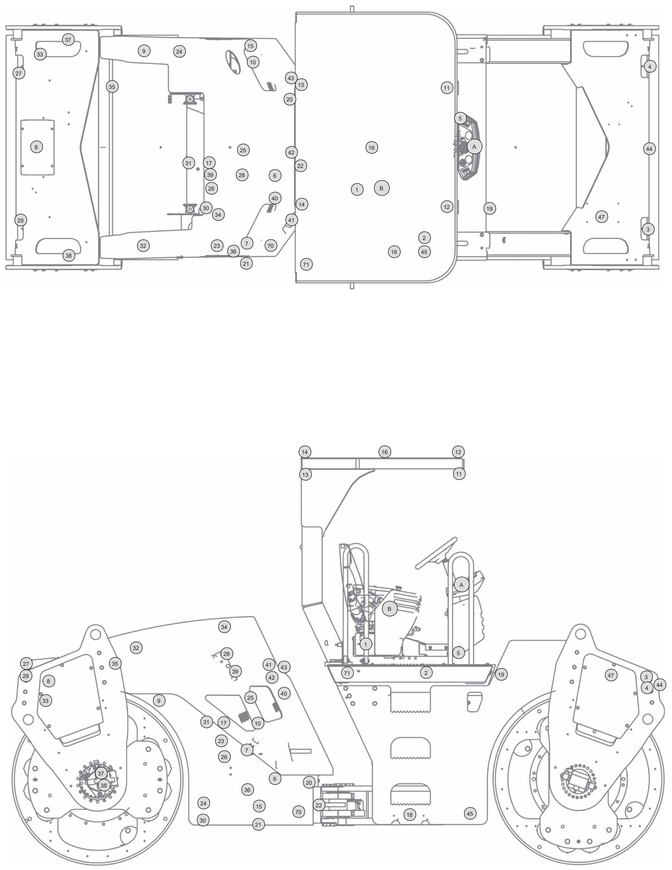
Wire Description

Wire Number	Wire Color	Description
		Power Circuits
101	RD	Un-switched Battery (+)
103	YL	Vibe Fuse
105	BR	Key Switch / Ignition Fuse
106	BU	Radio Fuse
109	RD	Alternator Output (+)
110	GN	Water Spray Fuse
112	PU	Main Power Relay Output (Switched)
114	GN	Light Breaker (30A)
115	PK	Light Breaker (15A)
117	RD	Main Breaker (Un-Switched)
118	GY	Right Washer / Wiper Fuse
119	PK	Front Washer / Wiper Fuse
121	YL	Backup Alarm Fuse
122	BU	Hitch Offset Fuse
123	WH	Gage Fuse
124	GN	HVAC Fuse
125	OR	Product Link or Front Fan
134	YL	Power Port Fuse
139	BU	Propel Control Fuse
144	GN	Rotating Beacon Fuse
155	PK	Brake Fuse
160	PU	Glow Plugs
175	PK	Joint Cutter Fuse
176	YL	Recorder Fuse
181	RD	Throttle Breaker / Start Relay
		Ground Circuits
200	BK	Main Chassis
204	BK	Not Used
286	BK	Aitch Recording Module
A249	BK	Can1 Shield
		Basic Machine Circuits
304	WH	Starter Relay Output
306	GN	Neutral Start Relay To Starter Relay
307	OR	Key Switch To Neutral Start Relay
308	YL	Main Power Relay Coil
320	OR	Horn Switch To Horn Relay
321	BR	Backup Alarm Lamp / Travel Alarm
322	GY	Forward Warning Horn
330	YL	Neutral Start Relay Coil
376	GN	Glow Plug Relay Coil
384	BU	Glow Plugs
A305	YL	Relay To Warning Horn)
		Monitoring Circuits
403	GN	Alternator 'R' Terminal
405	GY	Engine Oil Pressure Switch (Low)
406	PU	Coolant Temperature
419	YL	Parking Brake Sensor
426	OR	Hydraulic Temperature Sender
447	PK	Fuel Level Gage
449	BU	Speedometer Signal
465	OR	Low Charge Pressure Warning
480	GN	Glow Plug Relay Coil
A429	YL	Drum Center Switch
C444	YL	Indicator - Alternator
E455	BR	Hydraulic Oil Filter
F420	GN	Indicator - Recording Module
		Accessory Circuits
500	BR	Wiper - Front (Park)
501	GN	Wiper - Front (Low)
503	BR	Wiper - Rear (Park)
504	YL	Wiper - Rear (Low)
505	BU	Wiper - Rear (High)
506	PU	Washer - Front
507	WH	Washer - Rear
513	OR	A/C Refrigerant Pressure Switch
521	YL	Fan Speed Switch To A/C Pressure Switch
536	WH	Hazard Switch To Turn Signal Switch
537	GN	Turn Signal Switch To Flasher
A509	PK	Defroster Fan - Front (Low)
A504	YL	Defroster Fan - Rear (Low)
A508	OR	Defroster Fan - Front (High)
		Lighting Circuits
603	PK	Rotary Beacon Lamp
604	OR	Stop Lamps
605	YL	Turn Lamps - Left
606	GY	Turn Lamps - Right
607	PK	Not Used
608	GN	Rear Work Lamps
610	OR	Headlamps - Basic
614	PU	Tail / Position / Dash Lamps
619	GN	Headlamps - Low Beam
631	GY	Flood Lamp - Rear Left Hand
632	WH	Flood Lamp - Rear Right Hand
640	OR	Headlamps Relay
646	OR	Switch To Front Flood Lamps Relay
647	GN	Switch To Rear Flood Lamps Relay
651	PK	Not Used
652	YL	Flood Lamp - Right Front

Wire Number	Wire Color	Description
		Lighting Circuits - Continued
653	GN	Flood Lamp - Left Front
680	GN	High Int Relay Coil (RH Only)
690	GN	High Int Relay Output
A631	BU	Spray Lamp
		Control Circuits
710	GN	Propel Handle Speed PWM
751	GN	PWM Out 2 Speed Solenoid
777	PU	Brake Release Motor
C739	BU	Cutter Door Raise Solenoid
C730	BR	Cutter Door Lower Solenoid
F711	GN	Can 1 (+)
F712	GY	Can 1 (-)
H750	BR	Drum Offset Right
H751	OR	Drum Offset Left
J704	BU	Right Front Solenoid Valve
J705	WH	Right Front Solenoid Valve
J706	OR	Left Rear Solenoid Valve
J707	PU	Left Rear Solenoid Valve
J708	GN	Right Rear Solenoid Valve
J709	YL	Right Rear Solenoid Valve
J710	BR	Differential Lock Indicator Lamp (+)
J711	PK	Right Rear Speed Sensor Signal
J712	BR	Right Rear Speed Sensor (-)
J713	BR	Left Front Speed Sensor (-)
J714	GY	Left Front Solenoid Valve
J715	GN	Left Front Solenoid Valve
J717	BU	Left Front Speed Sensor Signal
J718	OR	Right Front Speed Sensor Signal
J719	PU	Right Front Speed Sensor (-)
J720	YL	Left Rear Speed Sensor Signal
J721	YL	Speed Sensors 12V Supply
J722	BR	Left Rear Speed Sensor (-)
J723	GY	Mode Switch
K728	BU	Propel Speed - Mode 1
K759	GY	Propel Speed - Mode 2
K725	GN	Propel Forward Pump
K726	BU	Propel Reverse Pump
U734	GN	Parking Brake Switch (NO)
U735	GY	Parking Brake Switch (NC)
C850	GN	Amp Signal To Recording Module
F877	WH	Neutral Switch
T825	YL	Vibration Solenoid
992	RD	Joint Cutter Relay 2 Coil
997	PU	Joint Cutter Relay 2
998	GN	Joint Cutter Switch (Water Spray)
A914	OR	Speed Dial Pot
A915	OR	Sensor Power Ground
A916	GN	5V DC Supply
A919	BU	Throttle Solenoid
A925	YL	Sensor Power Ground
A926	YL	5V DC Supply
A982	BR	Engine Throttle Control
A983	BU	Engine Throttle Control - Signal
A990	BU	Cvtlg Pin Analog
C903	BU	Water Pump 1 Switch
C904	GN	Wtr Spray Neutral Stop Rly To Wtr Spray Rly
C905	OR	Water Pump 2 Switch
C906	PU	Vibe H/Low Amp Switch
C922	BR	Front Drum Water Pump
C923	OR	Rear Drum Water Pump
C924	YL	Forward Vibratory Valve
C925	GN	Reverse Vibratory Valve
C926	BU	Front Drum Select Solenoid
C927	PU	Rear Drum Select Solenoid
C928	GY	Drum Offset RT
C929	WH	Drum Offset LT
C932	YL	Light Vibe On
C933	GN	Auto / Manual Switch Vibe
C955	PU	Dout Water Pump 2
C936	GY	Dout Backup Alarm
C937	WH	Dout Water Pump 1
K918	GN	PWM Out Vibe P Fwd
K919	YL	PWM Out Vibe P Rev
M954	OR	Auxiliary Circuit 1 (Digital Input)
M955	WH	Auxiliary Circuit 2 (Digital Input)
N938	OR	Water Spray Off Time Select Signal
N929	YL	Water Spray On Time Select Power
N930	BR	Water Spray On Time Select Signal
N957	PK	TXD - Comm 1
N960	OR	RXD - Comm 1
N970	YL	DTR - Comm 1
N973	BR	DCD - Comm 1
N979	GN	Signal Ground - Comm 1
P978	GN	Vibe On/Off Switch
P979	YL	Water On/Off Switch
T969	YL	Offset Config
T970	GY	Test Mode
X982	PU	Vibe H/Low Amp Switch



Machine Harness Connector And Component Locations

Component Location - Volume 1

Component	Schematic Location	Machine Location
Alarm - Backup	G-14	33
Alternator	G-12	23
Battery	B-14	8
Beacon - Rotating	C-11	16
Breaker - Alternator	G-12	20
Breaker - Glow Plug	G-12	20
Breaker - Light 15A	D-4	B
Breaker - Light 20A	D-5	B
Breaker - Main	G-12	20
Breaker - Throttle	D-13	25
Bus - Glow Plugs	F-14	39
Control - Propel (Handle)	B-6	B
Diode - A/C (Aitch)	E-13	35
Display - Brake Light	G-3	A
Display - Function Lamps	F-3	A
Flasher	C-6	B
Fuse - Back Up Alarm	G-6	1
Fuse - Brake	H-6	1
Fuse - Front High Int L	H-6	1
Fuse - Front High Int R	G-6	1
Fuse - Gage	H-6	1
Fuse - Hitch Offset	H-6	1
Fuse - Ignition	G-6	1
Fuse - Joint Cutter	H-6	1
Fuse - Power Port	G-6	1
Fuse - Propel Control	H-6	1
Fuse - Rear High Int L	H-6	1
Fuse - Rear High Int R	H-6	1
Fuse - Recorder	H-6	1
Fuse - Rotating Beacon	H-6	1
Fuse - Vibratory	H-6	1
Fuse - Water Spray	H-6	1
Gage - Fuel Level	G-2	A
Gage - Water Level	F-2	A
Ground - Console	D-6	2
Ground - Frame Disconnect	H-14	7
Ground - Frame Engine	A-13	23
Ground - Frame Rear Machine	C-13	23
Ground - Front Frame	D-9	20
Ground - Platform Stud	D-8	2
Horn	B-9	3
Hourmeter	I-2	A
Indicator - Diff Lock	C-6	B
Lamp - Backlight LH	G-2	A
Lamp - Backlight RH	F-2	A
Lamp - HID FLH	B-8	11
Lamp - HID FRH	B-8	12
Lamp - HID RLH	A-8	13
Lamp - HID RRH	A-8	14
Lamp - Rear Spray 1	D-14	41
Lamp - Rear Spray 2	D-14	42
Lamp - Rear Spray 3	D-14	43
Lamp - Signal Front LH	F-9	4
Lamp - Signal Front RH	E-9	3
Lamp - Signal Rear LH	C-14	27
Lamp - Signal Rear RH	C-14	28
Lamp - Spray 1	C-9	3
Lamp - Spray 2	G-9	44
Lamp - Spray 3	E-9	4
Lamp - Work Lamp Rear LH	C-14	27
Lamp - Work Lamp Rear RH	C-14	29
Light - License Plate	B-14	27
Light - Spray Vibratory	F-3	A
Motor - Fuel Lift Pump	E-14	28
Motor - Starter	H-2	6
Motor - Water Pump 1	D-9	18
Motor - Water Pump 2	D-9	18
Port - Auxiliary	D-4	1
Potentiometer - Auto Speed Control	C-6	B
Potentiometer - Water Spray On Time	F-3	A

Component	Schematic Location	Machine Location
Potentiometer - Water Spray On Time	F-3	A
Product Link	I-14	10
Relay - Back Up Alarm	F-6	1
Relay - Brake Release	F-6	1
Relay - Brake Release Latch	G-6	1
Relay - Drum Spray Lights	E-6	1
Relay - Front Work Light	G-6	3
Relay - Glow Plug	F-14	B
Relay - High Intensity	H-4	B
Relay - Horn	E-6	1
Relay - Main	E-8	B
Relay - Neutral Start 1	F-6	1
Relay - Neutral Start 2	F-6	1
Relay - Rear Work Light	G-6	1
Relay - Starter	G-14	25
Relay - Water Spray	F-6	1
Relay - Water Spray 3	F-6	1
Relay - Water Spray Neutral Stop	E-6	1
Sender - Fuel Level	C-13	24
Sender - Hydraulic Temperature	D-13	36
Sender - Water Level	C-5	19
Sensor - Propel Handle Speed	B-6	B
Sensor - Propel Speed	C-13	38
Sensor - Vibratory Speed	E-11	37
Solenoid - 2 Speed Valve	E-13	26
Solenoid - A/C Compressor	E-14	23
Solenoid - Brake Release	E-13	24
Solenoid - Cold Start Advance	E-13	34
Solenoid - Drum Offset Left	D-11	22
Solenoid - Drum Offset Right	F-11	22
Solenoid - Dump Valve	B-13	15
Solenoid - Fuel Shutoff	F-12	26
Solenoid - Joint Cutter Down	E-11	21
Solenoid - Joint Cutter Water Spray	C-11	45
Solenoid - Propel Pump	F-12	24
Solenoid - Throttle	G-14	25
Solenoid - Vib Control	E-12	24
Solenoid - Vib Select Valve Front	E-12	24
Solenoid - Vib Select Valve Rear	E-12	24
Speedometer	G-2	A
Stud - Jump Start	B-13	9
Switch - Backup - ARC #1	E-12	40
Suppressor - ARC #2	F-14	31
Suppressor - ARC (Dump Valve)	B-13	15
Switch - A/C Pressure	F-14	26
Switch - Beacon	E-3	A
Switch - Cold Start Temperature	E-13	34
Switch - Coolant Temperature	E-12	30
Switch - Diff Lock	E-4	5
Switch - Disconnect	B-15	32
Switch - Drum Center	F-11	22
Switch - Engine Oil Pressure	D-13	31
Switch - Hazard	E-2	A
Switch - HID	E-2	A
Switch - Hydraulic Charge Pressure	F-11	17
Switch - Hydraulic Indicator	E-11	7
Switch - Key Start	B-8	B
Switch - Light Master	E-1	A
Switch - Lights Select	E-2	A
Switch - Propel 2 Speed	B-7	B
Switch - Throttle Speed 2	B-6	B
Switch - Turn Signal	D-3	A
Switch - Vib Drum Select	H-1	A
Switch - Vibratory Auto / Manual	H-1	A
Switch - Vibratory High / Low Amp	H-2	A
Switch - Water Pump Select	H-2	A
Tachometer - Vibratory	F-2	A
Timer - Spray	B-5	B
Timer - Throttle	G-14	25

Machine locations are repeated for components located close together.
A = Located on the Instrument Panel.
B = Located inside the Right Hand Console.

Connector Location - Volume 1

Connector Number	Schematic Location	Machine Location
CONN 1	H-12	10
CONN 2	I-12	10
CONN 3	B-12	70
CONN 4	C-12	7
CONN 5	D-11	47
CONN 6	F-12	20
CONN 7	H-12	10
CONN 8	I-12	10
CONN 9	B-9	71
CONN 10	C-8	B
CONN 11	D-8	A
CONN 12	E-8	A
CONN 13	F-8	1
CONN 14	H-8	1
CONN 15	H-8	B
CONN 16	I-8	B
CONN 17	C-7	B
CONN 18	C-7	B
CONN 19	E-4	B
CONN 20	E-4	B
CONN 21	F-4	A
CONN 22	G-4	A

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.

Off Machine Switch Specification - Volume 1

Part No.	Function	Actuate	Deactuate	Contact Position
107-0614	Engine Oil Pressure	83 ± 21 kPa (12.48 ± 3 psi)	70 ± 21 kPa (10 ± 3 psi)	Normally Closed
134-0404	Hydraulic Indicator Pressure	275.8 ± 27.5 kPa (40 ± 4 psi)	206.8 MIN (30 psi MIN)	Normally Open
165-2521	Hydraulic Charge Pressure	14000 Kpa MAX (203 psi MAX)	1100 ± 70 kPa (159.5 ± 10.8 psi)	A to C: Normally Open A to B: Normally Closed
203-3219	Coolant Temperature	107 ± 3°C (224.6 ± 5.4°F)	90 °C MIN (194 °F MIN)	Normally Open
235-1790	Cold Start Temperature	40 ± 3°C (104 ± 5.4°F)	30 ± 3°C (86 ± 5.4°F)	Normally Open

Resistor, Sender and Solenoid Specifications - Volume 1

Part No.	Component Description	Resistance (Ohms)*
3E-1908	Solenoid: A/C Compressor	3.5 ± 0.15
199-6852	Sender: Fuel Level	Empty = 240 to 250 / Full = 28 to 33
202-8716	Sender: Water Level	Empty = 240 / Full = 30
270-8384	Potentiometer: Auto Speed Control	10K ± 20Ω
276-1827	Potentiometer: Water Spray On Time	100K ± 20K
279-6525	Solenoid: Dump Valve	7.5 ± 0.5

* At room temperature unless otherwise noted.

M0097997
August 2018

Schematic

CB-534D Vibratory Compactor Propel Handle / Park Brake Switch Update Electrical System

EAA493-UP
FEA1-UP
GCA1-UP
C9B1-UP
C4B1-UP
FGH585-UP
B9M1-UP
C8M1-UP

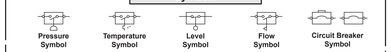
Volume 1 of 3: Standard Machine

SAFETY.CAT.COM

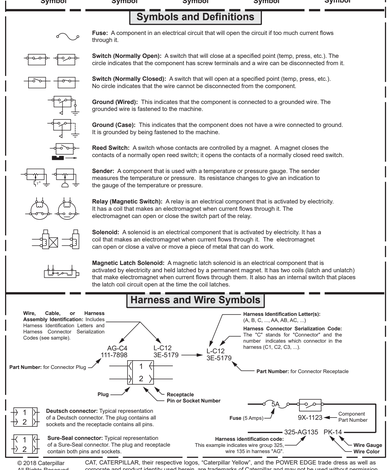
M0097997 VOL 1 of 3
36 Page, (Dimensions: 48 inches x 35 inches)

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.

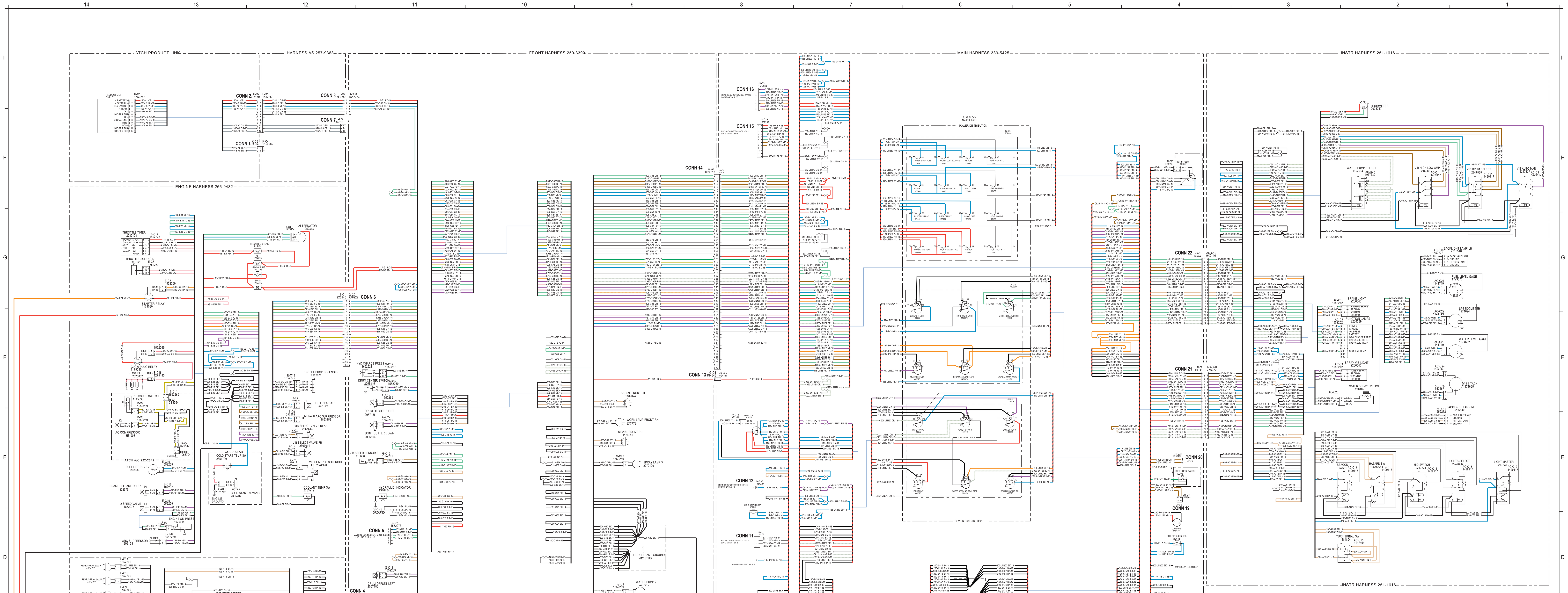
Relay (Magnetic Switch): A relay is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close the switch part of the relay.

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

M0097997 VOL 1 of 3
36 Page, (Dimensions: 48 inches x 35 inches)



CABLE/ WIRE ASSEMBLY LIST						
IDENT	PART NO.	GAGE	ROUTING PATH			
			END #1	SH/LOC	END #2	SH/LOC
CA	234-9568	000	BATTERY	SH1/B14	DISCONNECT SWITCH	SH1/B15
CF	234-9569	000	BATTERY	SH1/B14	JUMPSTUD	SH1/B14
CE	234-9567	000	DISCONNECT SWITCH	SH1/B14	GROUND FRAME DIS	SH1/B15
CC	234-9570	000	STARTER MOTOR	SH1/A14	JUMPSTUD	SH1/B14
CG	134-3355	00	STARTER MOTOR	SH1/A14	GROUND FRAME	SH1/A13
CG	134-3355	00	ENGINE BLOCK	SH1/F13	GROUND FRAME	SH1/A13
CH	224-0685	6	GLOW PLUG RELAY	SH1/F14	GLOW PLUG BREAKER	SH1/G13
CJ	232-1793		COLD START TEMP SWITCH	SH1/E13	COLD START ADVANCE	SH1/E13

NOTE: SH = SHEET = VOLUME

WIRES IN THE FOLLOWING GROUPS SHALL BE TWISTED: ONE TWIST PER 25 MM.	
WIRE GROUP	WIRE NAME
AH TW1	A249-AH63
AH TW1	F711-AH61
AH TW1	F712-AH62
AH TW2	A249-AH67
AH TW2	F711-AH65
AH TW2	F712-AH66
AH TW3	A249-AH5
AH TW3	F711-AH3
AH TW3	F712-AH4
J TW1	A249-J77
J TW1	F711-J75
J TW1	F712-J76
J TW2	A249-J221
J TW2	F711-J117
J TW2	F712-J119
J TW3	A249-J190
J TW3	F711-J218
J TW3	F712-J220
L TW1	944-L5
L TW1	945-L6

HARNESS ASSEMBLY				
IDENT	SH/LOC	PART NO.	ATCH	GROUP NAME
A	VOL3/F4	300-4138	IRH	INSTRUMENT PANEL
AC	VOL1/G4	251-1616	STD	INSTR HARNESS
AH	VOL2/F3	339-5428	STD	ADAPTER HARNESS
C	VOL2/F8	253-1395	STD	CAB HARNESS
E	VOL/G12	266-9432	STD	ENGINE HARNESS
EC	VOL2/F1	284-8474	STD	PLATFORM EDGE CUTTER OPTION
EU	VOL2/D2	284-8475	STD	REAR EGDE CUTTER OPTION
EJ	VOL3/F8	271-2760	IRH	WIRE AS
F	VOL1/H11	223-9737	STD	HID LIGHTING (ROPS)
F	VOL1/A9	226-2676	STD	HID LIGHTING (OPEN PLATFORM)
G	VOL1/G12	250-3399	STD	FRONT VEHICLE
H	VOL1/C12	237-0451	STD	REAR VEHICLE
J	VOL3/E7	339-5427*	IRH	PLATFORM HARNESS*
JC	VOL2/A5	231-3303	OPT	EDGE CUTTER HARNESS
JN	VOL1/H8	339-5425	STD	MAIN HARNESS
K	VOL1/H13	256-6803	OPT	PRODUCT LINK HARNESS
LT	VOL2/C3	247-8631	OPT	HARNESS AS (SPLIT DRUM REAR)
M	VOL2/B4	247-8630	OPT	HARNESS AS (SPLIT DRUM FRONT)
R	VOL1/F14	222-2842	OPT	AIR CONDITIONER HARNESS
RM	VOL2/C8	219-7014	OPT	RECORDING MODULE
L	VOL1/H13	257-9363	OPT	HARNESS AS
VH	VOL1/B12	282-9084	STD	JUMPER HARNESS
LP	VOL3/F8	271-2759	IRH	STOP LAMP HARNESS
PM	VOL2/D2	275-9339	OPT	HARNESS AS

* NOTE: WHEN PROPEL HANDLE SPEED SENSOR PART NUMBER IS 351-6944 IN PARTS INFORMATION
THE J PLATFORM HARNESS PART NUMBER IS 363-0348 (IRH ONLY)

WIRE GROUP COLOR DESCRIPTIONS	
(red)	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS OFF
(blue)	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS ON
(orange)	STARTING CIRCUIT
(black)	GROUND CIRCUIT
(pink)	START AID CIRCUIT
(light green)	FUNCTION LAMPS / GAGES / MONITOR CIRCUIT
(light pink)	ENGINE CONTROL CIRCUIT
(purple)	DIRECTION AND SPEED CONTROL CIRCUIT
(green)	TRACTION CONTROL CIRCUIT
(orange striped)	JOINT CUTTER CONTROL CIRCUIT
(brown)	VIBRATORY CONTROL CIRCUIT
(gray)	PRODUCT LINK CONTROL CIRCUIT
(gray striped)	WATER SPRAY PUMP CONTROL CIRCUIT
(yellow)	HEATER AND AIR CONDITIONER CIRCUIT
(tan)	TURN SIGNAL/WIPER/WASHER CIRCUIT
OTHER COLOR DESCRIPTIONS	
(light blue)	HIGHWAYS

CALLOUT FORMAT IF APPLICABLE

Callout Number (Machine Location from Component Locations Table) → (52) VALVE GP - CONTROL ← Component Name
138-1234 ← Part Number

SYMBOL	DESCRIPTION
	CIRCUIT CONNECTED
	CIRCUIT NOT CONNECTED
	ELECTRICAL CONNECTION TO MACHINE STRUCTURE
	INTERNAL ELECTRICAL CONNECTION TO SURFACE OF COMPONENT
	CONNECTOR
H#	CIRCUIT GROUPING DESIGNATION
---	ATCH WIRE, CABLE, COMPONENT
	SPLICE
	BLADE, SPADE, RING OR SCREW TERMINAL

ABBREV	COLOR
RD	RED
WH	WHITE
OR	ORANGE
YL	YELLOW
PK	PINK
BK	BLACK
GY	GRAY
PU	PURPLE
BR	BROWN
GN	GREEN
BU	BLUE

NOTE A: FOR 2 AMPLITUDE OR VERSA-VIB OPTION CONNECT C20 TO C18 AND CONNECT C21 TO C19. FOR 5 AMPLITUDE OPTION CONNECT C20 TO C19 AND C21 TO C18.

NOTE B: THE COLD START ADVANCE SOLENOID IS PART OF THE FUEL INJECTION PUMP

NOTE C: THE TWO OPTIONAL RADIO WIRES NEEDS TO BE HEATSHRINK OR WRAP WITH ELECTRICAL TAPE

⚠ WARNING

Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.

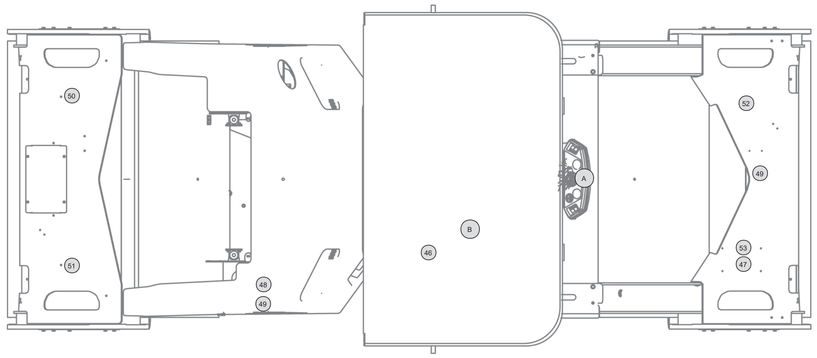
THIS SCHEMATIC IS FOR THE CB-534D ASPHALT COMPACTOR ELECTRICAL SYSTEM
VOLUME 1 of 3: STANDARD MACHINE
MEDIA NUMBER: M0097997
SCHEMATIC PART NUMBER: 189-5902, CHANGE: 09, VERSION: -
Components are shown installed on a fully operable machine with the key and engine off, transmission shifter in neutral and with parking brake set.
Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.
Refer to the Parts Manual using a specific serial number prefix in SIS before ordering parts from this schematic.

Component Location - Volume 2		
Component	Schematic Location	Machine Location
Amplifier Assembly - Recording Module	A-7	B
Beacon - Cab	E-8	66
Control - Direction & Speed	F-4	46
Control - Traction	D-4	47
Diode - Arc Suppressor (Adpt Harness)	D-2	B
Diode - D1 (Joint Cutter Control)	A-4	B
Fuse - F Washer Wiper	D-6	54
Fuse - Front Fan	D-6	54
Fuse - Heater	D-5	54
Fuse - R Washer Wiper	D-6	54
Fuse - Radio	D-6	54
Fuse - Recording Module	D-6	54
Heater - A/C	F-8	55
Indicator - Light (Recording Module)	A-6	B
Lamp - HID Cab FL	E-5	59
Lamp - HID Cab FR	E-5	58
Lamp - HID Cab RL	E-8	61
Lamp - HID Cab RR	E-8	60
Light - Dome	E-8	64
Module - Frequency (Recording Module)	B-6	B
Module - Threshold (Recording Module)	B-6	B
Motor - Blower	D-8	65
Motor - Front Washer	F-8	62
Motor - Rear Washer	F-8	62
Motor - Wiper Front	D-8	56
Motor - Wiper Rear	D-8	63
Receptacle Assembly - Adpt Harness	D-2	B
Relay - 1 (Joint Cutter Control)	A-3	B
Relay - 2 (Joint Cutter Control)	B-3	B
Relay - 3 (Recording Module)	A-6	B
Sensor - Left Front Speed	C-2	52
Sensor - Left Rear Speed	C-1	50
Sensor - Right Front Speed	B-2	53
Sensor - Right Rear Speed	D-1	51
Solenoid - Front Flow Divider	D-3	49
Switch - Front Fan	E-5	57
Switch - Front Wiper	F-5	57
Switch - Joint Cutter Up / Down	B-2	B
Switch - Neutral Position	D-2	B
Switch - Park Brake	E-3	B
Switch - Rear Wiper	F-5	57
Tachometer - 12 Volt	A-7	B

Machine locations are repeated for components located close together.

A = Located on the Instrument Panel.

B = Located inside the Right Hand Console.



Connector Location - Volume 2		
Connector Number	Schematic Location	Machine Location
CONN 5	B-4	47
CONN 10	E-3	B
CONN 11	F-7	A
CONN 12	F-7	A
CONN 15	F-8	A
CONN 16	E-1 , F-2 , F-3	B
CONN 23	C-7	B
CONN 24	A-4 , F-1	B
CONN 25	B-3	53
CONN 26	C-3	52
CONN 27	C-3	49
CONN 28	E-3	B
CONN 29	C-2	50
CONN 30	C-2	51

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.

Machine Harness Connector And Component Locations

Cab Component Locations

M0097997
August 2018

Schematic

CB-534D Vibratory Compactor
Propel Handel / Park Brake Switch Update
Electrical System

EAA493-UP
FEA1-UP
GCA1-UP
C2B1-UP
C4B1-UP
FGH585-UP
B5M1-UP
C8M1-UP

Volume 2 of 3: Machine Options

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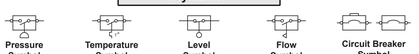
Harness And Wire Electrical Schematic Symbols

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.

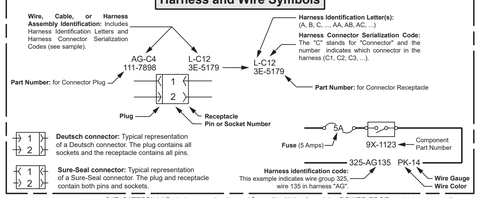
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.

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



Resistor, Sender and Solenoid Specifications - Volume 2		
Part No.	Component Description	Resistance (Ohms)[1]
240-5204	Resistor: Assembly	130 ± 6.5

[1] At room temperature unless otherwise noted.

Traction Control ECM LED Diagnostics				
LED Indicator State				Component
1	2	3	4	
OFF	OFF	OFF	OFF	No Diagnostic
ON	OFF	OFF	OFF	Rear Right Wheel Speed Sensor
OFF	**ON**	OFF	OFF	Rear Left Wheel Speed Sensor
OFF	OFF	**ON**	OFF	Front Right Wheel Speed Sensor
OFF	OFF	OFF	**ON**	Front Left Wheel Speed Sensor
OFF	**ON**	**ON**	**ON**	Rear Right Solenoid Valve
ON	OFF	**ON**	**ON**	Rear Left Solenoid Valve
ON	**ON**	OFF	**ON**	Front Right Solenoid Valve
ON	**ON**	**ON**	OFF	Front Right Solenoid Valve
ON	OFF	**ON**	OFF	5 VDC Supply
OFF	**ON**	**ON**	OFF	12 VDC Supply
ON	OFF	OFF	**ON**	Low Battery Power
ON	OFF	**ON**	OFF	Battery Overcharge
ON	**ON**	**ON**	**ON**	Warning Lamp

M0097997 VOL 2 of 3
30 Page, (Dimensions: 39 Inches x 28 Inches)

M0097997 VOL 2 of 3
30 Page, (Dimensions: 39 inches x 28 inches)

WIRES IN THE FOLLOWING GROUPS SHALL BE TWISTED: ONE TWIST PER 25 MM.	
WIRE GROUP	WIRE NAME
AH TW1	A249-AH63
AH TW1	F711-AH61
AH TW1	F712-AH62
AH TW2	A249-AH67
AH TW2	F711-AH65
AH TW2	F712-AH66
AH TW3	A249-AH5
AH TW3	F711-AH3
AH TW3	F712-AH4
J TW1	A249-J77
J TW1	F711-J75
J TW1	F712-J76
J TW2	A249-J221
J TW2	F711-J117
J TW2	F712-J119
J TW3	A249-J190
J TW3	F711-J218
J TW3	F712-J220
L TW1	944-L5
L TW1	945-L6

WIRE GROUP COLOR DESCRIPTIONS	
🟥	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS OFF
🟦	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS ON
🟧	STARTING CIRCUIT
⬛	GROUND CIRCUIT
▨	CAN DATA LINK
🟩	FUNCTION LAMPS / GAGES / MONITOR CIRCUIT
🟪	DIRECTION AND SPEED CONTROL CIRCUIT
🟩	TRACTION CONTROL CIRCUIT
▨	JOINT CUTTER CONTROL CIRCUIT
🟫	VIBRATORY CONTROL CIRCUIT
🟨	HEATER AND AIR CONDITIONER CIRCUIT
🟧	TURN SIGNAL/WIPER/WASHER CIRCUIT
OTHER COLOR DESCRIPTIONS	
🟦	HIGHWAYS

HARNESS ASSEMBLY				
IDENT	SH/LOC	PART NO.	ATCH	GROUP NAME
A	VOL3/F4	300-4138	IRH	INSTRUMENT PANEL
AC	VOL1/G4	251-1616	STD	INSTR HARNESS
AH	VOL2/F3	339-5428	STD	ADAPTER HARNESS
C	VOL2/F8	253-1395	STD	CAB HARNESS
E	VOL/G12	266-9432	STD	ENGINE HARNESS
EC	VOL2/F1	284-8474	STD	PLATFORM EDGE CUTTER OPTION
EU	VOL2/D2	284-8475	STD	REAR EGDE CUTTER OPTION
EJ	VOL3/F8	271-2760	IRH	WIRE AS
F	VOL1/H11	223-9737	STD	HID LIGHTING (ROPS)
F	VOL1/A9	226-2676	STD	HID LIGHTING (OPEN PLATFORM)
G	VOL1/G12	250-3399	STD	FRONT VEHICLE
H	VOL1/C12	237-0451	STD	REAR VEHICLE
J	VOL3/E7	339-5427*	IRH	PLATFORM HARNESS*
JC	VOL2/A5	231-3303	OPT	EDGE CUTTER HARNESS
JN	VOL1/H8	339-5425	STD	MAIN HARNESS
K	VOL1/H13	256-6803	OPT	PRODUCT LINK HARNESS
LT	VOL2/C3	247-8631	OPT	HARNESS AS (SPLIT DRUM REAR)
M	VOL2/B4	247-8630	OPT	HARNESS AS (SPLIT DRUM FRONT)
R	VOL1/F14	222-2842	OPT	AIR CONDITIONER HARNESS
RM	VOL2/C8	219-7014	OPT	RECORDING MODULE
L	VOL1/H13	257-9363	OPT	HARNESS AS
VH	VOL1/B12	282-9084	STD	JUMPER HARNESS
LP	VOL3/F8	271-2759	IRH	STOP LAMP HARNESS
PM	VOL2/D2	275-9339	OPT	HARNESS AS

* NOTE: WHEN PROPEL HANDLE SPEED SENSOR PART NUMBER IS 351-6944 IN PARTS INFORMATION
THE J PLATFORM HARNESS PART NUMBER IS 363-0348 (IRH ONLY)

CALLOUT FORMAT IF APPLICABLE

Callout Number (Machine Location from Component Locations Table) → (52) VALVE GP - CONTROL ← Component Name
138-1234 ← Part Number

SYMBOL	DESCRIPTION
┼●	CIRCUIT CONNECTED
┼	CIRCUIT NOT CONNECTED
⏚	ELECTRICAL CONNECTION TO MACHINE STRUCTURE
⏚	INTERNAL ELECTRICAL CONNECTION TO SURFACE OF COMPONENT
→)—	CONNECTOR
H#	CIRCUIT GROUPING DESIGNATION
– – –	ATCH WIRE, CABLE, COMPONENT
○–○	SPLICE
○	BLADE, SPADE, RING OR SCREW TERMINAL

ABBREV	COLOR
RD	RED
WH	WHITE
OR	ORANGE
YL	YELLOW
PK	PINK
BK	BLACK
GY	GRAY
PU	PURPLE
BR	BROWN
GN	GREEN
BU	BLUE

⚠ WARNING

Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.

NOTE A: FOR 2 AMPLITUDE OR VERSA-VIB OPTION CONNECT C20 TO C18 AND CONNECT C21 TO C19. FOR 5 AMPLITUDE OPTION CONNECT C20 TO C19 AND C21 TO C18.

NOTE B: THE COLD START ADVANCE SOLENOID IS PART OF THE FUEL INJECTION PUMP

NOTE C: THE TWO OPTIONAL RADIO WIRES NEEDS TO BE HEATSHRINK OR WRAP WITH ELECTRICAL TAPE

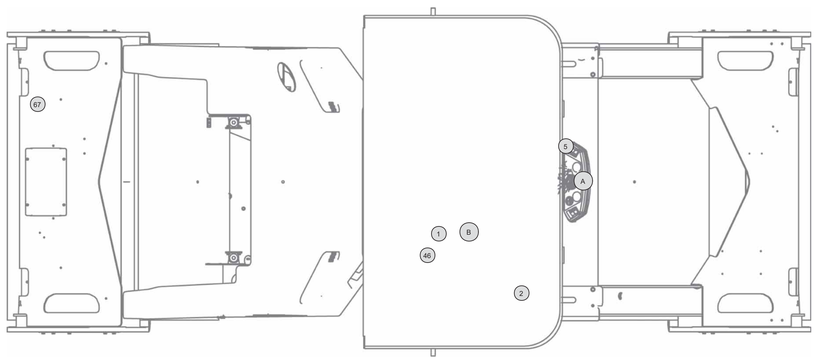
THIS SCHEMATIC IS FOR THE CB-534D ASPHALT COMPACTOR ELECTRICAL SYSTEM
VOLUME 2 of 3: MACHINE OPTIONS
MEDIA NUMBER: M0097997
SCHEMATIC PART NUMBER: 189-5902 CHANGE: 09, VERSION: -
Components are shown installed on a fully operable machine with the key and engine off, transmission shifter in neutral and with parking brake set.
Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.
Refer to the Parts Manual using a specific serial number prefix in SIS before ordering parts from this schematic.

Component Location - Volume 3		
Component	Schematic Location	Machine Location
Breaker - Light 15A	C-4	B
Breaker - Light 20A	C-4	B
Control - Direction & Speed	C-7	46
Control - Propel	B-6	B
Diode - Arc Suppressor (Hour Meter)	F-4	A
Diode - Pack	B-6	B
Display - Function Lamps	E-3	A
Flasher	B-6	B
Fuse - Back Up Alarm	E-6	1
Fuse - Brake	F-6	1
Fuse - Front High Into Left	F-5	1
Fuse - Front High Into Right	E-5	1
Fuse - Gage	F-6	1
Fuse - Hitch Offset	F-6	1
Fuse - Ignition	E-6	1
Fuse - Joint Cutter	F-6	1
Fuse - Power Port Fuse	E-6	1
Fuse - Propel Control	F-6	1
Fuse - Rear High Into Left	F-5	1
Fuse - Rear High Into Right	F-5	1
Fuse - Recorder Fuse	F-6	1
Fuse - Rotating Beacon	F-6	1
Fuse - Vibratory	F-6	1
Fuse - Water Spray	F-6	1
Gage - Fuel Level	E-3	A
Gage - Water Level	D-3	A
Ground - Console	C-5	2
Hourmeter	F-3	A
Indicator - Differential Lock	C-6	B
Jumper - 1 & 2 (Vibe Control)	E-6	1
Jumper - 3 (Vibe Control)	E-6	1
Lamp - Backlight LH	E-3	A
Lamp - Backlight RH	C-3	A
Light - Brake 2	C-4	A
Light - Spray Vibratory	C-4	A
Port - Auxiliary	D-4	1
Potentiometer - Auto Speed Control	D-4	B
Potentiometer - Water Spray Timer	E-3	A
Relay - Back Up Alarm	D-5	1
Relay - Front Light	D-5	1
Relay - High Intermittent	D-4	B
Relay - Horn	D-6	1
Relay - Main	B-6	B
Relay - Rear Light	D-6	1
Relay - Water Spray 1	D-6	1
Relay - Water Spray 2	D-6	1
Resistor - Datalink	E-6	1
Sensor - Propel Handle Speed	B-6 , B-5	B
Sensor - Neutral Position	B-6	B
Speedometer	D-3	A
Switch - Beacon	C-4	A
Switch - Park Brake	B-5	B
Switch - Differential Lock	C-4	5
Switch - Hazard	C-3	A
Switch - HID	C-3	A
Switch - Key Start	B-7	B
Switch - Light Master	C-2	A
Switch - Light Select	C-3	A
Switch - Propel Speed	A-6	B
Switch - Throttle Speed	A-5	B
Switch - Turn Signal	B-4	A
Switch - Vibe Auto \ Manual	E-3	A
Switch - Vibe High \ Low Amp	E-3	A
Switch - Vibratory Drum Select	E-3	A
Switch - Water Pump Select	E-3	A
Tachometer - Vibe	D-3	A

Machine locations are repeated for components located close together.

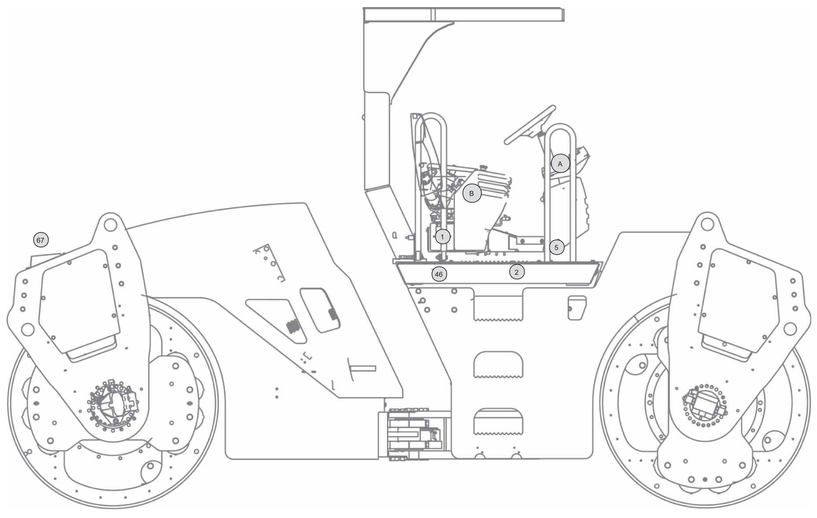
A = Located on the Instrument Panel.

B = Located inside the Right Hand Console.



Connector Location - Volume 3		
Connector Number	Schematic Location	Machine Location
CONN 11	F-7	A
CONN 12	D-7	A
CONN 13	D-7	1
CONN 14	E-7	1
CONN 15	F-7	B
CONN 31	D-7	B
CONN 32	F-8	67
CONN 33	E-3	A
CONN 34	F-3	A

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.



Machine Harness Connector And Component Locations

Resistor, Sender and Solenoid Specifications - Volume 3		
Part No.	Component Description	Resistance (Ohms)[1]
134-2540	Resistor: CAN Data Link	120 ± 12
240-5204	Resistor: Assembly	130 ± 6.5
270-8364	Potentiometer: Auto Speed Control	1.0K ± 200

[1] At room temperature unless otherwise noted.

M0097997
August 2018

Schematic

CB-534D Vibratory Compactor
Propel Handel / Park Brake Switch Update
Electrical System

EAA493-UP
FEA1-UP
GCA1-UP
C2B1-UP
C4B1-UP
FGH585-UP
B5M1-UP
C8M1-UP

Volume 3 of 3: IRH Option

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Wire Description					
Wire Number	Wire Color	Description	Wire Number	Wire Color	Description
Power Circuits			**Lighting Circuits - Continued**		
101	RD	Un-switched Battery (+)	653	GN	Flood Lamp - Left Front
103	YL	Vibe Fuse	680	GN	High Int Relay Coil (IRH Only)
105	BR	Key Switch / Ignition Fuse	690	GN	High Int Relay Output
108	BU	Radio Fuse	A631	BU	Spray Lamp
109	RD	Alternator Output (+)	**Control Circuits**		
110	GN	Water Spray Fuse	710	GN	Propel Handle Speed PWM
112	PU	Main Power Relay Output (Switched)	751	GN	PWM Out 2 Speed Solenoid
114	GN	Light Breaker (30A)	777	PU	Brake Release Motor
115	PK	Light Breaker (15A)	C729	BU	Cutter Door Raise Solenoid
117	RD	Main Breaker (Un-Switched)	C730	BR	Cutter Door Lower Solenoid
118	GY	Right Washer / Wiper Fuse	F711	GN	CAN 1 Data Link (+)
119	PK	Front Washer / Wiper Fuse	F712	GY	CAN 1 Data Link (-)
121	YL	Backup Alarm Fuse	H750	BR	Drum Offset Right
122	BU	Hitch Offset Fuse	H751	OR	Drum Offset Left
123	WH	Gage Fuse	J704	BU	Right Front Solenoid Valve
124	GN	HVAC Fuse	J705	WH	Right Front Solenoid Valve
125	OR	Product Link or Front Fan	J706	OR	Left Rear Solenoid Valve
134	YL	Power Port Fuse	J707	PU	Left Rear Solenoid Valve
135	BU	Propel Control Fuse	J708	GN	Right Rear Solenoid Valve
144	GN	Rotating Beacon Fuse	J709	YL	Right Rear Solenoid Valve
155	PK	Brake Fuse	J710	BR	Differential Lock Indicator Lamp (+)
160	BU	Glow Plugs	J711	PK	Right Rear Speed Sensor Signal
175	PK	Joint Cutter Fuse	J712	BR	Right Rear Speed Sensor (-)
176	YL	Recorder Fuse	J713	BR	Left Front Speed Sensor (-)
181	RD	Throttle Breaker / Start Relay	J714	GY	Left Front Solenoid Valve
Ground Circuits			J715	GN	Left Front Solenoid Valve
200	BK	Main Chassis	J717	BU	Left Front Speed Sensor Signal
206	BK	Not Used	J718	OR	Right Front Speed Sensor Signal
286	BK	Altch Recording Module	J719	PU	Right Front Speed Sensor (-)
A249	BK	CAN 1 Data Link Shield	J720	YL	Left Rear Speed Sensor Signal
Basic Machine Circuits			J721	YL	Speed Sensors 12V Supply
304	WH	Starter Relay Output	J722	BR	Left Rear Speed Sensor (-)
306	GN	Neutral Start Relay To Starter Relay	J723	GY	Mode Switch
307	OR	Key Switch To Neutral Start Relay	K708	BU	Propel Speed - Mode 1
308	YL	Main Power Relay Coil	K709	GY	Propel Speed - Mode 2
320	OR	Horn Switch To Horn Relay	K725	GN	Propel Forward Pump
321	BR	Backup Alarm Lamp / Travel Alarm	K726	BU	Propel Reverse Pump
322	GY	Forward Warning Horn	U734	GN	Parking Brake Switch (NO)
330	YL	Neutral Start Relay Coil	U735	GY	Parking Brake Switch (NC)
376	GN	Glow Plug Relay Coil	C850	GN	Amp Signal To Recording Module
384	BU	Glow Plugs	F877	WH	Neutral Switch
A305	YL	Relay To Warning Horn)	T825	YL	Vibration Solenoid
Monitoring Circuits			996	RD	Joint Cutter Relay 2 Coil
403	GN	Alternator 'R' Terminal	997	PU	Joint Cutter Relay 2
405	GY	Engine Oil Pressure Switch (Low)	998	GN	Joint Cutter Switch (Water Spray)
406	PU	Coolant Temperature	A914	OR	Speed Dial Pot
418	YL	Parking Brake Sensor	A915	OR	Sensor Power Ground
428	OR	Hydraulic Temperature Sender	A916	GN	5V DC Supply
447	PK	Fuel Level Gage	A919	BU	Throttle Solenoid
449	BU	Speedometer Signal	A925	YL	Sensor Power Ground
465	OR	Low Charge Pressure Warning	A926	YL	5V DC Supply
480	GN	Glow Plug Relay Coil	A982	BR	Engine Throttle Control
A429	YL	Drum Center Switch	A983	BU	Engine Throttle Control - Signal
C444	YL	Indicator - Alternator	A990	BU	Cnfg Pin Analog
E455	BR	Hydraulic Oil Filter	C903	BU	Water Pump 1 Switch
F420	GN	Indicator - Recording Module	C904	GN	Wtr Spray Neutral Stop Rly To Wtr Spray Rly
Accessory Circuits			C905	OR	Water Pump 2 Switch
500	BR	Wiper - Front (Park)	C906	PU	Vibe Hi/Low Amp Switch
501	GN	Wiper - Front (Low)	C922	BR	Front Drum Water Pump
503	BR	Wiper - Rear (Park)	C923	OR	Rear Drum Water Pump
504	YL	Wiper - Rear (Low)	C924	YL	Forward Vibratory Valve
505	BU	Wiper - Rear (High)	C925	GN	Reverse Vibratory Valve
506	PU	Washer - Front	C926	BU	Front Drum Select Solenoid
507	WH	Washer - Rear	C927	PU	Rear Drum Select Solenoid
513	OR	A/C Refrigerant Pressure Switch	C928	GY	Drum Offset RT
521	YL	Fan Speed Switch To A/C Pressure Switch	C929	WH	Drum Offset LT
536	WH	Hazard Switch To Turn Signal Switch	C932	YL	Light Vibe On
537	GN	Turn Signal Switch To Flasher	C933	GN	Auto / Manual Switch Vibe
A503	PK	Defroster Fan - Front (Low)	C935	PU	Dout Water Pump 2
A504	YL	Defroster Fan - Rear (Low)	C936	GY	Dout Backup Alarm
A506	OR	Defroster Fan - Front (High)	C937	WH	Dout Water Pump 1
Lighting Circuits			K918	GN	PWM Out Vibe P Fwd
603	PK	Rotary Beacon Lamp	K919	YL	PWM Out Vibe P Rev
604	OR	Stop Lamps	M904	OR	Auxiliary Circuit 1 (Digital Input)
605	YL	Turn Lamps - Left	M905	WH	Auxiliary Circuit 2 (Digital Input)
606	GY	Turn Lamps - Right	N928	OR	Water Spray Off Time Select Signal
607	PK	Not Used	N929	YL	Water Spray On Tim Select Power
608	GN	Rear Work Lamps	N930	BR	Water Spray On Time Select Signal
610	OR	Headlamps - Basic	N957	PK	TXD - Comm 1
614	PU	Tail / Position / Dash Lamps	N960	OR	RXD - Comm 1
619	GN	Headlamps - Low Beam	N970	YL	DTR - Comm 1
631	GY	Flood Lamp - Rear Left hand	N973	BR	DCD - Comm 1
632	WH	Flood Lamp - Rear Right Hand	N979	GN	Signal Ground - Comm 1
645	OR	Headlamps Relay	P978	GN	Vibe On/Off Switch
646	OR	Switch To Front Flood Lamps Relay	P979	YL	Water On/Off Switch
647	GN	Switch To Rear Flood Lamps Relay	T969	YL	Offset Config
651	PK	Not Used	T970	GY	Test Mode
652	YL	Flood Lamp - Right Front	X982	PU	Vibe Hi/Low Amp Switch

Harness And Wire Electrical Schematic Symbols

Symbols

Pressure Symbol | Temperature Symbol | Level Symbol | Flow Symbol | Circuit Breaker Symbol

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.

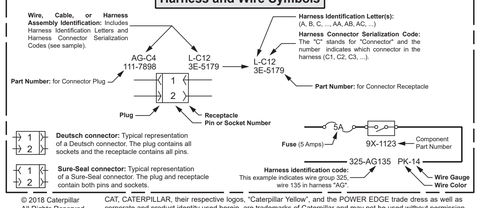
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.

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.

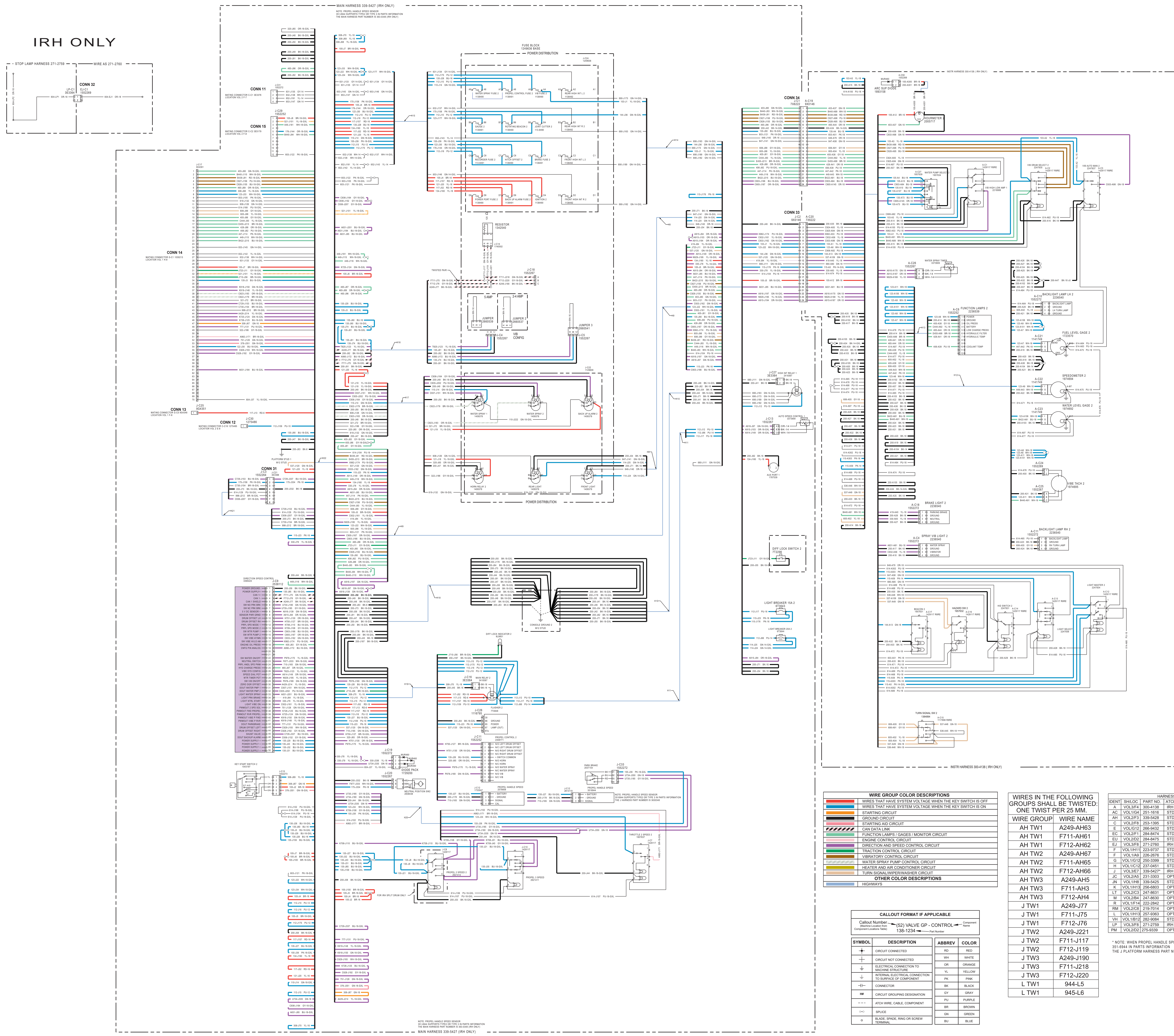
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil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

Harness and Wire Symbols



M0097997 VOL 3 of 3
30 Page, (Dimensions: 39 Inches x 28 inches)

M0097997 VOL 2 of 3
30 Page, (Dimensions: 39 inches x 28 inches)



WIRE GROUP COLOR DESCRIPTIONS	
(red)	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS OFF
(blue)	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS ON
(orange)	STARTING CIRCUIT
(black)	GROUND CIRCUIT
(pink)	STARTING AID CIRCUIT
(black/pink striped)	CAN DATA LINK
(light green)	FUNCTION LAMPS / GAGES / MONITOR CIRCUIT
(light pink)	ENGINE CONTROL CIRCUIT
(purple)	DIRECTION AND SPEED CONTROL CIRCUIT
(green)	TRACTION CONTROL CIRCUIT
(brown)	VIBRATORY CONTROL CIRCUIT
(grey striped)	WATER SPRAY PUMP CONTROL CIRCUIT
(yellow)	HEATER AND AIR CONDITIONER CIRCUIT
(tan)	TURN SIGNAL/WIPER/WASHER CIRCUIT
OTHER COLOR DESCRIPTIONS	
(light blue)	HIGHWAYS

CALLOUT FORMAT IF APPLICABLE

Callout Number (Machine Location from Component Locations Table) → (52) VALVE GP - CONTROL ← Component Name
138-1234 ← Part Number

SYMBOL	DESCRIPTION
┼ (dot)	CIRCUIT CONNECTED
┼	CIRCUIT NOT CONNECTED
⏚	ELECTRICAL CONNECTION TO MACHINE STRUCTURE
⏚ (dashed)	INTERNAL ELECTRICAL CONNECTION TO SURFACE OF COMPONENT
→)⟩—	CONNECTOR
H#	CIRCUIT GROUPING DESIGNATION
- - -	ATCH WIRE, CABLE, COMPONENT
o–o	SPLICE
o	BLADE, SPADE, RING OR SCREW TERMINAL

ABBREV	COLOR
RD	RED
WH	WHITE
OR	ORANGE
YL	YELLOW
PK	PINK
BK	BLACK
GY	GRAY
PU	PURPLE
BR	BROWN
GN	GREEN
BU	BLUE

WIRES IN THE FOLLOWING GROUPS SHALL BE TWISTED: ONE TWIST PER 25 MM.

WIRE GROUP	WIRE NAME
AH TW1	A249-AH63
AH TW1	F711-AH61
AH TW1	F712-AH62
AH TW2	A249-AH67
AH TW2	F711-AH65
AH TW2	F712-AH66
AH TW3	A249-AH5
AH TW3	F711-AH3
AH TW3	F712-AH4
J TW1	A249-J77
J TW1	F711-J75
J TW1	F712-J76
J TW2	A249-J221
J TW2	F711-J117
J TW2	F712-J119
J TW3	A249-J190
J TW3	F711-J218
J TW3	F712-J220
L TW1	944-L5
L TW1	945-L6

HARNESS ASSEMBLY

IDENT	SH/LOC	PART NO.	ATCH	GROUP NAME
A	VOL3/F4	300-4138	IRH	INSTRUMENT PANEL
AC	VOL1/G4	251-1616	STD	INSTR HARNESS
AH	VOL2/F3	339-5428	STD	ADAPTER HARNESS
C	VOL2/F8	253-1395	STD	CAB HARNESS
E	VOL/G12	266-9432	STD	ENGINE HARNESS
EC	VOL2/F1	284-8474	STD	PLATFORM EDGE CUTTER OPTION
EU	VOL2/D2	284-8475	STD	REAR EGDE CUTTER OPTION
EJ	VOL3/F8	271-2760	IRH	WIRE AS
F	VOL1/H11	223-9737	STD	HID LIGHTING (ROPS)
F	VOL1/A9	226-2676	STD	HID LIGHTING (OPEN PLATFORM)
G	VOL1/G12	250-3399	STD	FRONT VEHICLE
H	VOL1/C12	237-0451	STD	REAR VEHICLE
J	VOL3/E7	339-5427*	IRH	PLATFORM HARNESS*
JC	VOL2/A5	231-3303	OPT	EDGE CUTTER HARNESS
JN	VOL1/H8	339-5425	STD	MAIN HARNESS
K	VOL1/H13	256-6803	OPT	PRODUCT LINK HARNESS
LT	VOL2/C3	247-8631	OPT	HARNESS AS (SPLIT DRUM REAR)
M	VOL2/B4	247-8630	OPT	HARNESS AS (SPLIT DRUM FRONT)
R	VOL1/F14	222-2842	OPT	AIR CONDITIONER HARNESS
RM	VOL2/C8	219-7014	OPT	RECORDING MODULE
L	VOL1/H13	257-9363	OPT	HARNESS AS
VH	VOL1/B12	282-9084	STD	JUMPER HARNESS
LP	VOL3/F8	271-2759	IRH	STOP LAMP HARNESS
PM	VOL2/D2	275-9339	OPT	HARNESS AS

* NOTE: WHEN PROPEL HANDLE SPEED SENSOR PART NUMBER IS 351-6944 IN PARTS INFORMATION
THE J PLATFORM HARNESS PART NUMBER IS 363-0348 (IRH ONLY)

⚠ WARNING

Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.

NOTE A: FOR 2 AMPLITUDE OR VERSA-VIB OPTION CONNECT C20 TO C18 AND CONNECT C21 TO C19. FOR 5 AMPLITUDE OPTION CONNECT C20 TO C19 AND C21 TO C18.

NOTE B: THE COLD START ADVANCE SOLENOID IS PART OF THE FUEL INJECTION PUMP

NOTE C: THE TWO OPTIONAL RADIO WIRES NEEDS TO BE HEATSHRINK OR WRAP WITH ELECTRICAL TAPE

THIS SCHEMATIC IS FOR THE CB-534D ASPHALT COMPACTOR ELECTRICAL SYSTEM
VOLUME 2 of 3: IRH VERSION
MEDIA NUMBER: M0097997
SCHEMATIC PART NUMBER: 189-5902 CHANGE: 09, VERSION: -
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.
Refer to the Parts Manual using a specific serial number prefix in SIS before ordering parts from this schematic.