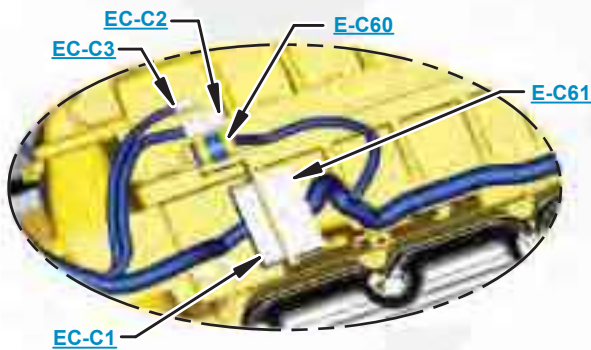


This document is best viewed at a screen resolution of 1024 X 768.

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

725, 730, and 730E Articulated Truck Electrical System

**725:
B1L2387-UP**

**730:
B1M2870-UP**

**730E:
B1W369-UP**

COMPONENT LOCATION

Page 1 of 2



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Actuator - Water Valve	C-6	E	Sensor - OTG Oil Temperature	B-11	13
Alarm - Action	H-12	C	Sensor - Shift Lever	E-7	D
Alarm - Backup	I-14	53	Sensor - T/C Temp	D-3	32
Alternator	G-3	27	Sensor - Throttle	E-7	B
Arc Suppressor - A/C	G-4	6	Sensor - Turbo Inlet Pressure	G-4	12
Arc Suppressor - Secondary Steering	G-2	9	Sensor - Xmsn Out Speed A	B-12	22
Battery - A	F-2	3	Sensor - Xmsn Out Speed B	B-12	22
Battery - B	D-1	3	Sensor - Xmsn T/C Output Speed	D-12	12
Breaker - Alternator	F-4	9	Socket - 12V Power	G-10	C
Breaker - Hood	F-4	9	Solenoid - 1 Xmsn Clutch	C-12	45
Breaker - Main	F-4	9	Solenoid - 2 Xmsn Clutch	C-13	45
Camera	I-14	57	Solenoid - 3 Xmsn Clutch	C-13	45
Camera Display	I-8	A	Solenoid - 4 Xmsn Clutch	C-13	45
Coil - A/C Clutch	G-4	6	Solenoid - 5 Xmsn Clutch	C-12	45
Control - Powertrain	H-13	E	Solenoid - 1 Fuel Injector	H-3	21
Control - Engine	I-3	4	Solenoid - 2 Fuel Injector	H-3	21
Control - Product Link	C-2	E	Solenoid - 3 Fuel Injector	H-3	21
Control - Hood Relay	D-2	8	Solenoid - 4 Fuel Injector	G-3	21
Control - Int Wiper Delay Mod	F-5	B	Solenoid - 5 Fuel Injector	G-3	21
Converter - 24V to 12V	B-7	55	Solenoid - 6 Fuel Injector	G-3	21
Display Cluster	D-7	A	Solenoid - Crossaxle Diff Lock	F-13	42
Flasher	G-5	B	Solenoid - Demand Fan	E-4	42
Fuse Block	I-11	C	Solenoid - Interaxle Diff Lock	F-14	42
Horn - High Tone	E-1	17	Solenoid - Lock Up Clutch	C-12	1
Horn - Low Tone	E-1	18	Solenoid - Lower Valve	G-13	45
Lever - Shift Hoist	E-7	D	Solenoid - Park Brake	E-4	45
Messenger	D-5	A	Solenoid - Raise Valve	G-13	44
Motor - Blower	C-6	28	Solenoid - Retarder	C-12	32
Motor - Front Washer	E-5	30	Solenoid - Start Aid	G-4	8
Motor - Front Wiper	D-4	29	Switch - A/C Select	D-5	A
Motor - Fuel Priming Pump	H-2	56	Switch - AC Pressure	G-4	27
Motor - Hood Actuator	E-2	16	Switch - Auto Lube Pressure	D-14	57
Motor - Rear Washer	D-5	30	Switch - Crossaxle Lock	E-5	A
Motor - Rear Wiper	I-12	45	Switch - Diff Lock	G-5	A
Motor - Secondary Steer	F-3	26	Switch - Disconnect	E-1	9
Motor - Starter	G-3	10	Switch - Dome Lamp	G-5	52
Radio - Product Link	C-2	E	Switch - Engine Shutdown	G-4	9
Relay - Backup Alarm	G-11	C	Switch - Fan Speed	E-5	A
Relay - Headlamp	G-6	E	Switch - Filter Bypass	C-12	60
Relay - Horn	G-11	C	Switch - Fuel Differential Pressure	F-2	62
Relay - INT Wiper	G-11	C	Switch - Fuel Priming Pump	G-2	56
Relay - Main (1)	H-11	C	Switch - Hazard Flasher	H-6	A
Relay - Main (2)	H-11	C	Switch - Head Side Lamp	I-5	A
Relay - Secondary Steer	G-11	C	Switch - Heated Mirror	E-6	A
Relay - Secondary Steer	G-3	26	Switch - Heated Seat	D-6	A

COMPONENT LOCATION

Page 2 of 2



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Relay - Start	F-4	8	Switch - Hood Locking	D-2	9
Resistor - Blower Motor	C-7	28	Switch - Horn	G-5	F
Resistor (2)	C-6	51	Switch - Key Start	G-5	A
Resistor - CAN	D-6	A	Switch - Low Brake Oil Pressure	E-4	39
Resistor - CAN	H-5	56	Switch - OTG Filter Bypass	D-14	5
Sender - Fuel Level	D-2	23	Switch - OTG Low Oil Pressure	C-14	5
Sensor - Atmospheric Pressure	H-1	19	Switch - Park Brake	E-7	D
Sensor - Body Up	I-14	53	Switch - Park Brake Pressure	E-4	24
Sensor - Cam Speed/Timing	G-3	6	Switch - Rear Wiper	I-6	A
Sensor - Coolant Temp	G-2	14	Switch - Retarder	F-5	F
Sensor - Crank Speed/Timing	G-3	54	Switch - Secondary Steer	E-5	A
Sensor - Ejector Blade Retract	B-13	61	Switch - Service Brake	D-4	33
Sensor - Engine Speed	B-12	11	Switch - Steer Pressure	F-4	15
Sensor - Fuel Pressure	F-2	7	Switch - Stop Lamp	D-4	33
Sensor - Fuel Temp	F-2	7	Switch - Temp Selector	H-5	A
Sensor - Hoist Position	E-7	D	Switch - Temperature	C-7	A
Sensor - Inlet Manifold Air Temp	G-2	9	Switch - Top Gear	E-7	D
Sensor - Intake Air Pressure	H-1	7	Switch - Transmission Hold	E-7	D
Sensor - Oil Pressure	H-1	6	Switch - Wiper/Washer Turn	F-5	F
Sensor - Oil Temp	B-12	59	Switch - Work Lamp	I-5	A

Machine locations are repeated for components located close together.

A = Located inside of cab.

D = Located on right side of cab.

B = Located behind dash of cab.

E = Located behind service panels on right side of cab.

C = Located on cab relay panel.

F = Located on the steering column.

CONNECTOR LOCATION



Connector Number	Schematic Location	Machine Location
CONN 1	D-13	34
CONN 2	D-13	35
CONN 3	D-13	34
CONN 4	D-13	35
CONN 5	D-13	34
CONN 6	D-13	35
CONN 7	D-12	39
CONN 8	D-12	39
CONN 9	I-12	C
CONN 10 ET CONN	G-11	C
CONN 11	C-11	2
CONN 12	C-10	2
CONN 13	B-3, C-3, E-10	E
CONN 14 Service CONN	G-10	C
CONN 15	H-9	C
CONN 16	H-9	C
CONN 17	I-9	C
CONN 18	F-9	43
CONN 19	C-7	E
CONN 20	I-7	50
CONN 21	H-7	50
CONN 22	E-7	49
CONN 23	E-7	48
CONN 24	C-5	46
CONN 25	C-5	46
CONN 26	G-4	18
CONN 27	H-4	47
CONN 28	F-4	18
CONN 29	B-4	26
CONN 30	E-3	15
CONN 31	G-3	8
CONN 32	H-3	56
CONN 33	E-3	37
CONN 34	G-1	62
CONN 35 Remote Start Receptacle	F-2	9

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)	
Power Train ECM (MID No. 027)	
CID	Component
0041	Sensor Power Supply
0096	Fuel Level Sensor
0144	Backup Alarm Relay
0168	Electrical System Voltage
0177	Transmission Oil Temperature Sensor
0190	Engine Speed Sensor
0420	Secondary Steering Relay
0444	Start Relay
0585	Xmsn Out Speed Sensor (A)
0590	Engine Control Module
0650	Harness Code
0672	Torque Converter Output Speed Sensor
0673	Xmsn Out Speed Sensor (B)
0681	Parking Brake Solenoid
0702	Shift Lever Sensor
0704	Service Brake Pressure Switch
0707	Solenoid Valve (Up)
0708	Solenoid Valve (Down)
0709	Lockup Clutch Solenoid
0724	Body Raise Solenoid
0725	Body Lower Solenoid
0773	Hoist Position Sensor
0826	T/C Temperature Sensor
0967	Machine Application
0971	Interaxle Diff Lock Solenoid
1100	Crossaxle Diff Lock Solenoid
1227	Retarder Lever Switch
1248	Retarder Solenoid
1251	Alternator - (R-Terminal)
1292	Transmission Hold Sw.
1401	Transmission Clutch Modulating Valve No. 1
1402	Transmission Clutch Modulating Valve No. 2
1403	Transmission Clutch Modulating Valve No. 3
1404	Transmission Clutch Modulating Valve No. 4
1405	Transmission Clutch Modulating Valve No. 5
1837	Clear Sw.
1838	Service Sw.
2707	OTG Temperature Sensor
Engine Control ECM (MID No. 036)	
CID	Component
0001	Fuel Injector Solenoid #1
0002	Fuel Injector Solenoid #2
0003	Fuel Injector Solenoid #3
0004	Fuel Injector Solenoid #4
0005	Fuel Injector Solenoid #5
0006	Fuel Injector Solenoid #6
0041	ECM 8V DC Supply
0091	Throttle Sensor
0094	Fuel Pressure Sensor
0100	Oil Pressure Sensor
0102	Boost Pressure Sensor
0110	Engine Coolant Temperature Sensor
0168	Electrical Power Supply
0172	Inlet Air Temperature Sensor
0174	Fuel Temperature Sensor
0190	Engine Speed Sensor
0261	Engine Timing Calibration
0262	5 Volt Sensor Supply
0267	Engine Shutdown Sw.
0268	Check Programmable Parameters
0274	Atmospheric Pressure Sensor
0275	Right Turbo Inlet Pressure Sensor
0291	Engine Cooling Fan Solenoid
0296	Unable to communicate with Transmission ECM
0342	Camshaft Position Sensor
0791	Jake Brake Low/High Solenoid
0792	Jake Brake Medium/High Solenoid
2417	Start Aid Solenoid

Event Codes	
Engine Control	
Event Code	Condition
E096	High Fuel Pressure
E172	High Air Filter Restriction
E360	Low Engine Oil Pressure Warning
E361	High Engine Coolant Temperature
E362	Engine Overspeed
E363	High Fuel Temperature
E390	Fuel Filter Restriction
E539	High Intake Manifold Air Temperature
Powertrain Control	
Event Code	Condition
E047	Transmission Abuse Warning
E049	Coasting in Neutral Warning
E108	Machine Upshift to Prevent Engine Overspeed
E155	High Torque Converter Oil Temperature
E327	Low OTG Pressure
E328	OTG Filter Plugged
E329	Transmission Filter Plugged
E330	Transmission Output Speed Mismatch
E392	Downshift Suspended
E542	Low Steering Pump Pressure
E556	Low Brake Pump Pressure
E573	High OTG Oil Temperature
E627	Machine Driven with Parking Brake On
E879	Hydraulic Tank Oil Filter Plugged

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.

SPECIFICATIONS AND RELATED MANUALS



Resistor, Sender and Solenoid Specifications		
Part No.	Component Description	Resistance (Ohms) ¹
9X-3506	Resistor: Can Data Link	120 ± 6.0
152-8385	Solenoid: Interaxle Diff Lock Crossaxle Diff Lock	32.6 ± 1.6
173-2056	Solenoid: Retarder	2.2 ± 0.2
191-7785	Solenoid: Demand Fan	5.0 ± 0.3
192-4315	Sender: Fuel Level	Full: 0-3.5 Empty: 92-98
201-0950	Solenoid: Park Brake	41.9 ± 2.1
230-7195	Solenoid: A/C Clutch Coil	17.6 ± 0.6
239-1134	Solenoid: Start Aid	20
239-9368	Resistor: Water Valve Actuator	27K ± 270
244-3144	Solenoid: Clutch Solenoids Lockup Clutch	8.7 ± 0.4
249-0712	Solenoid: Fuel Injectors	1.06 ± 5%
313-7668	Solenoid: Raise Valve Lower Valve	5.0 ± 0.3
257-5029	Resistor: Blower Motor Speed	A-C = 2.1 B-C = 0.8 C-D = 0.4

Off Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
3E-5464	Temperature Switch	-1.1 ± 0.8°C (30 ± 1.4°F)	2.2 ± 0.8°C (36 ± 1.4°F)	Normally Closed
3E-7692	OTG Low Oil Pressure Switch	113 kPa (16.4 psi)	70 ± 20kPa (10.2 ± 2.9psi)	Normally Open
114-5333	A/C Pressure Switch	275 to 1750 kPa ¹ (39.9 to 253.8 psi)	--	Normally Open ²
213-6947	Park Brake Pressure Switch	13800 kPa MAX (2002 psi MAX)	12300 ± 345 kPa (1784 psi ± 50 psi)	Normally Open A-B Normally Closed A-C
227-6745	OTG Filter Bypass Switch	276 ± 28kPa (40 ± 4.1 psi)	179 kPa (26 psi)	Normally Closed
266-6477	Low Brake Oil Pressure Sw.	11500 kPa MAX (1668 psi MAX)	10000 ± 345 kPa (1450 psi ± 50 psi)	Normally Open A-B Normally Closed A-C
275-1253	Fuel Diff. Pressure Switch	103.4 ± 13.8 kPa (15 ± 2 psi)	69 kPa MIN (10 psi MIN)	Normally Closed
313-5104	Steering Pressure Switch	1200 kPa (174.05 psi)	700 ± 100kPa (101.5 ± 14.5psi)	Normally Open A-B Normally Closed A-C

Related Electrical Service Manuals		
	Title	Form Number
	Alternator: 200-2232 (Delco 34 SI)	SENR7508
	Electric Starting Motor: 207-1556	
	Consist: 207-1557 (Delco 42MT)	SENR3581
	Consist: 6V-5582 (Nippondenso F8.0)	SENR4975
	Engine Control:	REN5097
	Powertrain Control:	REN8035

WIRE DESCRIPTION

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Wire Number	Wire Color	Description	Wire Number	Wire Color	Description
Power Circuits			Control Circuits		
101	RD	Bat (+)	703	BU	Xmsn Up Sol
102	RD	Hd Lmp	704	GY	Xmsn Down Sol
105	RD	Key Sw	705	PK	Xmsn Lockup Clutch Sol Basic
108	BU	Air Seat	708	YL	Xmsn Hold Sw
109	RD	Alt Output (+) Term.	709	OR	Sensor Power Supply
110	GN	Product Link / Rear Wiper	720	PU	Xmsn Brake Sw
111	RD	Transmission Control / ET CONN / Display Cluster	721	BR	Xmsn Gear Code 1
112	PU	Main Power Rly Output	722	WH	Xmsn Gear Code 2
113	OR	Opr Mon Panel Vmis B+ Switched	723	OR	Xmsn Gear Code 3
114	RD	Warning Horn (forward)	724	YL	Xmsn Gear Code 4
115	RD	Dome Lamp / Converter	725	GN	Xmsn Gear Code 5
116	BR	Beacon / Rear Flood	726	BU	Xmsn Gear Code 6
118	GY	Front Wiper	727	GN	Suppl Ster Motor Relay
121	RD	Back Alarm To Lamp	728	BU	Suppl Ster Cont Sw
123	WH	Heated Seat	751	GN	Xmsn Shift Sol No. 1 Or 3
124	GN	A/C Breaker	752	YL	Xmsn Shift Sol No. 2
125	OR	Product Link	754	BU	Xmsn Shift Sol No. 3 Or 1
129	RD	Cigar Lighter / EEC	755	OR	Xmsn Shift Sol No. 4 Or 5
136	GN	Suppl Ster	799	WH	10v Sensor Supply
139	OR	Camera	A751	YL	After Cooler Temp
150	RD	Engine Breaker	E748	BK	Start Aid Solenoid Return
165	YL	Start Aid / Converter	E789	PU	Load Return
173	RD	Stop Lamps	E790	PK	Raise / Lower Solenoid Valves
175	RD	Hood Breaker	F711	GN	Can Link +
177	RD	Main Brkr	F712	GY	Can Link -
192	GN	Secondary Steering Relay	F715	PU	Shutdown
A108	PK	12/24V Converter	F716	WH	Shutdown
A109	PU	Flasher	F762	GY	Start Aid Solenoid
A110	WH	Autolube	G704	YL	Body Raise Sol
A111	GY	Heated Mirror and Seat	G705	GN	Body Lower Sol
A112	OR	Display / Messenger	G706	BU	Retarder Sol No. 1
A114	BK	Camera +12V DC	G707	GN	Retarder Sol No. 2
Ground Circuits			G708	GY	Retarder Sol No. 3
200	BK	Main Chassis	J764	BR	Switch/sensor Return #1
201	BK	Operator Monitor Return	K737	BR	Not Used
202	BK	Xmsn Ctrl	K738	GN	Not Used
C215	BK	Autolube Pressure Switch Ground	K739	BU	Not Used
Basic Machine Circuits			K742	OR	Top Gear Switch (up)
304	WH	Starter Relay No. 1 Output	K744	BU	Retarder Proportional Solenoid
306	GN	Starter Relay Coil To Neut Start Sw Or Key Sw	L730	OR	Analog Sensor Power (+5v)
307	OR	Key Sw To Neutral Start Sw	L740	BR	OTG Oil Temperature Sensor Return
308	YL	Main Power Relay Coil	M739	YL	Solenoid Return 2
320	OR	Horn Relay Coil To Sw	N707	PU	Fuel Differential Pressure Sw. Return
322	GY	Warning Horn (forward)	N787	BU	Hydraulic Tank Filter Bypass Switch
323	WH	Fuel Prime Pump to Fuel Prime Sw.	N788	PK	Steer Tank Filter Bypass Switch
324	BU	Differential Lock Sol	P795	PK	Ejector Blade Retract Sensor
326	PU	Fuel Prime Pump Power	R746	PK	Intake Air Pressure
331	OR	Backup Alarm Relay Coil	R747	GY	Atmospheric Pressure
368	OR	Diff Lock (front)	T725	WH	Fuel Differential Pressure Sw.
369	PU	Diff Lock (rear)	802	YL	Auto Lube Press. Sw
374	PK	Neutral Start Sw To Park Brake Sw	892	BR	Cat Data Link (-)
397	OR	Hood Raise Motor	893	GN	Cat Data Link (+)
398	BU	Hood Raise Motor	G828	WH	Engine Control Pressure Sensor +5v
A300	GN	Hood Raise Relay Coil	G829	GN	Engine Control Pressure Sensor Common
A301	WH	Hood Raise Relay Coil	G833	PK	Engine Temperature Sensor Common
A323	GY	Interaxle Diff Lock Solenoid	G834	PU	Cooling Fan Speed +
Monitoring Circuits			G835	OR	Cooling Fan Speed -
403	GN	Alternator (r) Term.	G856	WH	TDC Probe +
406	PU	Opr Mon Coolant Temp	G857	YL	TDC Probe -
410	WH	Opr Mon Fault Alarm	J812	PK	Fan Drive Oil Filter Bypass Switch

WIRE DESCRIPTION

Page 2 of 2



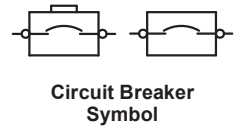
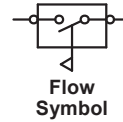
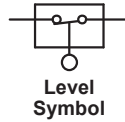
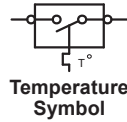
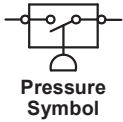
Wire Number	Wire Color	Description	Wire Number	Wire Color	Description
417	GY	Primary Ster Sw	R800	OR	+8v Digital Sensor Power
419	YL	Opr Mon Parking Brake	R816	PK	Autolube Cab Control
426	BR	Opr Mon Power Train Oil Filter	T858	GY	Fuel Injector 1 & 2 High
432	PK	Opr Mon Brake Press. (oil)	T859	WH	Fuel Injector 3 & 4 High
447	PK	Fuel Level Gage	T860	OR	Fuel Injector 5 & 6 High
F400	GY	Low Oil Pressure	900	PU	Xmsn Shift Sol No. 5 Or 4
F421	YL	Fuel Temperature Sensor	901	WH	Xmsn Shift Sol No. 6
F478	GN	OTG Oil Temperature Sensor	921	WH	Xmsn Sol No 1 Or 3 Return
G485	BU	Opr Mon Front Brake Temperature	922	BR	Xmsn Sol No 2 Return
G486	GN	Opr Mon Rear Brake Temperature	993	BR	Analog Sensor Common
Accessory Circuits			994	GY	Oil Pressure (filtered)
500	BR	Wiper - Front (park)	995	BU	Coolant Temperature
501	GN	Wiper - Front (low)	998	BR	Digital Sensor Return
502	OR	Wiper - Front (hi)	A958	WH	Park Brake Sol
503	BR	Wiper - Rear (park)	C912	GN	Throttle Position
504	YL	Wiper - Rear (low)	C967	BU	Inlet Air Temperature
506	PU	Washer - Left	C972	YL	Elevated Engine Idle Switch
507	WH	Washer - Rear	C991	PK	Fuel Filter Monitor
508	PU	Radio Speaker - Left	E900	WH	Trans Output Spd +
509	WH	Radio Speaker - Left (commom)	E901	GN	Trans Output Spd -
511	BR	Radio Speaker - Right	E906	OR	Trans Output Spd Q+
512	GN	Radio Speaker - Right (common)	E907	GY	Trans Output Spd Q-
513	OR	A/C Compressor Pressure Sw	E956	BK	Camera Video Signal
515	GY	Blower Motor (hi)	E963	BK	Engine Speed/timing A-
516	GN	Blower Motor (medium)	E964	WH	Engine Speed/timing A+
517	BU	Blower Motor (low)	E965	BU	Engine Speed/timing B-
522	WH	A/C Clutch to Thermostat Sw	E966	YL	Engine Speed/timing B+
537	GN	Turn Signal Sw To Flasher	E971	GN	A/C High Pressure Switch
575	YL	Wiper - Aux (park)	K952	BR	Sol Return 3
590	GY	Wiper Sw To Intermittent Module	K977	PK	Trans Oil Temp Sensor
591	WH	Intermittent Module To Wiper Motor	L910	PK	Torque Converter Output Speed +
592	BU	DC/DC Converter Power Output	L911	YL	T/C Output Speed -
A513	PK	DC/DC Converter Memory Output	M996	PK	Hoist Lever Position
A523	PU	Temp Potentiometer Pos 1	M997	PU	Shift Lever Position
A524	BR	Temp Potentiometer Pos 2	N957	PK	Gateway RS-232 Port 1 (TXD)
A525	GN	Temp Potentiometer Pos 3	N960	OR	Gateway RS-232 Port 1 (RXD)
A537	PK	Heated Seat	N970	YL	Gateway RS-232 Port 1 (DCD)
C542	GN	Heated Mirror Power	N973	BR	Gateway RS-232 Port 1 (DTR)
C547	OR	Blower Motor (med-low)	N979	GN	Gateway RS-232 Port 1 (GND)
E528	PU	HVAC On/off Sw To Blower Speed Sw And A/C Sw	T957	PU	Fuel Injector 1 Common
Lighting Circuits			T958	YL	Fuel Injector 2 Common
602	WH	Dome Lamp	T959	BR	Fuel Injector 3 Common
604	OR	Stop Lamp	T960	BU	Fuel Injector 4 Common
605	YL	Turn Lamp - Left	T961	GN	Fuel Injector 5 Common
606	GY	Turn Lamp - Right	T962	WH	Fuel Injector 6 Common
610	OR	Head Lamp Basic	T997	OR	OTG Oil Temperature Sensor +5 V Supply
611	PU	Head Lamp Hi			
612	GY	Backup Lamp			
614	PU	Park / Tail / Dash Lamp			
619	GN	Head Lamp Lo			
624	YL	Flood Lamp Bowl			

HARNESS and WIRE

Electrical Schematic Symbols



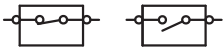
Symbols



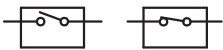
Symbols and Definitions



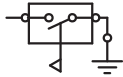
Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.



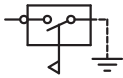
Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



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.



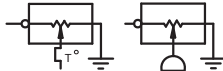
Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



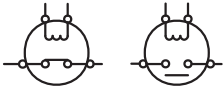
Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



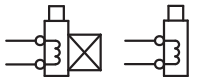
Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



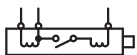
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



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.



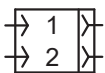
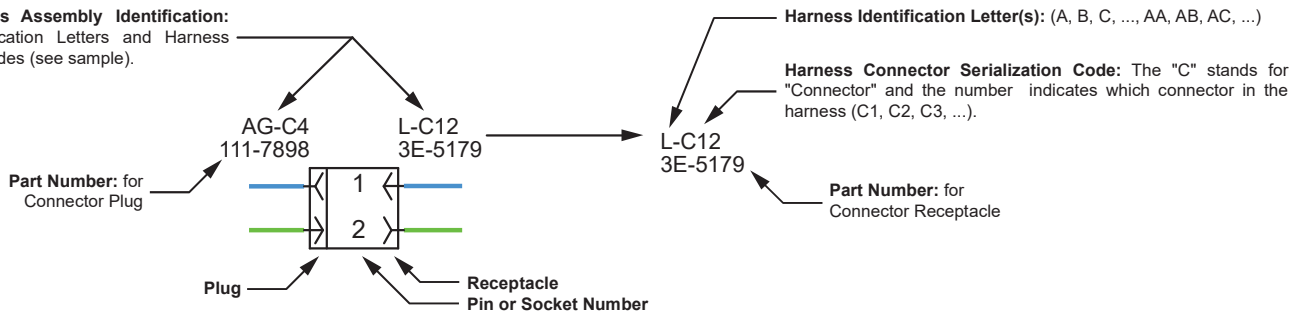
Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



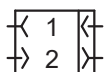
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil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

Harness and Wire Symbols

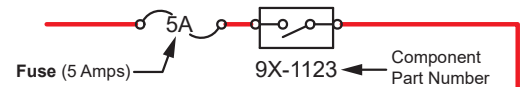
Wire, Cable, or Harness Assembly Identification: Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).



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



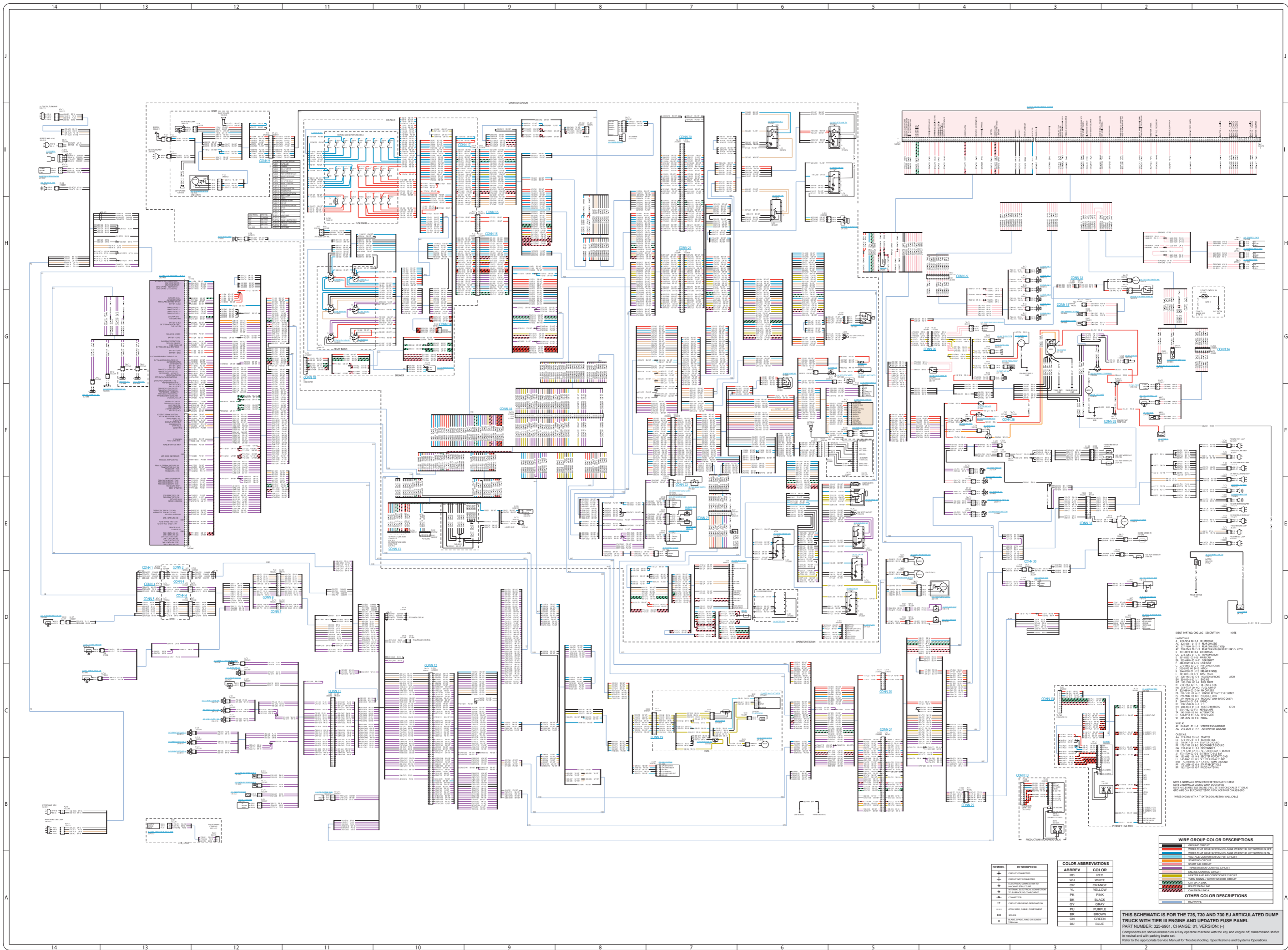
Sure-Seal connector: Typical representation of a Sure-Seal connector. The plug and receptacle contain both pins and sockets.



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

325-AG135 **PK-14**

Wire Gauge
Wire Color



WIRE NO.	WIRE DESCRIPTION	WIRE
101	12V BATTERY	101
102	12V BATTERY	102
103	12V BATTERY	103
104	12V BATTERY	104
105	12V BATTERY	105
106	12V BATTERY	106
107	12V BATTERY	107
108	12V BATTERY	108
109	12V BATTERY	109
110	12V BATTERY	110
111	12V BATTERY	111
112	12V BATTERY	112
113	12V BATTERY	113
114	12V BATTERY	114
115	12V BATTERY	115
116	12V BATTERY	116
117	12V BATTERY	117
118	12V BATTERY	118
119	12V BATTERY	119
120	12V BATTERY	120
121	12V BATTERY	121
122	12V BATTERY	122
123	12V BATTERY	123
124	12V BATTERY	124
125	12V BATTERY	125
126	12V BATTERY	126
127	12V BATTERY	127
128	12V BATTERY	128
129	12V BATTERY	129
130	12V BATTERY	130
131	12V BATTERY	131
132	12V BATTERY	132
133	12V BATTERY	133
134	12V BATTERY	134
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136	12V BATTERY	136
137	12V BATTERY	137
138	12V BATTERY	138
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295	12V BATTERY	295
296	12V BATTERY	296
297	12V BATTERY	297
298	12V BATTERY	298
299	12V BATTERY	299
300	12V BATTERY	300

NOTE: A NORMALLY OPEN BRK SW (RETRAY) CHARGE PUMP NORMALLY CLOSING WHEN OPERATE. GND WIRE CAN BE CONNECTED TO 5 PIN OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55 OR 56 OR 57 OR 58 OR 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66 OR 67 OR 68 OR 69 OR 70 OR 71 OR 72 OR 73 OR 74 OR 75 OR 76 OR 77 OR 78 OR 79 OR 80 OR 81 OR 82 OR 83 OR 84 OR 85 OR 86 OR 87 OR 88 OR 89 OR 90 OR 91 OR 92 OR 93 OR 94 OR 95 OR 96 OR 97 OR 98 OR 99 OR 100 OR 101 OR 102 OR 103 OR 104 OR 105 OR 106 OR 107 OR 108 OR 109 OR 110 OR 111 OR 112 OR 113 OR 114 OR 115 OR 116 OR 117 OR 118 OR 119 OR 120 OR 121 OR 122 OR 123 OR 124 OR 125 OR 126 OR 127 OR 128 OR 129 OR 130 OR 131 OR 132 OR 133 OR 134 OR 135 OR 136 OR 137 OR 138 OR 139 OR 140 OR 141 OR 142 OR 143 OR 144 OR 145 OR 146 OR 147 OR 148 OR 149 OR 150 OR 151 OR 152 OR 153 OR 154 OR 155 OR 156 OR 157 OR 158 OR 159 OR 160 OR 161 OR 162 OR 163 OR 164 OR 165 OR 166 OR 167 OR 168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174 OR 175 OR 176 OR 177 OR 178 OR 179 OR 180 OR 181 OR 182 OR 183 OR 184 OR 185 OR 186 OR 187 OR 188 OR 189 OR 190 OR 191 OR 192 OR 193 OR 194 OR 195 OR 196 OR 197 OR 198 OR 199 OR 200 OR 201 OR 202 OR 203 OR 204 OR 205 OR 206 OR 207 OR 208 OR 209 OR 210 OR 211 OR 212 OR 213 OR 214 OR 215 OR 216 OR 217 OR 218 OR 219 OR 220 OR 221 OR 222 OR 223 OR 224 OR 225 OR 226 OR 227 OR 228 OR 229 OR 230 OR 231 OR 232 OR 233 OR 234 OR 235 OR 236 OR 237 OR 238 OR 239 OR 240 OR 241 OR 242 OR 243 OR 244 OR 245 OR 246 OR 247 OR 248 OR 249 OR 250 OR 251 OR 252 OR 253 OR 254 OR 255 OR 256 OR 257 OR 258 OR 259 OR 260 OR 261 OR 262 OR 263 OR 264 OR 265 OR 266 OR 267 OR 268 OR 269 OR 270 OR 271 OR 272 OR 273 OR 274 OR 275 OR 276 OR 277 OR 278 OR 279 OR 280 OR 281 OR 282 OR 283 OR 284 OR 285 OR 286 OR 287 OR 288 OR 289 OR 290 OR 291 OR 292 OR 293 OR 294 OR 295 OR 296 OR 297 OR 298 OR 299 OR 300

SYMBOL	DESCRIPTION
(+)	GROUND CONNECTION
(-)	GROUND CONNECTION
(E)	ELECTRICAL CONNECTION TO BATTERY ENCLOSURE
(S)	SEPARATE ELECTRICAL CONNECTION TO BATTERY ENCLOSURE
(C)	CONNECTION
(G)	GROUND CONNECTION
(T)	WIRE WITH LOCAL COMPONENT
(W)	WIRE
(B)	BATTERY
(R)	RELAY
(S)	SWITCH
(M)	MOTOR
(L)	LAMP
(H)	HEATER
(F)	FUSE
(R)	RESISTOR
(C)	CONDENSER
(D)	DIODE
(T)	TRANSISTOR
(I)	INDUCTOR
(V)	VARIABLE
(P)	PUMP
(O)	OTHER

THIS SCHEMATIC IS FOR THE 725, 730 AND 730 EJ ARTICULATED DUMP TRUCK WITH TIER III ENGINE AND UPDATED FUSE PANEL.
PART NUMBER: 325-9961, CHANGE: 01, VERSION: 1.
Components are shown installed on a fully equipped tractor with the key and engine off, transmission shift in neutral and with parking brake set.
Refer to the appropriate service manual for Troubleshooting, Specifications and Systems Operations.

MACHINE HARNESS CONNECTOR AND COMPONENT LOCATIONS

