPONENT LOCATION

Page 2 of 2



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Relay - ST AID ON	G-15	30	Solenoid -Cylinder Head #1, #3, #5, #7	C-2	39
Relay - Stop Lamp	F-10	30	Solenoid -Cylinder Head #2, #4, #6, #8	B-2	39
Relay - Suppl Steering	F-10	47	Solenoid -Down Shift	C-13	10
Relay -Headlamp	F-9	30	Solenoid -Lockup Clutch	C-13	6
Relay -Hi Beam	G-15	30	Solenoid -Lower	C-11	28
Relay -Main Power	F-9	47	Solenoid -Raise	C-11	28
Relay -Prelube	F-15	47	Solenoid -Up Shift	C-13	27
Relay -Secondary Steering	B-7	17	Suppressor - Arc A/C	C-7	17
Relay -Start	A-9	17	Suppressor - Key Switch ARC	E-5	47
Relay -Wiper Delay	G-15	26	Suppressor - Stop Lamp	F-9	47
Resistor -Blower Motor Dropping	E-5	50	Suppressor -Horn Sol	G-13	30
Sender - Fuel Level	B-8	12	Switch - A/C ON	D-4	50
Sensor - Air Inlet Temperature	B-3	37	Switch - A/C Refrigerant Pressure	C-8	17
Sensor - Atmospheric Pressure	C-3	37	Switch - A/C Thermostat	E-5	50
Sensor - BK Air Pressure	I-13	30	Switch - ARC Pressure	I-1	41
Sensor - Engine Oil Pressure	B-3	37	Switch - Auto Retarder	E-4	50
Sensor - Engine Oil Temperature	B-3	37	Switch - Blower	G-3	50
Sensor - Engine Speed	B-7	47	Switch - EXH Diverter	F-6	53
Sensor - Fuel Temperature	B-3	37	Switch - Service Brake Pressure	I-14	47
Sensor - Primary Cam S/T	C-3	37	Switch - Steering Pressure	B-8	14
Sensor - Secondary Cam S/T	C-3	37	Switch - Suppl Steering	D-2	50
Sensor - Shift Lever Position	G-8	35	Switch - Transmission Gear	C-13	25
Sensor - Turbo Outlet Pressure	C-3	37	Switch -Air Dryer	B-8	6
Sensor - XMSN Speed (Hall Effect)	C-13	4	Switch -Brake Over Stroke	B-8	15
Sensor -Body Up	C-15	46	Switch -CAT Monitoring System Clear	H-11	48
Sensor -Brake Oil Temp	B-3	9	Switch -CAT Monitoring System Set	H-11	48
Sensor -Coolant Temperature	C-3	37	Switch -CMS Mode	E-2	50
Sensor -Hoist Lever Position	G-2	34	Switch -Coolant Flow	C-3	39
Sensor -LH Front Strut Pressure	E-1	17	Switch -Disconnect	A-6	43
Sensor -LH Rear Strut Pressure	C-15	45	Switch -Door	E-7	52
Sensor -LH Wheel Speed	A-15	8	Switch -Ground Level Shutdown	A-5	42
Sensor -Rail Pressure	C-3	37	Switch -Hazard	F-6	53
Sensor -RH Front Strut Pressure	E-1	33	Switch -Headlamp	E-5	50
Sensor -RH Rear Strut Pressure	B-15	23	Switch -Horn	H-5	50
Sensor -RH Turbo Inlet Press	B-7	33	Switch -Key Start	G-2	50
Sensor -RH Wheel Speed	A-15	3	Switch -Machine Lockout	F-1	43
Sensor -T/C Temp	B-7	11	Switch -Power Window	I-10	49
Sensor -THRT Position	D-5	35	Switch -Retard BK Pressure	H-1	20
Solenoid - A/C Clutch	C-7	19	Switch -SEC/ ParkBK Pressure	I-13	30
Solenoid - Air Horn	G-13	50	Switch -Secondary Steer Pressure	G-1	42
Solenoid - ARC Cont	I-2	24	Switch -Stop Lamp	H-14	47
Solenoid - Exhaust Diverter	B-11	47	Switch -TCS Test	E-3	35
Solenoid - Start Aid	B-6	19	Switch -Turn Sig/ Wiper/Washer/Hi Beam	I-5	50
Solenoid - TCS 4 way	A-14	25	Switch -XMSN Filter Pressure	C-8	17
Solenoid - TCS Proportional	A-14	25	Valve -Rail Pressure	C-3	39
Solenoid -ARC Supply	I-1	24			

CONNECTOR LOCATION



Connector Number	Schematic Location	Machine Location	Connector Number	Schematic Location	Machine Location
CONN 1	E-15	30	CONN 29	B-7	19
CONN 2	I-15	47	CONN 30	C-7	17
CONN 3	B-14	25	CONN 31	C-7	17
CONN 4	C-14	26	CONN 32	C-7	17
CONN 5	G-14	47	CONN 33	D-7	32
CONN 6	A-13	25	CONN 34	C-6	17
CONN 7	B-13	25	CONN 35	C-6	17
CONN 8	B-13	25	CONN 36	G-6	48
CONN 9	G-13	30	CONN 37	B-5	17
CONN 10	C-12	10	CONN 38	D-6	32
CONN 11	D-12	32	CONN 39	E-5	48
CONN 12	I-12	5	CONN 40	B-5	51
CONN 13	I-12	30	CONN 41	C-5	51
CONN 14	C-11	6	CONN 42	E-5	50
CONN 15	D-11	30	CONN 43	F-5	50
CONN 16	H-11	47	CONN 44	F-4	30
CONN 17	H-11	47	CONN 45	G-3	50
CONN 18	H-11	30	CONN 46	H-4	50
CONN 19	H-11	30	CONN 47	B-3	18
CONN 20	C-10	32	CONN 48	D-3	37
CONN 21	D-10	30	CONN 49	H-3	47
CONN 22	C-10	32	CONN 50	B-2	36
CONN 23	D-9	32	CONN 51	B-2	36
CONN 24	I-9	30	CONN 52	C-2	37
CONN 25	B-8	31	CONN 53	C-2	37
CONN 26	B-8	31	CONN 54	G-2	16
CONN 27	D-8	32	CONN 55	G-2	16
CONN 28	I-8	1			



Component Identifiers (CID¹) Module Identifier (MID²)	
Caterpillar Transmission/Chassis Control System (MID No. 027)	
CID	Component
0168	Electrical System
0190	Engine Speed Sensor
0248	CAT Data Link
0269	Sensor Power Supply
0420	Secondary Steering Relay
0444	Start Relay
0562	Secondary Steering Relay
0590	Engine Electronic Control Module
0627	Parking Brake Switch
0700	Transmission Gear Sensor
0701	Transmission Output Speed Sensor
0702	Shift Lever Position Sensor
0704	Service Brake Pressure Switch
0706	Body Up Switch Electronic Control
0707	Upshift Solenoid Valve
0708	Downshift Solenoid Valve
0709	Lockup Clutch Solenoid Valve
0718	Transmission System
0724	Body Raise Solenoid Valve
0725	Body Lower Solenoid Valve
0773	Rotary Position Sensor (Hoist Lever)
0967	Machine Application
1236	Body Up Indicator Lamp
1326	Location Code
1394	Exhaust Diverter Solenoid Valve
1427	Machine Lockout Lamp
Caterpillar Monitoring System (MID No. 030)	
CID	Component
0096	Fuel Level Sender
0100	Engine Oil Pressure Sensor
0110	Engine Coolant Temperature Sensor
0177	Transmission Oil Temperature Sensor
0248	Data Link
0263	Sensor Power Supply
0271	Action Alarm
0324	Action Lamp
0601	Brake Air Pressure Sensor
0819	Display Data Link
0821	Display Power Supply
0826	Torque Converter Oil Temperature Sensor
0830	Brake Oil Temperature Sensor

Engine Electronic 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
0007	Injector Cylinder 7
0008	Injector Cylinder 8
0042	Injector Actuation Valve
0091	Throttle Position Signal
0100	Engine Oil Pressure
0110	Engine Coolant Temperature
0164	Injector Actuation Pressure Voltage
0168	System Voltage
0172	Intake Manifold Air Temp
0174	Fuel Temperature
0175	Engine Oil Temperature
0190	Engine Speed
0248	CAT Data Link
0253	Personality Module
0254	Electronic Control Module
0261	Engine Timing
0262	5 Volt Sensor DC Power Supply
0263	Digital Sensor Supply
0267	Incorrect Engine Shutdown Switch Inputs
0268	Check Programmable Parameters
0273	Turbo Outlet Pressure
0274	Atmospheric Pressure
0275	Right Turbo Inlet Pressure
0291	Engine Cooling Fan Solenoid
0296	Unable to communicate with Transmission ECM
0338	Pre-Lube Relay
0342	Secondary Engine Speed
0544	Engine Cooling Fan Speed
0545	Ether Start Relay
0562	Unable to Communicate with Cat Monitoring System



Brake Electronic Control System (MID No. 116)

CID	Component
0084	Ground Speed Sensor
0091	Throttle Position Sensor
0168	Electrical System Voltage
0190	Speed Sensor (Engine)
0248	CAT Data Link
0269	Sensor Power Supply
0296	Electronic Control Module (Transmission/Chassis ECM)
0291	Engine Cooling Fan Solenoid Valve
0541	Differential Oil Pressure Sensor
0544	Engine Cooling Fan Speed Sensor
0590	Electronic Control Module (Engine)
0607	Left Wheel Speed Sensor
0608	Right Wheel Speed Sensor
0689	Left Rear Traction Control Solenoid Valve
0690	Right Rear Traction Control Solenoid Valve
0700	Transmission Gear Position Sensor
0701	Transmission Output Speed Sensor
0702	Transmission Shift Lever Position Sensor
0704	Service Brake Pressure Switch
0710	Auto Retarder Supply Solenoid Valve
0711	Auto Retarder Control Solenoid Valve
0712	Retarder Indicator Lamp
0713	Auto Retarder Rocker Switch
0714	Auto Retarder Pressure Switch
0715	Retarder Pressure Switch
0719	Proportional Solenoid Valve (Traction Control)
0742	Brake Lamp Relay
0796	Differential Fan Solenoid
0800	Caterpillar Monitoring System (CMS)
0835	Differential Oil Temperature Sensor
0849	Air System Pressure Sensor
0966	Traction Control Indicator Lamp
0967	Machine Application
1225	Left Parking Brake Oil Pressure Sensor
1226	Right Parking Brake Oil Pressure Sensor
1229	Brake Cooling Pump Speed Sensor
1230	Brake Cooling Pump Solenoid
1231	Front Brake Cooling Diverter Solenoid Valve
1232	Rear Axle Diverter Solenoid
1326	Incorrect Location Code
1437	Rear Axle Supply Solenoid

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.

Diagnostic Codes for the Truck Payload Measurement System¹

Code	Description
F01	Suspension Cylinder (Left Front) Incorrect Charge.
F02	Suspension Cylinder (Right Front) Incorrect Charge.
F03	Suspension Cylinder (Left Rear) Incorrect Charge.
F04	Suspension Cylinder (Right Rear) Incorrect Charge.
F05	Pressure Sensor of Suspension Cylinder (Left Front)
F06	Pressure Sensor of Suspension Cylinder (Right Front)
F07	Pressure Sensor of Suspension Cylinder (Left Rear)
F08	Pressure Sensor of Suspension Cylinder (Right Rear)
F09	Back Up Battery Low
F10	System Setting Incorrect or Memory Error
F13	Both Load Indicator Lights (Green) Are on Continuously
F13	Both Load Indicator Lights (Green) Do Not Illuminate
F14	Both Load Indicator Lights (Green) Do Not Illuminate
F15	Both Load Indicator Lights (Red) Are on Continuously
F15	Both Load Indicator Lights (Red) Do Not Illuminate
F15	Both Load Indicator Lights (Red) Do Not Illuminate

¹The Truck Payload Measurement System diagnostic code indicates what type of failure has occurred.

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.



Machine Codes

Machine	Code
771D	53
769D	54

Monitoring System Service Modes

Service Mode	Number
Operator Mode Sequence	0
Harness Code	1
Numeric Readout	2
Service	3
Digital Tattletale	4
Units	5
Charging System Display	6

Monitoring System Operator Modes

Operator Mode	Number
Service Meter	1
Tachometer	2
Engine Oil Pressure	3
Odometer - Machine Travel Distance	4
Scrolling (Diagnostic)	5

Resistor, Sender and Solenoid Specifications		
Part No.	Component Description	Resistance (Ohms) ¹
3E-1906	Solenoid: A/C Clutch	17.6 ± 0.6
3E-6333	Solenoid: Start Aid	6
3E-8691	Solenoid: ARC Cont & ARC Supply	31 ± 3
3T-0062	Solenoid: TCS Proportional	16
9G-9988	Solenoid: TCS 4 way	24.9 ± 0.4
101-3430	Solenoid: Exhaust Diverter	31.1 ± 2.4
112-5874	Solenoid: Lower Raise	6.5 ± 0.4
125-9740	Resistor: Blower Motor Dropping	A - C: 2 ± 0.1 B - C: 1 ± 0.05 C - D: 0.36 ± 0.02
144-6292	Solenoid: Down & Shift Lockup Clutch	32.6 ± 1.6
150-8202	Solenoid: Cylinder Head #1 thru #8	21 ± 0.2
185-0008	Solenoid: Air Horn	74 ± 2
212-1439	Sender: Fuel Level	Full: 0.0 - 3.5 Empty: 92 -98

¹ At room temperature unless otherwise noted.

Off Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
3E-2034	Switch - Service Brake Pressure	80 kPa MAX (11.6 psi MAX)	55 ± 20 kPa (7.8 ± 2.9 psi)	Normally Closed
3E-5464	Switch - A/C Thermostat	-1.1 ± 0.8 °C (30.0 ± 1.4 °F)	2.2 ± 0.8 °C (36.0 ± 1.4 °F)	Normally Closed
3E-6428	Switch - Coolant Flow	326 ± 29 mN (1.3 ± 0.1 ozf)	303 mN (1.1 ozf)	Normally Open
3E-6450	Switch - Secondary Steering Pressure Switch - Steering Pressure	1200 kPa MAX (174 psi MAX)	700 ± 100 kPa MAX (102 ± 15 psi MAX)	(A - C) Normally Closed (A - B) Normally Open
103-4977	Switch - Retard BK Pressure	60 kPa MAX (8.7 psi MAX)	28 ± 15 kPa (4.1 ± 2.2 psi)	Normally Open
111-9563	Switch - ARC Pressure	80 kPa MAX (11.6 psi MAX)	55 ± 20 kPa (7.8 ± 2.9 psi)	Normally Closed
114-5333	Switch - A/C Refrigerant Pressure	275 - 1750 kPa ¹ (39.9 - 253.8 psi)	-- --	Normally Open ²
160-2445	Switch - SEC/ ParkBK Pressure	517 ± 35 kPa (75.0 ± 5.1 psi)	448 ± 35 kPa (65.0 ± 5.1 psi)	Normally Open
166-7781	Switch - Stop Lamp	45 kPa MAX (6.5 psi MAX)	5 kPa MIN (0.7 psi MIN)	Normally Open
227-6744	Switch - XMSN Filter Pressure	276 ± 28 kPa (40.0 ± 4.1 psi)	179 kPa MIN (26.0 psi MIN)	Normally Closed

¹ With increasing pressure the closed condition can be maintained up to 2800 kpa (405 psi), with decreasing pressure the closed condition can be maintained down to 170 kpa (25psi).

² Contact position at the contacts of the harness connector.

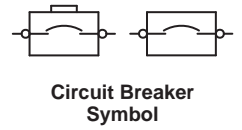
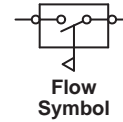
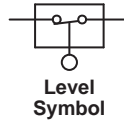
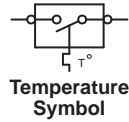
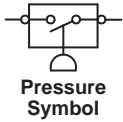
Related Electrical Service Manuals	
Title	Form Number
Brake Control:	SENR1503
Alternator: 169-3345	SENR4130
Caterpillar Monitoring System:	SENR6717
Engine Control:	SENR1062
Payload Monitor (TPMS):	SENR4733
Starting and Charging:	SENR2947
Starting Motor: 6V-0890	SENR3581
Transmission Control:	RENR2668

HARNESS and WIRE

Electrical Schematic Symbols



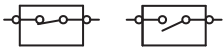
Symbols



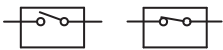
Symbols and Definitions



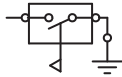
Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.



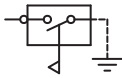
Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



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.



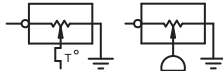
Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



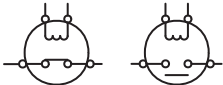
Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



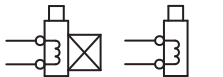
Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



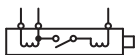
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



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.



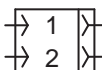
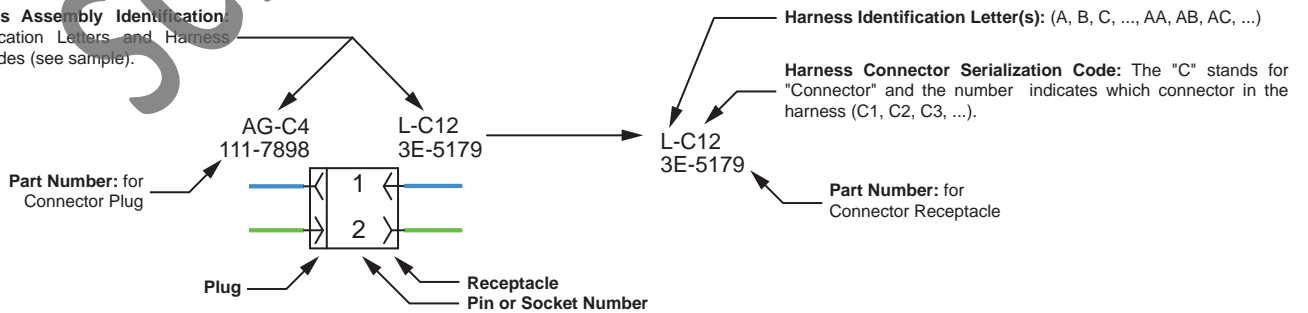
Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



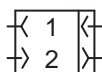
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil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

Harness and Wire Symbols

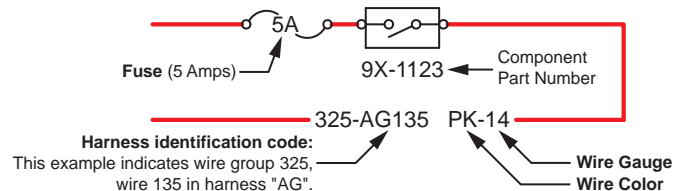
Wire, Cable, or Harness Assembly Identification: Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).

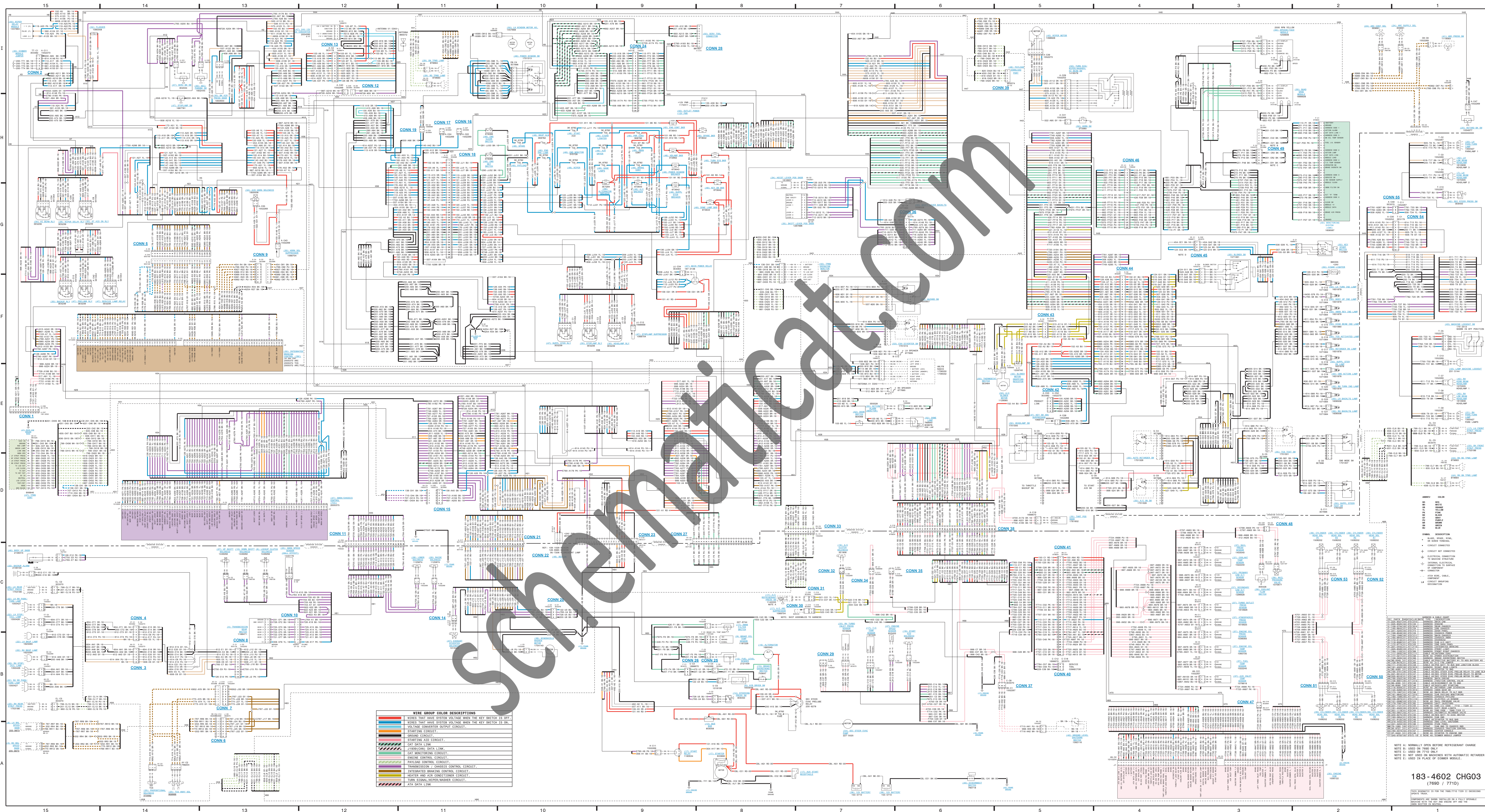


Deutsch connector: Typical representation of a Deutsch connector. The plug contains all sockets and the receptacle contains all pins.



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





WIRE GROUP COLOR DESCRIPTIONS

- RED: BATTERY (+) SYSTEM
- RED/BLACK: BATTERY (+) SYSTEM WITH KEY SWITCH IS OFF
- RED/WHITE: BATTERY (+) SYSTEM WITH KEY SWITCH IS ON
- BLACK: GROUND
- GREEN: STARTING CIRCUIT
- ORANGE: CHARGE CIRCUIT
- YELLOW: STARTING AID CIRCUIT
- BLUE: DATA LINE
- BLACK/WHITE: LOCK MOTOR CIRCUIT
- BLACK/BLACK: LOCK MOTOR CIRCUIT
- PINK: PARKING CONTROL CIRCUIT
- GREEN/WHITE: TRANSMISSION / CHASSIS CONTROL CIRCUIT
- GREEN/BLACK: TRANSMISSION / CHASSIS CONTROL CIRCUIT
- RED/BLACK: HEATER AND AIR CONDITIONER CIRCUIT
- ORANGE/BLACK: TRANSMISSION / CHASSIS CONTROL CIRCUIT
- BLACK/BLACK: AIR BACK LAMP

CONN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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CONN 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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CONN 45	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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CONN 49	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 50	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 51	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CONN 52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

183-4602 CHG03
(7640 / 7710)

NOTE A: NORMALLY OPEN BEFORE REFERENT CHANGE
NOTE B: USED ON 7702 ONLY
NOTE C: NOT USED IN BOMBARDIER SETS AUTOMATIC BETWEEN
NOTE D: USED IN PLACE OF DIMMER MODULE

MACHINE COMPONENT LOCATIONS

