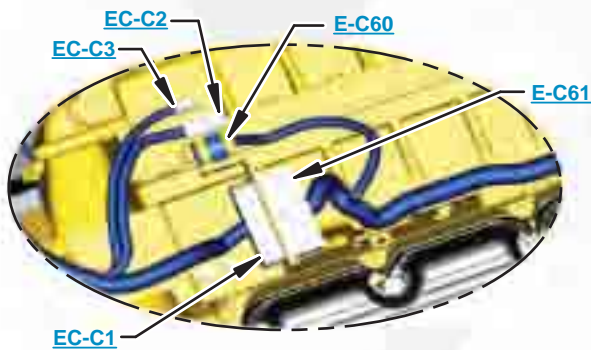




This document is best viewed at a screen resolution of 1024 X 768.

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 and 730 Articulated Truck Electrical System

725:
AFX1179-UP

730:
AGF1092-UP

COMPONENT LOCATION



| Component | Schematic Location | Machine Location | Component | Schematic Location | Machine Location |
|-------------------------------|--------------------|------------------|---|--------------------|------------------|
| Actuator - Water Valve | B-6 | E | Sensor - Turbo Inlet Pressure | G-3 | 12 |
| Alarm - Action | H-13 | C | Sensor - Xmsn Out Speed A | A-13 | 22 |
| Alarm - Backup | H-15 | 53 | Sensor - Xmsn Out Speed B | A-13 | 22 |
| Alternator | G-2 | 27 | Sensor - Xmsn T/C Output Speed | C-13 | 12 |
| Battery - A | E-1 | 3 | Socket - 12V Power | F-10 | C |
| Battery - B | B-2 | 3 | Socket - EEC Worklamp | F-10 | C |
| Breaker - A/C | I-11 | C | Solenoid - # 1 Xmsn Clutch | B-13 | 45 |
| Breaker - Alternator | F-3 | 9 | Solenoid - # 2 Xmsn Clutch | B-13 | 45 |
| Breaker - Engine | H-11 | C | Solenoid - # 3 Xmsn Clutch | B-13 | 45 |
| Breaker - Headlamp | I-11 | C | Solenoid - # 4 Xmsn Clutch | A-13 | 45 |
| Breaker - Hood | F-3 | 9 | Solenoid - # 5 Xmsn Clutch | B-13 | 45 |
| Breaker - Key | H-11 | C | Solenoid - #1 Fuel Injector | G-4 | 21 |
| Breaker - Main | E-3 | 9 | Solenoid - #2 Fuel Injector | G-4 | 21 |
| Coil - A/C Clutch | G-2 | 6 | Solenoid - #3 Fuel Injector | A-13 | 21 |
| Control - ABL Chassis | G-14 | E | Solenoid - #4 Fuel Injector | G-3 | 21 |
| Control - Engine | I-3 | 4 | Solenoid - #5 Fuel Injector | G-3 | 21 |
| Control - Hood Relay | B-2 | 8 | Solenoid - #6 Fuel Injector | G-3 | 21 |
| Control - Int Wiper Delay Mod | E-4 | B | Solenoid - Crossaxle Diff Lock | F-15 | 42 |
| Converter - 24V to 12V | A-7 | 55 | Solenoid - Demand Fan | E-3 | 42 |
| Display Cluster | C-6 | A | Solenoid - Interaxle Diff Lock | F-15 | 42 |
| Flasher | F-5 | B | Solenoid - Lock Up Clutch | B-13 | 1 |
| Horn - High Tone | D-1 | 17 | Solenoid - Lower Valve | F-15 | 45 |
| Horn - Low Tone | D-1 | 18 | Solenoid - Park Brake | E-3 | 24 |
| Lever - Shift/Hoist | D-7 | D | Solenoid - Raise Valve | F-15 | 44 |
| Motor - Blower | B-6 | 28 | Solenoid - Retarder | B-13 | 21 |
| Motor - Front Washer | C-4 | 30 | Solenoid - Start Aid | F-2 | 8 |
| Motor - Front Wiper | C-3 | 29 | Suppressor - Arc | G-3 | 6 |
| Motor - Hood Actuator | B-2 | 16 | Switch - A/C Select | C-4 | A |
| Motor - Rear Washer | C-4 | 30 | Switch - AC Pressure | F-2 | 27 |
| Motor - Rear Wiper | H-14 | 45 | Switch - Crossaxle Lock | D-5 | A |
| Motor - Secondary Steer | F-1 | 26 | Switch - Diff Lock | F-5 | A |
| Motor - Starter | G-2 | 10 | Switch - Disconnect | A-2 | 9 |
| Relay - Backup Alarm | C-9 | E | Switch - Dome Lamp | F-5 | 52 |
| Relay - Headlamp | G-6 | E | Switch - Economy Mode | C-4 | A |
| Relay - Horn | C-8 | E | Switch - Engine Shutdown | F-3 | 9 |
| Relay - INT Wiper | C-9 | E | Switch - Fan Speed | D-5 | A |
| Relay - Main | I-11 | C | Switch - Filter Bypass | B-13 | 60 |
| Relay - Secondary Steer | C-9 | E | Switch - Hazard Flasher | I-6 | A |
| Relay - Secondary Steer | F-1 | 26 | Switch - Headlamp Tail | I-5 | A |
| Relay - Start | F-2 | 8 | Switch - Heated Mirror | C-5 | A |
| Relay - Start Aid | C-8 | E | Switch - Hood Locking | B-2 | 9 |
| Resistor | B-7 | 28 | Switch - Horn | F-5 | F |
| Resistor (2) | B-6 | 51 | Switch - Hydraulic Oil Tank Filter Bypass | E-3 | 58 |
| Resistor - CAN | C-6 | A | Switch - Key Start | G-4 | A |
| Resistor - CAN | H-4 | 56 | Switch - Low Brake Oil Pressure | D-3 | 39 |
| Sender - Fuel Level | C-2 | 23 | Switch - OTG Filter Bypass | B-15 | 5 |
| Sensor - Air Temp | G-2 | 9 | Switch - OTG Low Oil Pressure | B-15 | 5 |
| Sensor - Atmospheric Pressure | I-1 | 19 | Switch - OTG Temp | B-15 | 5 |
| Sensor - Cam Speed/Timing | H-3 | 6 | Switch - Park Brake | D-7 | D |
| Sensor - Coolant Temp | G-2 | 14 | Switch - Park Brake Pressure | D-3 | 24 |
| Sensor - Crank Speed/Timing | H-3 | 54 | Switch - Rear Flood | H-5 | A |
| Sensor - Engine Speed | A-13 | 11 | Switch - Rear Wiper | I-5 | A |
| Sensor - Fuel Pressure | H-1 | 7 | Switch - Retarder | F-4 | F |
| Sensor - Fuel Temp | G-2 | 7 | Switch - Secondary Steer | D-5 | A |
| Sensor - Hoist Position | C-7 | D | Switch - Service Brake Pressure | C-4 | 33 |
| Sensor - Oil Pressure | H-1 | 6 | Switch - Start Aid | H-6 | A |
| Sensor - Oil Temp | A-13 | 59 | Switch - Steer Pressure | E-3 | 15 |
| Sensor - Shift Lever | D-7 | D | Switch - Stop Lamp Pressure | C-4 | 33 |
| Sensor - T/C Temp | C-2 | 32 | Switch - Temp Selector | H-5 | A |
| Sensor - Throttle | C-7 | B | Switch - Temperature | B-7 | A |
| Sensor - Turbo Boost Pressure | H-1 | 20 | Switch - Wiper/Washer Turn | F-5 | F |
| Switch - Auto Lube Pressure | C-15 | 57 | | | |

Machine locations are repeated for components located close together.

- A = Components located on dash of cab.
- B = Components located behind dash of cab.
- C = Components located on cab relay panel.
- D = Components located on right side of cab.
- E = Components located behind service panels on right side of cab.
- F = Components located on the steering column

CONNECTOR LOCATION



| Connector Number | Schematic Location | Machine Location |
|---------------------------------|----------------------|--------------------|
| CONN 1 | C-14 | 3 |
| CONN 2 | C-14 | 4 |
| CONN 3 | C-13 | 9 |
| CONN 4 | H-13 | D |
| CONN 5 | I-13 | D |
| CONN 6 ET Connector | I-12 | B |
| CONN 7 Service Tool Connector | I-12 | B |
| CONN 8 | A-12 | 15 |
| CONN 9 | A-11 | 16 |
| CONN 10 | I-10 | E |
| CONN 11 | I-10 | E |
| CONN 12 | H-10 | E |
| CONN 13 | G-10 | E |
| CONN 14 Xmsn Control Plug | A-10 | 1 |
| CONN 15 | F-9 | 2 |
| CONN 16 | B-8 | 1 |
| CONN 17 | B-7 | E |
| CONN 18 | D-7 | 21 |
| CONN 19 | E-7 | 33 |
| CONN 20 | E-7 | 33 |
| CONN 21 | E-7 | 33 |
| CONN 22 | I-7 | 10 |
| CONN 23 | A-5 | 31 |
| CONN 24 | B-5 | 32 |
| CONN 25 | G-3 | 34 |
| CONN 26 | A-3 | 35 |
| CONN 27 | H-3 | 39 |
| CONN 28 TDC Service Probe | H-3 | 40 |
| CONN 29 | E-2 | 37 |
| CONN 30 | E-2 | 38 |
| CONN 31 | D-2 | 36 |
| CONN 32 | C-2 | 41 |
| CONN 33 Remote Start Receptacle | F-1 | 42 |

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 ECS (MID No. 027) | |
|--|---|
| CID | Component |
| 0041 | Sensor Power Supply |
| 0144 | Backup Alarm Relay |
| 0168 | Electrical System Voltage |
| 0177 | Transmission Oil Temperature Sensor |
| 0190 | Engine Speed Sensor |
| 0248 | CAT Data Link |
| 0420 | Secondary Steering Relay |
| 0444 | Start Relay |
| 0585 | Xmsn Out Speed Sensor (A) |
| 0590 | Engine Control Module |
| 0627 | Parking Brake Pressure Switch |
| 0672 | Torque Converter Output Speed Sensor |
| 0673 | Xmsn Out Speed Sensor (B) |
| 0681 | Parking Brake Solenoid |
| 0700 | Transmission Gear Sensor |
| 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 |
| 0971 | Interaxle Diff Lock Solenoid |
| 1100 | Crossaxle Diff Lock Solenoid |
| 1227 | Retarder Lever Switch |
| 1248 | Retarder Solenoid |
| 1326 | ECM Location Code |
| 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 |
| 1406 | Transmission Clutch Modulating Valve No. 6 |
| 1674 | Solenoid Return No. 1 |
| 1675 | Solenoid Return No. 2 |
| Engine Control Module (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 |
| 0110 | Engine Coolant Temperature Sensor |
| 0168 | Electrical Power Supply |
| 0172 | Inlet Air Temperature Sensor |
| 0174 | Fuel Temperature Sensor |
| 0190 | Engine Speed Sensor |
| 0248 | CAT Data Link Communications |
| 0253 | Personality Module mismatch |
| 0254 | Engine Control Module |
| 0261 | Engine Timing Calibration |
| 0262 | 5 Volt Sensor Supply |
| 0267 | Engine Shutdown Switch |
| 0268 | Check Programmable Parameters |
| 0273 | Turbo Outlet Pressure Sensor |
| 0274 | Atmospheric Pressure Sensor |
| 0275 | Turbo Inlet Pressure Sensor |
| 0291 | Engine Cooling Fan Solenoid |
| 0296 | Unable to communicate with Transmission ECM |
| 0320 | Crankshaft Position Sensor |
| 0342 | Camshaft Position Sensor |
| 0545 | Start Aid Relay |
| 0788 | Engine Retarder Selector Switch |
| 0791 | Jake Brake Low / High Solenoid |
| 0792 | Jake Brake Medium / High Solenoid |
| 1076 | Hydraulic Fan Solenoid |

| Event Codes For ADEM III ECM | |
|------------------------------|---|
| Event Code | Condition |
| E015 | High Engine Coolant Temperature Derate |
| E017 | High Engine Coolant Temperature Warning |
| E025 | High Inlet Air Temperature Derate |
| E027 | High Inlet Air Temperature Warning |
| E039 | Low Engine Oil Pressure Derate |
| E056 | High Fuel Temperature Warning |
| E094 | Axle Protection Derate |
| E100 | Low Engine Oil Pressure Warning |
| E190 | Engine Overspeed Warning |
| E272 | Inlet Air Restriction Warning |
| Powertrain ECS | |
| Event Code | Condition |
| E047 | Transmission Abuse Event |
| E049 | Transmission Overspeed Event |
| E108 | Machine Upshift to prevent Engine Overspeed |
| E155 | High Torque Converter Oil Temperature |
| E327 | Low Output Transfer Gear Pressure Event |
| E328 | Output Transfer Gear Pressure Event |
| E329 | Transmission Filter Plugged Event |
| E330 | Transmission Output Speed Mismatch Event |
| E392 | Downshift Suspended |
| E542 | Low Steering Pump Pressure |
| E556 | Low Brake Pump Pressure |
| E627 | Machine Driven With Parking Brake On Event |
| 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.

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

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

SPECIFICATIONS AND RELATED MANUALS



| Resistor, Sender and Solenoid Specifications | | |
|--|--------------------------------|---------------------------------------|
| Part No. | Component Description | Resistance (Ohms) ¹ |
| 3E-6332 | Solenoid: Start Aid | 6 |
| 9X-3506 | Resistor: Can Data Link | 120 ± 6.0 |
| 125-9740 | Resistor: Blower Motor Speed | A-C 2 ±5% B-C 1 ±5% C-D .36 ±5% |
| 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 |
| 192-6443 | Solenoid: Raise Valve | 5.0 ± 0.3 |
| 196-2403 | Solenoid: Lower Valve | 5.0 ± 0.3 |
| 201-0950 | Solenoid: Park Brake | 41.9 ± 2.1 |
| 239-9368 | Resistor: Water Valve Actuator | 27K ± 270 |

¹ At room temperature unless otherwise noted.

| 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-6449 | OTG Temperature Switch | 38 ±3°C (100.4 ± 5.4°F) | 27 °C (80.6 °C) | Normally Closed |
| 3E-6450 | Steering Pressure Switch | 1200 kPa (174.05 psi) | 700 ±100kPa (101.5 ±14.5psi) | Normally Open A-B Normally Closed A-C |
| 3E-7688 | Low Brake Oil Pressure Sw. | 13800 kPa MAX (2002 psi MAX) | 10300 ± 689 kPa (1494 psi ±100 psi) | Normally Open A-B Normally Closed A-C |
| 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 |
| 172-7071 | Stop Lamp Pressure Switch Service Brake Pressure Switch | 200 ±50 kPa (29 psi ±7psi) | 140 kPa (20.3 psi) | Normally Open |
| 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 |
| 227-6744 | OTG Filter Bypass Switch | 276 ±28kPa (40 ±4.1psi) | 179 kPa (26 psi) | 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 |
| Alternator: 200-2232 (Delco 34SI) | SENR7508 |
| Starting Motor: 207-1556 | |
| Consist: 207-1557 (Delco 42MT) | SENR3581 |
| Consist: 6V-5582 (Nippondenso F8.0) | SENR4975 |
| ADEM III ECM | REN1285 |
| Power Train ECS | REN8035 |

WIRE DESCRIPTION

Page 1 of 2



| Wire Number | Wire Color | Description | Wire Number | Wire Color | Description |
|-------------------------------|------------|--|--------------------------------------|------------|---------------------------------|
| Power Circuits | | | Lighting Circuits (Continued) | | |
| 101 | RD | Bat (+) | 610 | OR | Head Lamp Basic |
| 102 | RD | Hd Lmp | 611 | PU | Head Lamp Hi |
| 103 | RD | Dash Lamps / Flasher | 612 | GY | Backup Lamp |
| 105 | RD | Key Sw | 614 | PU | Park / Tail / Dash Lamp |
| 108 | BU | Air Seat | 619 | GN | Head Lamp Lo |
| 109 | RD | Alt Output (+) Term. | 624 | YL | Flood Lamp Bowl |
| 110 | GN | Product Link / Rear Wiper | Control Circuits | | |
| 111 | RD | Transmission Control / ET CONN / Display Cluster | 703 | BU | Xmsn Up Sol |
| 112 | PU | Main Power Rly Output | 704 | GY | Xmsn Down Sol |
| 113 | OR | Opr Mon Panel Vmis B+ Switched | 705 | PK | Xmsn Lockup Clutch Sol Basic |
| 114 | RD | Warning Horn (forward) | 708 | YL | Xmsn Hold Sw |
| 115 | RD | Dome Lamp / Converter | 709 | OR | Sensor Power Supply |
| 116 | BR | Beacon / Rear Flood | 720 | PU | Xmsn Brake Sw |
| 118 | GY | Front Wiper | 721 | BR | Xmsn Gear Code 1 |
| 121 | RD | Back Alarm To Lamp | 722 | WH | Xmsn Gear Code 2 |
| 123 | WH | Heated Seat | 723 | OR | Xmsn Gear Code 3 |
| 124 | GN | A/C Breaker | 724 | YL | Xmsn Gear Code 4 |
| 129 | RD | Cigar Lighter / EEC | 725 | GN | Xmsn Gear Code 5 |
| 136 | GN | Suppl Ster | 726 | BU | Xmsn Gear Code 6 |
| 150 | RD | Engine Breaker | 727 | GN | Suppl Ster Motor Relay |
| 165 | YL | Start Aid / Converter | 728 | BU | Suppl Ster Cont Sw |
| 170 | RD | Product Link | 751 | GN | Xmsn Shift Sol No. 1 Or 3 |
| 173 | RD | Stop Lamps | 752 | YL | Xmsn Shift Sol No. 2 |
| 175 | RD | Hood Breaker | 754 | BU | Xmsn Shift Sol No. 3 Or 1 |
| 177 | RD | Main Brkr | 755 | OR | Xmsn Shift Sol No. 4 Or 5 |
| Ground Circuits | | | A701 | GY | Injector #1 |
| 200 | BK | Main Chassis | A702 | PU | Injector #2 |
| 201 | BK | Operator Monitor Return | A703 | BR | Injector #3 |
| 202 | BK | Xmsn Ctrl | A704 | GN | Injector #4 |
| 277 | BK | Xmsn Ctrl Ident Code 1 | A705 | BU | Injector #5 |
| 278 | BK | Xmsn Ctrl Ident Code 2 | A706 | GY | Injector #6 |
| 279 | BK | Xmsn Ctrl Ident Code 3 | A746 | PK | Turbo Outlet Pressure |
| 280 | BK | Xmsn Ctrl Ident Code 4 | A747 | GY | Atmospheric Pressure |
| 281 | BK | Xmsn Ctrl Ident Code 5 | A751 | YL | After Cooler Temp |
| 290 | BK | Service | E737 | PU | OTG Temp Sw |
| 291 | BK | Clear | E789 | PU | Load Return |
| C215 | BK | Autolube Pressure Switch Ground | E790 | PK | Raise / Lower Solenoid Valves |
| Basic Machine Circuits | | | F710 | BR | Start Aid Relay |
| 304 | WH | Starter Relay No. 1 Output | F711 | GN | Can Link + |
| 306 | GN | Starter Relay | F712 | GY | Can Link - |
| 307 | OR | Key Start Crank Position | F715 | PU | Shutdown |
| 308 | YL | Main Power Relay Coil | F716 | WH | Shutdown |
| 310 | PU | Start Aid Sw To Start Aid Sol | G704 | YL | Body Raise Sol |
| 317 | YL | Start Aid Relay To Start Aid Sol | G705 | GN | Body Lower Sol |
| 320 | OR | Horn Relay Coil To Sw | G706 | BU | Retarder Sol No. 1 |
| 322 | GY | Warning Horn (forward) | G707 | GN | Retarder Sol No. 2 |
| 324 | BU | Differential Lock Sol | G708 | GY | Retarder Sol No. 3 |
| 331 | OR | Backup Alarm Relay Coil | J700 | BR | Engine Retarder Sol Cyl 1 2 5 6 |
| 368 | OR | Diff Lock (front) | J701 | GN | Engine Retarder Sol 3 4 |
| 369 | PU | Diff Lock (rear) | J702 | BK | Engine Retarder Sol Common |
| 374 | PK | Powertrain ECM To Park Brake Sw | J764 | BR | Switch/sensor Return #1 |
| 397 | OR | Hood Raise Motor | K737 | BR | Engine Retarder Sol Cyl 1 2 5 6 |
| 398 | BU | Hood Raise Motor | K738 | GN | Engine Retarder Sol 3 4 |
| A300 | GN | Hood Raise Relay Coil | K739 | BU | Engine Retarder Sol Common |
| A301 | WH | Hood Raise Relay Coil | K742 | OR | Top Gear Switch (up) |

WIRE DESCRIPTION

Page 2 of 2



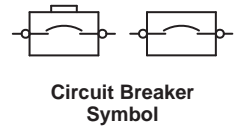
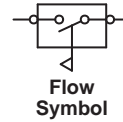
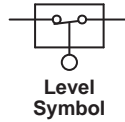
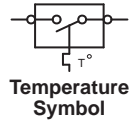
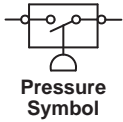
| Wire Number | Wire Color | Description | Wire Number | Wire Color | Description |
|----------------------------|------------|--|-------------|------------|---------------------------------------|
| A323 | GY | Interaxle Diff Lock Solenoid | K744 | BU | Retarder Proportional Solenoid |
| A324 | PK | Diff Lock Selector Sw Jumper | L730 | OR | Analog Sensor Power (+5v) |
| Monitoring Circuits | | | M739 | YL | Solenoid Return 2 |
| 403 | GN | Alternator (r) Term. | N787 | BU | Hydraulic Tank Filter Bypass Switch |
| 406 | PU | Opr Mon Coolant Temp | N788 | PK | Steer Tank Filter Bypass Switch |
| 410 | WH | Opr Mon Fault Alarm | 802 | YL | Auto Lube Press. Sw |
| 417 | GY | Primary Ster Sw | 892 | BR | Cat Data Link (-) |
| 419 | YL | Opr Mon Parking Brake | 893 | GN | Cat Data Link (+) |
| 426 | BR | Opr Mon Power Train Oil Filter | G828 | WH | Engine Control Pressure Sensor +5v |
| 432 | PK | Opr Mon Brake Press. (oil) | G829 | GN | Engine Control Pressure Sensor Common |
| 447 | PK | Fuel Level Gage | G833 | PK | Engine Temperature Sensor Common |
| C452 | WH | Fuel Press Sw | G834 | PU | Cooling Fan Speed + |
| F400 | GY | Low Oil Pressure | G835 | OR | Cooling Fan Speed - |
| G485 | BU | Opr Mon Front Brake Temperature | G850 | BU | Inlet Air Heater |
| G486 | GN | Opr Mon Rear Brake Temperature | G856 | WH | TDC Probe + |
| Accessory Circuits | | | G857 | YL | TDC Probe - |
| 500 | BR | Wiper - Front (park) | J812 | PK | Fan Drive Oil Filter Bypass Switch |
| 501 | GN | Wiper - Front (low) | K884 | YL | Economy Power Mode 1 |
| 502 | OR | Wiper - Front (hi) | K885 | PU | Economy Power Mode 2 |
| 503 | BR | Wiper - Rear (park) | R800 | OR | +8v Digital Sensor Power |
| 504 | YL | Wiper - Rear (low) | R816 | PK | Autolube Cab Control |
| 505 | BU | Wiper - Rear (hi) | 900 | PU | Xmsn Shift Sol No. 5 Or 4 |
| 506 | PU | Washer - Front | 901 | WH | Xmsn Shift Sol No. 6 |
| 507 | WH | Washer - Rear | 921 | WH | Xmsn Sol No 1 Or 3 Return |
| 508 | PU | Radio Speaker - Left | 922 | BR | Xmsn Sol No 2 Return |
| 509 | WH | Radio Speaker - Left (common) | 993 | BR | Analog Sensor Common |
| 511 | BR | Radio Speaker - Right | 994 | GY | Oil Pressure (filtered) |
| 512 | GN | Radio Speaker - Right (common) | 995 | BU | Coolant Temperature |
| 513 | OR | A/C Compressor Pressure Sw | 998 | BR | Digital Sensor Return |
| 515 | GY | Blower Motor (hi) | A958 | WH | Park Brake Sol |
| 516 | GN | Blower Motor (medium) | C912 | GN | Throttle Position |
| 517 | BU | Blower Motor (low) | C967 | BU | Inlet Air Temperature |
| 522 | WH | A/C Clutch to Thermostat Sw | C991 | PK | Fuel Filter Monitor |
| 537 | GN | Turn Signal Sw To Flasher | E900 | WH | Trans Output Spd + |
| 575 | YL | Wiper - Aux (park) | E901 | GN | Trans Output Spd - |
| 590 | GY | Wiper Sw To Intermittent Module | E906 | OR | Trans Output Spd Q+ |
| 591 | WH | Intermittent Module To Wiper Motor | E907 | GY | Trans Output Spd Q- |
| 592 | BU | Dc/dc Converter Power Output | E963 | BK | Engine Speed/timing A- |
| A513 | PK | Dc/dc Converter Memory Output | E964 | WH | Engine Speed/timing A+ |
| A523 | PU | Temp Potentiometer Pos 1 | E965 | BU | Engine Speed/timing B- |
| A524 | BR | Temp Potentiometer Pos 2 | E966 | YL | Engine Speed/timing B+ |
| A525 | GN | Temp Potentiometer Pos 3 | E971 | GN | A/C High Pressure Switch |
| A526 | PK | Electronic Water Valve Actuator | K952 | BR | Sol Return 3 |
| C542 | GN | Heated Mirror Power | K977 | PK | Ecpc Trans Oil Temp Sensor |
| C547 | OR | Blower Motor (med-low) | L910 | PK | Torque Converter Output Speed + |
| E528 | PU | HVAC On/Off Sw To Blower Speed Sw And A/C Sw | L911 | YL | T/C Output Speed - |
| Lighting Circuits | | | L983 | WH | Injector Common 1 & 2 |
| 602 | WH | Dome Lamp | L984 | OR | Injector Common 3 & 4 |
| 604 | OR | Stop Lamp | L985 | YL | Injector Common 5 & 6 |
| 605 | YL | Turn Lamp - Left | M996 | PK | Hoist Lever Position |
| 606 | GY | Turn Lamp - Right | M997 | PU | Shift Lever Position |

HARNESS and WIRE

Electrical Schematic Symbols



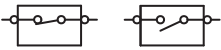
Symbols



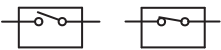
Symbols and Definitions



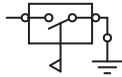
Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.



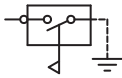
Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



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.



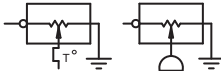
Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



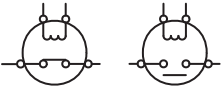
Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



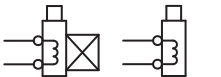
Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



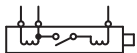
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



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.



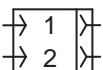
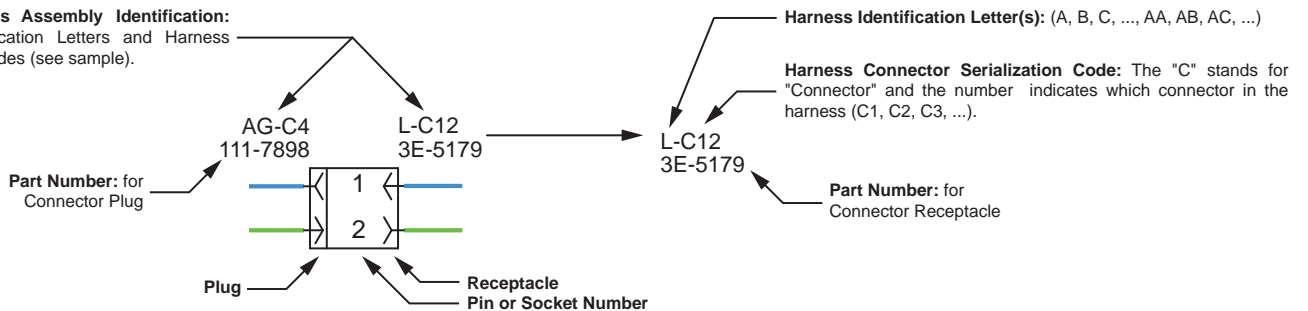
Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



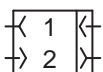
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil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

Harness and Wire Symbols

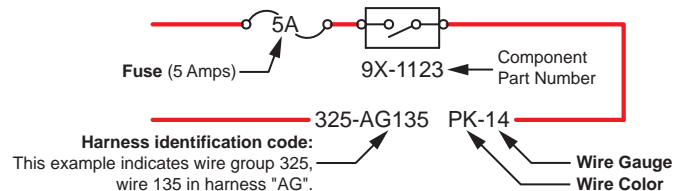
Wire, Cable, or Harness Assembly Identification: Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).



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.



MACHINE HARNESS CONNECTOR AND COMPONENT LOCATIONS

