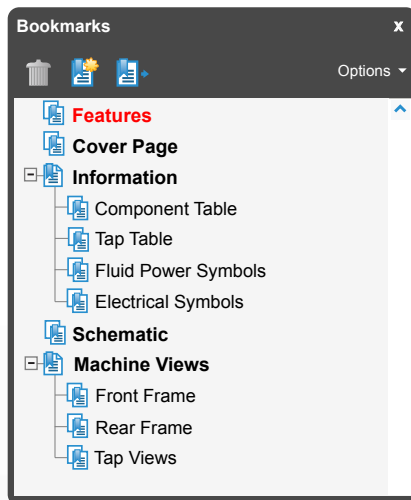


# INTERACTIVE SCHEMATIC



***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**.

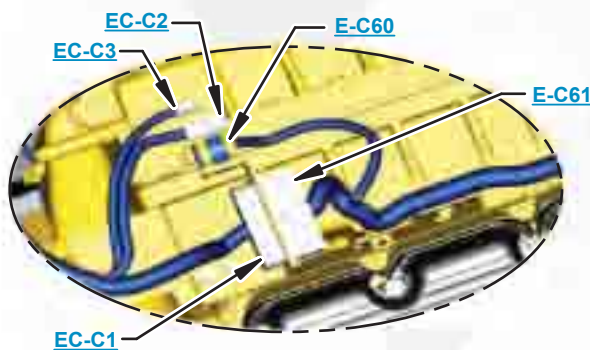
Select **PROPERTIES**.

**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

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## **950H and 962H Wheel Loader Electrical System**

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**950H:**  
**MXL1-UP**  
**JLX1-UP**

**962H:**  
**SSA1-UP**  
**PCW1-UP**

**Volume 1 of 2: Cab Wiring**  
**Volume 2 of 2: Chassis Wiring**

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# COMPONENT LOCATION

## Volume 1 of 2 - CAB WIRING



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Alarm - Action	<a href="#">D-13</a>	<a href="#">1</a>	Resistor 2	<a href="#">J-13</a>	<a href="#">45</a>
Alarm - Quick Coupler	<a href="#">D-1</a>	<a href="#">2</a>	Sensor - 3rd Lever Position	<a href="#">E-6</a>	<a href="#">46</a>
Arc Suppressor - Forward Horn	<a href="#">G-6</a>	<a href="#">3</a>	Sensor - LH Brake Pedal	<a href="#">F-1</a>	<a href="#">47</a>
Arc Suppressor - Hazard	<a href="#">D-13</a>	<a href="#">4</a>	Sensor - Lift Lever Position	<a href="#">F-6</a>	<a href="#">48</a>
Arc Suppressor - Hazard LED Panel	<a href="#">F-1</a>	<a href="#">5</a>	Sensor - Throttle Position	<a href="#">F-1</a>	<a href="#">49</a>
Arc Suppressor - Turn Signal 1	<a href="#">D-13</a>	<a href="#">6</a>	Sensor - Tilt Lever Position	<a href="#">F-6</a>	<a href="#">50</a>
Arc Suppressor - Turn Signal 2	<a href="#">D-13</a>	<a href="#">7</a>	Switch - Auto Reverse Fan	<a href="#">C-1</a>	<a href="#">51</a>
Block AS - Fuse	<a href="#">A-14</a>	<a href="#">8</a>	Switch - Auto Dig Kickout Set	<a href="#">C-1</a>	<a href="#">52</a>
Control GP - Implement	<a href="#">E-11</a>	<a href="#">9</a>	Switch - Auto Dig Mode	<a href="#">D-3</a>	<a href="#">53</a>
Control GP - Joystick	<a href="#">H-6</a>	<a href="#">10</a>	Switch - Auto Dig Mode Select	<a href="#">C-1</a>	<a href="#">54</a>
Control GP - Machine	<a href="#">J-16</a>	<a href="#">11</a>	Switch - Auto Man Gear Sel	<a href="#">C-3</a>	<a href="#">55</a>
Control GP - Monitor (Messenger)	<a href="#">C-6</a>	<a href="#">12</a>	Switch - Autodig Trigger	<a href="#">F-6</a>	<a href="#">56</a>
Control GP - Payload	<a href="#">E-4</a>	<a href="#">13</a>	Switch - Beacon	<a href="#">F-3</a>	<a href="#">57</a>
Control GP - Product Link	<a href="#">H-11</a>	<a href="#">14</a>	Switch - Blower Fan Speed	<a href="#">C-7</a>	<a href="#">58</a>
Control Gp - Transmission (HMU STEERING)	<a href="#">G-3</a>	<a href="#">15</a>	Switch - Down Shift	<a href="#">E-6</a>	<a href="#">59</a>
Converter - Power 1	<a href="#">F-14</a>	<a href="#">16</a>	Switch - Fine Modulation 1	<a href="#">G-7</a>	<a href="#">60</a>
Converter - Power 2	<a href="#">E-13</a>	<a href="#">17</a>	Switch - Fine Modulation 2	<a href="#">E-7</a>	<a href="#">61</a>
Flasher - 24V	<a href="#">D-13</a>	<a href="#">18</a>	Switch - FNR	<a href="#">F-6</a>	<a href="#">62</a>
Ground - Cab 1	<a href="#">A-10</a>	<a href="#">19</a>	Switch - Forward Horn 1	<a href="#">H-6</a>	<a href="#">63</a>
Ground - Cab 2	<a href="#">A-10</a>	<a href="#">20</a>	Switch - Forward Horn 2	<a href="#">F-6</a>	<a href="#">64</a>
Ground - Cab 4	<a href="#">I-13</a>	<a href="#">21</a>	Switch - Hazard Lamp	<a href="#">F-3</a>	<a href="#">65</a>
Ground - Dash	<a href="#">J-4</a>	<a href="#">22</a>	Switch - Heated Mirror	<a href="#">D-2</a>	<a href="#">66</a>
Ground - Eng End Frame	<a href="#">I-13</a>	<a href="#">23</a>	Switch - HID Lamp	<a href="#">C-7</a>	<a href="#">67</a>
Ground - Upper Cab	<a href="#">A-3</a>	<a href="#">24</a>	Switch - HVAC Select	<a href="#">C-7</a>	<a href="#">68</a>
Horn - Implement Audible Alert	<a href="#">D-13</a>	<a href="#">25</a>	Switch - Implement Lockout 1	<a href="#">H-7</a>	<a href="#">69</a>
Indicator Panel - LH	<a href="#">J-1</a>	<a href="#">26</a>	Switch - Implement Lockout 2	<a href="#">F-7</a>	<a href="#">70</a>
Indicator Panel - RH	<a href="#">H-1</a>	<a href="#">27</a>	Switch - Key Start	<a href="#">F-3</a>	<a href="#">71</a>
Module GP - Display (Gauge Cluster)	<a href="#">I-1</a>	<a href="#">28</a>	Switch - Lift Tilt Kickout Set	<a href="#">D-1</a>	<a href="#">72</a>
Module GP - MSS	<a href="#">E-3</a>	<a href="#">29</a>	Switch - Low / Hi Beam	<a href="#">D-6</a>	<a href="#">73</a>
Motor - Blend Door Actuator	<a href="#">J-14</a>	<a href="#">30</a>	Switch - Mode Select	<a href="#">I-3</a>	<a href="#">74</a>
Motor - Blower	<a href="#">J-14</a>	<a href="#">31</a>	Switch - Neutralizer Override	<a href="#">C-2</a>	<a href="#">75</a>
Motor - Front Wiper	<a href="#">G-1</a>	<a href="#">32</a>	Switch - Payload Clear Store	<a href="#">A-4</a>	<a href="#">76</a>
Motor - Rear Wiper	<a href="#">I-13</a>	<a href="#">33</a>	Switch - Payload Reweigh Zero	<a href="#">C-6</a>	<a href="#">77</a>
Potentiometer AS - Temp Control	<a href="#">B-7</a>	<a href="#">34</a>	Switch - Quick Coupler	<a href="#">D-1</a>	<a href="#">78</a>
Relay - Axle Cooler	<a href="#">C-13</a>	<a href="#">35</a>	Switch - Rear Wiper Washer	<a href="#">C-3</a>	<a href="#">79</a>
Relay - Forward Cab Floodlamp	<a href="#">C-13</a>	<a href="#">36</a>	Switch - Ride Control	<a href="#">C-2</a>	<a href="#">80</a>
Relay - Forward Horn	<a href="#">C-13</a>	<a href="#">37</a>	Switch - Running Lamp	<a href="#">I-3</a>	<a href="#">81</a>
Relay - Heated Mirror	<a href="#">C-13</a>	<a href="#">38</a>	Switch - Secondary Steering Test	<a href="#">C-2</a>	<a href="#">82</a>
Relay - Rear Cab Floodlamp	<a href="#">C-13</a>	<a href="#">39</a>	Switch - Stop Lamp	<a href="#">F-1</a>	<a href="#">83</a>
Relay - Variable Pitch Fan	<a href="#">E-14</a>	<a href="#">40</a>	Switch - Third Func Cont	<a href="#">I-3</a>	<a href="#">84</a>
Resistor - Blower	<a href="#">I-14</a>	<a href="#">41</a>	Switch - Turn Signal	<a href="#">H-2</a>	<a href="#">85</a>
Resistor - Can A	<a href="#">I-5</a>	<a href="#">42</a>	Switch - Wiper	<a href="#">B-7</a>	<a href="#">86</a>
Resistor - Can B	<a href="#">B-4</a>	<a href="#">43</a>	Thermostat (HVAC)	<a href="#">I-14</a>	<a href="#">87</a>
Resistor 1	<a href="#">J-13</a>	<a href="#">44</a>			

# COMPONENT LOCATION

## Volume 2 of 2 - CHASSIS WIRING



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Actuator - Belly Guard	<a href="#">J-11</a>	<a href="#">88</a>	Sensor - Fuel Pressure	<a href="#">C-13</a>	<a href="#">134</a>
Alarm - Backup	<a href="#">G-13</a>	<a href="#">89</a>	Sensor - Hyd Oil Temp	<a href="#">H-5</a>	<a href="#">135</a>
Alternator	<a href="#">H-9</a>	<a href="#">90</a>	Sensor - Input Speed	<a href="#">H-6</a>	<a href="#">136</a>
Arc Suppressor - Quick Coupler	<a href="#">J-3</a>	<a href="#">91</a>	Sensor - Injection Actuation Pressure	<a href="#">D-12</a>	<a href="#">137</a>
Arc Suppressor	<a href="#">A-10</a>	<a href="#">92</a>	Sensor - Intake Man Air Temp	<a href="#">D-12</a>	<a href="#">138</a>
Arc Suppressor - Start Rly	<a href="#">H-11</a>	<a href="#">93</a>	Sensor - Lift Cyl He Press	<a href="#">J-3</a>	<a href="#">139</a>
Arc Suppressor 1	<a href="#">I-7</a>	<a href="#">94</a>	Sensor - Oil Pressure	<a href="#">C-12</a>	<a href="#">140</a>
Battery - 12V 1	<a href="#">J-10</a>	<a href="#">95</a>	Sensor - Output Speed (Leading)	<a href="#">G-6</a>	<a href="#">141</a>
Battery - 12V 2	<a href="#">J-9</a>	<a href="#">96</a>	Sensor - Output Speed (Trailing)	<a href="#">G-6</a>	<a href="#">142</a>
Breaker - Air Inlet Heater	<a href="#">H-11</a>	<a href="#">97</a>	Sensor - Park Brake Press	<a href="#">B-3</a>	<a href="#">143</a>
Breaker - Belly Guard	<a href="#">I-11</a>	<a href="#">98</a>	Sensor - Rail Pressure	<a href="#">D-12</a>	<a href="#">144</a>
Breaker - Hood Actuator	<a href="#">I-11</a>	<a href="#">99</a>	Sensor - Rear Axle Oil Temp	<a href="#">A-8</a>	<a href="#">145</a>
Breaker - Main	<a href="#">H-11</a>	<a href="#">100</a>	Sensor - Rotary Lift Pos	<a href="#">J-3</a>	<a href="#">146</a>
Breaker - Running Lamp	<a href="#">I-11</a>	<a href="#">101</a>	Sensor - Rotary Tilt Position	<a href="#">J-2</a>	<a href="#">147</a>
Breaker - Start	<a href="#">H-11</a>	<a href="#">102</a>	Sensor - Torq Conv Temp	<a href="#">C-7</a>	<a href="#">148</a>
Breaker - Unswitched Buss (Cab)	<a href="#">H-11</a>	<a href="#">103</a>	Sensor - Turbo Inlet Pressure	<a href="#">D-9</a>	<a href="#">149</a>
Clutch GP - Axle Cooler	<a href="#">D-9</a>	<a href="#">104</a>	Sensor - XMSN Oil Temp	<a href="#">H-6</a>	<a href="#">150</a>
Control GP - Engine	<a href="#">F-11</a>	<a href="#">105</a>	Sensor Group - Speed	<a href="#">C-12</a>	<a href="#">151</a>
Cover GP - Air Inlet	<a href="#">D-10</a>	<a href="#">106</a>	Solenoid - AC Clutch	<a href="#">A-10</a>	<a href="#">152</a>
Ground	<a href="#">G-13</a>	<a href="#">107</a>	Solenoid - Aux 3rd Fun Rearward	<a href="#">G-2</a>	<a href="#">153</a>
Ground - Alternator	<a href="#">H-8</a>	<a href="#">108</a>	Solenoid - Aux 3rd FunFwd	<a href="#">G-2</a>	<a href="#">154</a>
Ground - Engine	<a href="#">I-8</a>	<a href="#">109</a>	Solenoid - Dump Prop	<a href="#">H-2</a>	<a href="#">155</a>
Ground - LH	<a href="#">J-9</a>	<a href="#">110</a>	Solenoid - Injectors 1-6	<a href="#">E-13</a>	<a href="#">156</a>
Ground - RH	<a href="#">A-7</a>	<a href="#">111</a>	Solenoid - Lower	<a href="#">G-2</a>	<a href="#">157</a>
Ground - Secondary Steering	<a href="#">H-7</a>	<a href="#">112</a>	Solenoid - Pilot Hyd Supp	<a href="#">G-2</a>	<a href="#">158</a>
Horn - Forward High	<a href="#">H-3</a>	<a href="#">113</a>	Solenoid - Quick Coupler	<a href="#">I-3</a>	<a href="#">159</a>
Motor - Hood Actuator	<a href="#">H-12</a>	<a href="#">114</a>	Solenoid - Rackback Prop	<a href="#">H-2</a>	<a href="#">160</a>
Motor - Starter	<a href="#">I-8</a>	<a href="#">115</a>	Solenoid - Raise Prop	<a href="#">G-2</a>	<a href="#">161</a>
Pump and Motor GP - Secondary Steering	<a href="#">H-7</a>	<a href="#">116</a>	Solenoid - Ride Control Activation	<a href="#">H-3</a>	<a href="#">162</a>
Pump AS - Front Washer	<a href="#">B-3</a>	<a href="#">117</a>	Solenoid - Ride Control Balance	<a href="#">H-3</a>	<a href="#">163</a>
Pump AS - Rear Washer	<a href="#">B-3</a>	<a href="#">118</a>	Solenoid - Variable Speed Fan	<a href="#">H-8</a>	<a href="#">164</a>
Pump GP - Fuel Priming	<a href="#">A-10</a>	<a href="#">119</a>	Switch - AC Press	<a href="#">B-10</a>	<a href="#">165</a>
Receptacle - Auxiliary Start	<a href="#">J-9</a>	<a href="#">120</a>	Switch - Actuator	<a href="#">J-10</a>	<a href="#">166</a>
Relay - Air Inlet Heater	<a href="#">H-11</a>	<a href="#">121</a>	Switch - Aux Ground Level Shutdown	<a href="#">B-10</a>	<a href="#">167</a>
Relay - Backup	<a href="#">G-14</a>	<a href="#">122</a>	Switch - Disconnect	<a href="#">J-9</a>	<a href="#">168</a>
Relay - Hood Raise / Lower Motor Control	<a href="#">I-10</a>	<a href="#">123</a>	Switch - Fuel Pressure	<a href="#">C-13</a>	<a href="#">169</a>
Relay - Main	<a href="#">H-11</a>	<a href="#">124</a>	Switch - Fuel Priming Pump	<a href="#">A-10</a>	<a href="#">170</a>
Relay - Sec Steer Intermediate	<a href="#">I-7</a>	<a href="#">125</a>	Switch - Ground Level Shutdown	<a href="#">G-12</a>	<a href="#">171</a>
Relay - Start	<a href="#">H-11</a>	<a href="#">126</a>	Switch - Hood Actuator	<a href="#">G-12</a>	<a href="#">172</a>
Resistor - DC Can 1	<a href="#">C-7</a>	<a href="#">127</a>	Switch - Hyd Filter Bypass	<a href="#">B-3</a>	<a href="#">173</a>
Sender - Fuel Level	<a href="#">I-13</a>	<a href="#">128</a>	Switch - Prim Steer Press	<a href="#">I-6</a>	<a href="#">174</a>
Sensor - Atmospheric Pressure	<a href="#">D-12</a>	<a href="#">129</a>	Switch - Sec Steer Press	<a href="#">I-6</a>	<a href="#">175</a>
Sensor - Boost Pressure	<a href="#">D-12</a>	<a href="#">130</a>	Switch - XMSN Filter Bypass	<a href="#">B-3</a>	<a href="#">176</a>
Sensor - Oil Press	<a href="#">H-8</a>	<a href="#">131</a>	Valve GP - Clutch 1-6	<a href="#">H-7</a>	<a href="#">177</a>
Sensor - Coolant Temp	<a href="#">D-12</a>	<a href="#">132</a>	Valve GP - Ether Starting	<a href="#">C-6</a>	<a href="#">178</a>
Sensor - Front Axle Oil Temp	<a href="#">I-2</a>	<a href="#">133</a>			

# CONNECTOR LOCATION

## Volume 1 of 2 - CAB WIRING



Connector Number	Schematic Location
<a href="#"><u>CONN 1</u></a>	<a href="#"><u>B-16</u></a>
<a href="#"><u>CONN 2</u></a>	<a href="#"><u>C-16</u></a>
<a href="#"><u>CONN 3</u></a>	<a href="#"><u>D-16</u></a>
<a href="#"><u>CONN 4</u></a>	<a href="#"><u>D-16</u></a>
<a href="#"><u>CONN 5</u></a>	<a href="#"><u>H-14</u></a>
<a href="#"><u>CONN 6</u></a>	<a href="#"><u>E-13</u></a>
<a href="#"><u>CONN 7</u></a>	<a href="#"><u>A-12</u></a>
<a href="#"><u>CONN 8</u></a>	<a href="#"><u>F-12</u></a>
<a href="#"><u>CONN 9</u></a>	<a href="#"><u>F-12</u></a>
<a href="#"><u>CONN 10</u></a>	<a href="#"><u>G-12</u></a>
<a href="#"><u>CONN 11</u></a>	<a href="#"><u>J-12</u></a>
<a href="#"><u>CONN 12</u></a>	<a href="#"><u>I-10</u></a>
<a href="#"><u>CONN 13</u></a>	<a href="#"><u>H-9, F-8</u></a>
<a href="#"><u>CONN 14</u></a>	<a href="#"><u>H-9, F-8</u></a>
<a href="#"><u>CONN 15</u></a>	<a href="#"><u>E-8</u></a>
<a href="#"><u>CONN 16</u></a>	<a href="#"><u>D-6</u></a>
<a href="#"><u>CONN 17</u></a>	<a href="#"><u>E-3</u></a>
<a href="#"><u>CONN 18</u></a>	<a href="#"><u>E-2</u></a>

# CONNECTOR LOCATION

## Volume 2 of 2 - CHASSIS WIRING



Connector Number	Schematic Location
<a href="#">CONN 1</a>	<a href="#">D-4</a>
<a href="#">CONN 2</a>	<a href="#">E-4</a>
<a href="#">CONN 3</a>	<a href="#">F-4</a>
<a href="#">CONN 4</a>	<a href="#">G-4</a>
<a href="#">CONN 19</a>	<a href="#">G-13</a>
<a href="#">CONN 20</a>	<a href="#">G-13</a>
<a href="#">CONN 21</a>	<a href="#">C-12</a>
<a href="#">CONN 22</a>	<a href="#">C-12</a>
<a href="#">CONN 23</a>	<a href="#">E-12</a>
<a href="#">CONN 24</a>	<a href="#">H-12</a>
<a href="#">CONN 25</a>	<a href="#">A-8</a>
<a href="#">CONN 26</a>	<a href="#">F-7</a>
<a href="#">CONN 27</a>	<a href="#">E-7</a>
<a href="#">CONN 28</a>	<a href="#">E-7</a>
<a href="#">CONN 29</a>	<a href="#">I-6</a>
<a href="#">CONN 30</a>	<a href="#">A-4</a>
<a href="#">CONN 31</a>	<a href="#">B-4</a>
<a href="#">CONN 32</a>	<a href="#">I-4</a>
<a href="#">CONN 33</a>	<a href="#">I-3</a>
<a href="#">CONN 34</a>	<a href="#">I-3</a>
<a href="#">CONN 35</a>	<a href="#">H-3</a>
<a href="#">CONN 36</a>	<a href="#">G-3</a>
<a href="#">CONN 37</a>	<a href="#">A-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.

# CID / MID / FMI

## Volume 1 of 2 - CAB WIRING



Component Identifiers (CID <sup>1</sup> ) Module Identifier (MID <sup>2</sup> ) Payload Control System (MID No. 074)	
CID	Component
0168	Electrical System Voltage
0364	Head End Lift Cylinder Pressure Sensor
0591	Electrically Erasable Programmable Read Only Memory
0769	Rod End Lift Cylinder Pressure Sensor
1964	Lift Cylinder Position Sensor

Failure Mode Identifiers (FMI) <sup>1</sup>	
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.

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

# CID / MID / FMI

## Volume 2 of 2 - CHASSIS WIRING



Failure Mode Identifiers (FMI) <sup>1</sup>	
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.

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

Event Codes Engine Control	
Event Code	Condition
E0096	HighFuelPressure
E0162	HighBoostPressure
E0198	LowFuelPressure
E0265	UserDefinedShutdown
E0360	LowEngineOilPressure
E0361	HighEngineCoolantTemperature
E0362	EngineOverspeed
E0390	FuelFilterRestriction
E0539	HighIntakeManifoldAirTemperature

Component Identifiers (CID <sup>1</sup> ) Module Identifier (MID <sup>2</sup> ) Engine Control	
CID	Component
0001	Cylinder #1 Injector
0002	Cylinder #2 Injector
0003	Cylinder #3 Injector
0004	Cylinder #4 Injector
0005	Cylinder #5 Injector
0006	Cylinder #6 Injector
0041	8 Volt DC Supply
0042	Injector Actuation Valve
0091	ThrottlePositionSensor
0094	Fuel Delivery Pressure Sensor
0100	Engine Oil Pressure Sensor
0110	Engine Coolant Temperature Sensor
0164	Injector Actuation Pressure Sensor
0168	Electrical System Voltage
0172	Intake Manifold Air Temperature Sensor
0174	Fuel Temperature Sensor
0190	Engine Speed Sensor
0253	Personality Module
0261	Engine Timing Calibration
0262	5 Volt Sensor DC Power Supply
0268	Programmed Parameter Fault
0274	Atmospheric Pressure Sensor
0286	Low Oil Pressure Lamp
0342	Secondary Engine Speed Sensor
0617	Inlet Air Heater Relay
1639	Machine Security System Module
1785	Intake Manifold Pressure Sensor
2417	Ether Injection Control Solenoid

<sup>1</sup> The CID is a diagnostic code that indicates which circuit is faulty.



# SPECIFICATIONS AND RELATED MANUALS

## Volume 1 of 2 - CAB WIRING



Resistor Specifications		
Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
9G-1950	Resistor: Blower	2 ± .1
134-2540	Resistor: Can A Can B	120 ± 12

<sup>1</sup> At room temperature unless otherwise noted.

Off-Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
3E-5464	Thermostat (HVAC)	1.1 ± 0.8° C 30 ± 1.4° F	2.2 ± 0.8° C 36 ± 1.4° F	Normally Closed

Title	Form Number
Cross Reference for Electrical Connectors:	REHS0970
Payload Control:	REN6293
Machine Control:	UENR0795

# SPECIFICATIONS AND RELATED MANUALS

## Volume 2 of 2 - CHASSIS WIRING



Off-Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
258-0883	Fuel Pressure	110.3 ± 13.8 kPa (15.99 to 2 psi)	69 kPa min (10 psi)	Normally Closed
227-6744	Hyd Filter Bypass XMSN Filter Bypass	293 ± 35 kPa (42.49 to 0.29 psi)	179 kPa min (25.96 psi)	Normally Closed
367-9074	Primary Steer Pressure Secondary Steer Pressure	1200 kPa Max (174.04psi)	700 ± 100 kPa (101.52 to 14.5 psi)	A-B: N / O A-C: N / C
355-3148	AC High/Low Pressure	275 to 2800 kPa <sup>1</sup> (39.9 to 253.8 psi)	170 to 1750 kPa <sup>1</sup> ( 24.65 to 253.816 psi)	Normally Open <sup>2</sup>

Resistor, Sender and Solenoid Specifications		
Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
163-0872	Solenoid: AC Clutch	17.6 ± 0.6
134-2540	Resistor: DC Can 1	120 ± 12
251-3268	Solenoid: Ride Control Activation	33.75 ± 1.68
313-7668	Solenoid: Aux 3rd Function Forward Aux 3rd Function Rearward	5 ± 0.3
313-7668	Solenoid: Dump Prop Lower Rackback Prop Raise Prop	5 ± 0.3
322-7452	Sender: Fuel Level	Empty: 240-250 Full: 28-33
328-2585	Solenoid: Injectors 1-6	0.815 ± 0.045
333-8242	Solenoid: Pilot Hyd Supp	33.75 ± 1.69

<sup>1</sup> At room temperature unless otherwise noted.

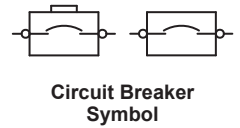
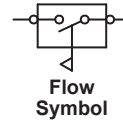
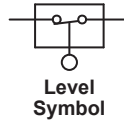
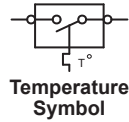
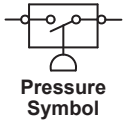
Related Electrical Service Manuals	
Title	Form Number
Cross Reference for Electrical Connectors:	REHS0970
Starting Motor: Delco 42-MT	SENR3581
Engine Control:	RENR5089

# HARNESS and WIRE

## Electrical Schematic Symbols



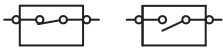
### Symbols



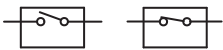
### Symbols and Definitions



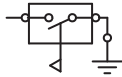
**Fuse:** A component in an electrical circuit that will open the circuit if too much current flows through it.



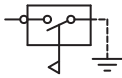
**Switch (Normally Open):** A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



**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.



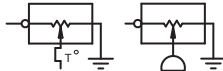
**Ground (Wired):** This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



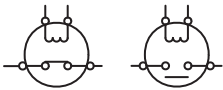
**Ground (Case):** This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



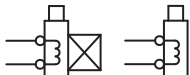
**Reed Switch:** A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



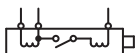
**Sender:** A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



**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.



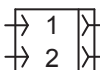
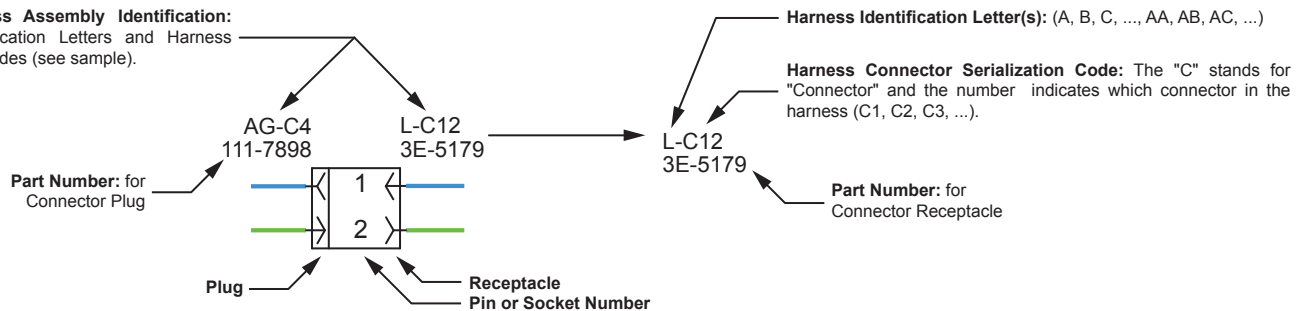
**Solenoid:** A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



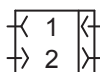
**Magnetic Latch Solenoid:** A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch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

### Harness and Wire Symbols

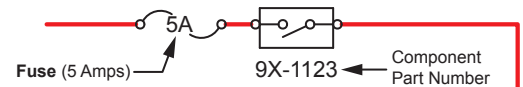
**Wire, Cable, or Harness Assembly Identification:**  
Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).



**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.

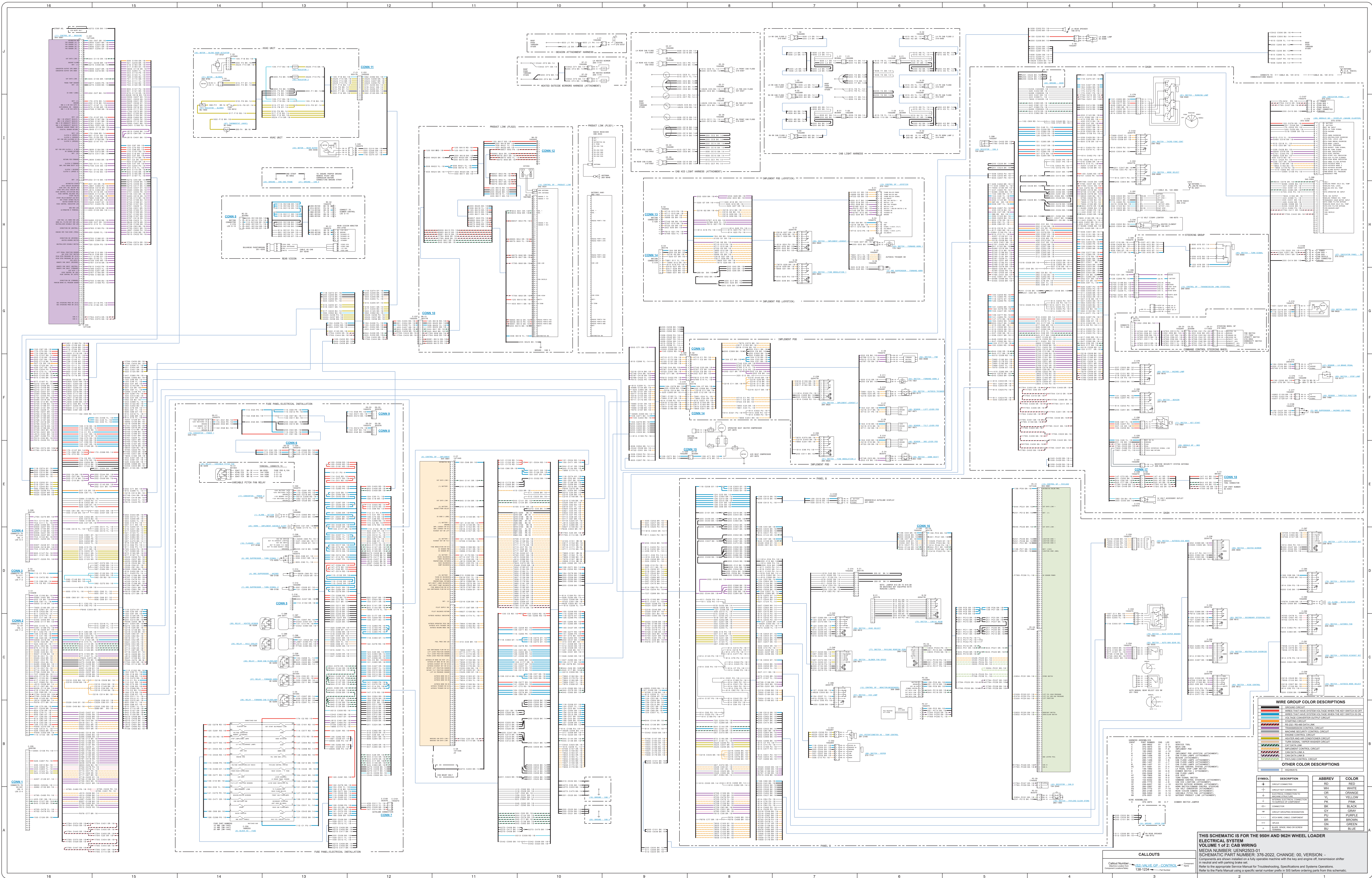


**Harness identification code:**  
This example indicates wire group 325, wire 135 in harness "AG".

**Wire Gauge**

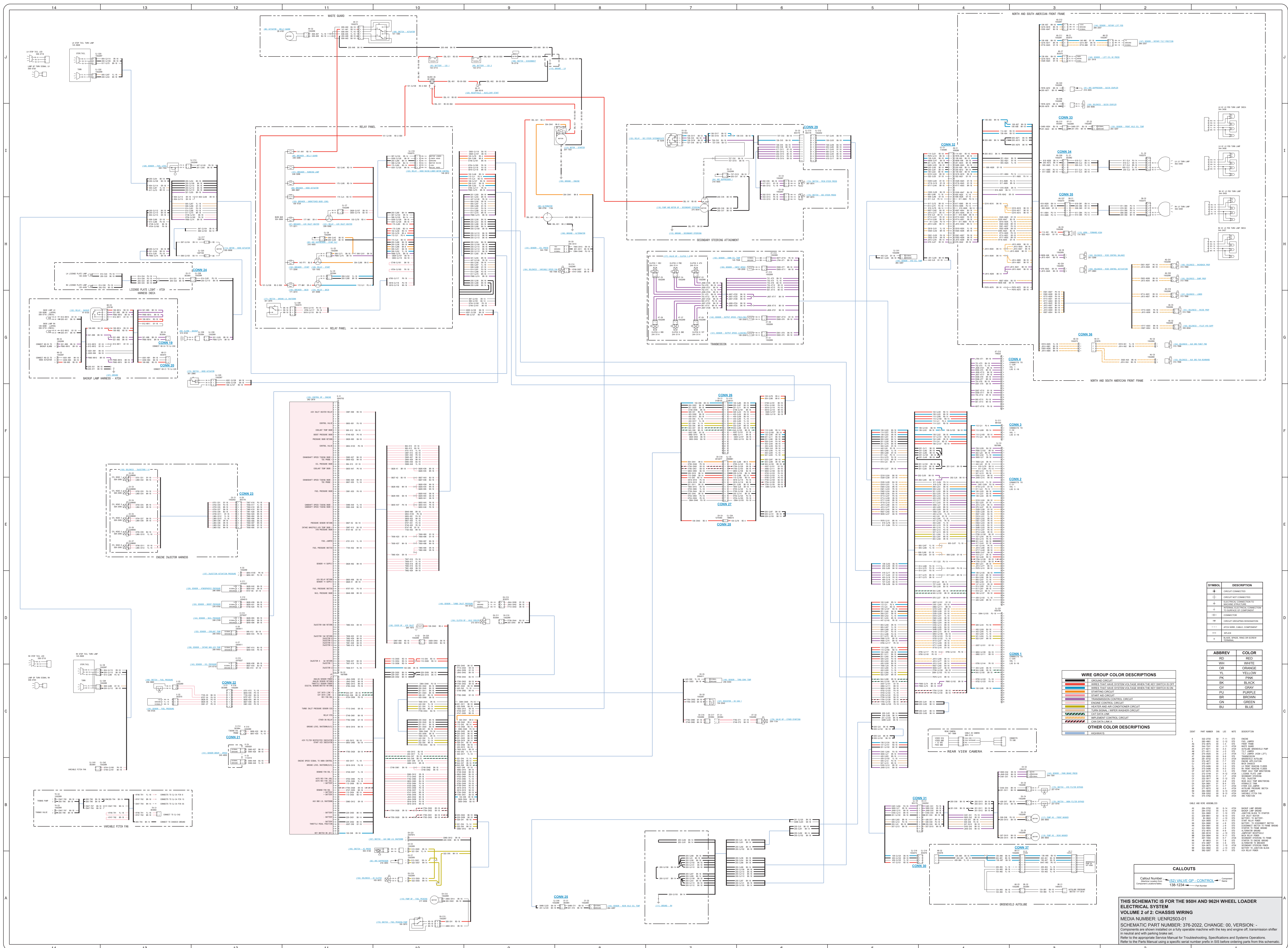
**Wire Color**



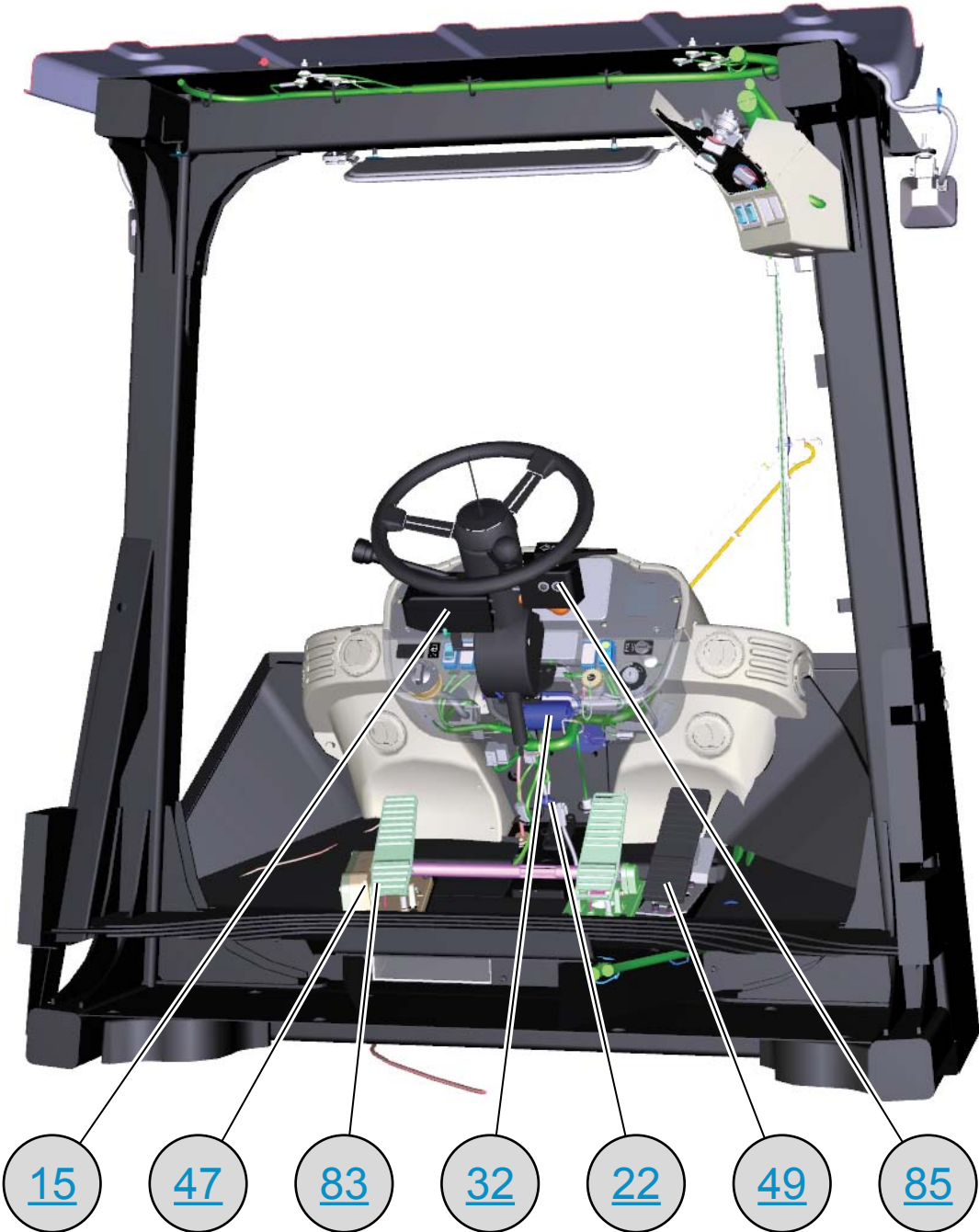


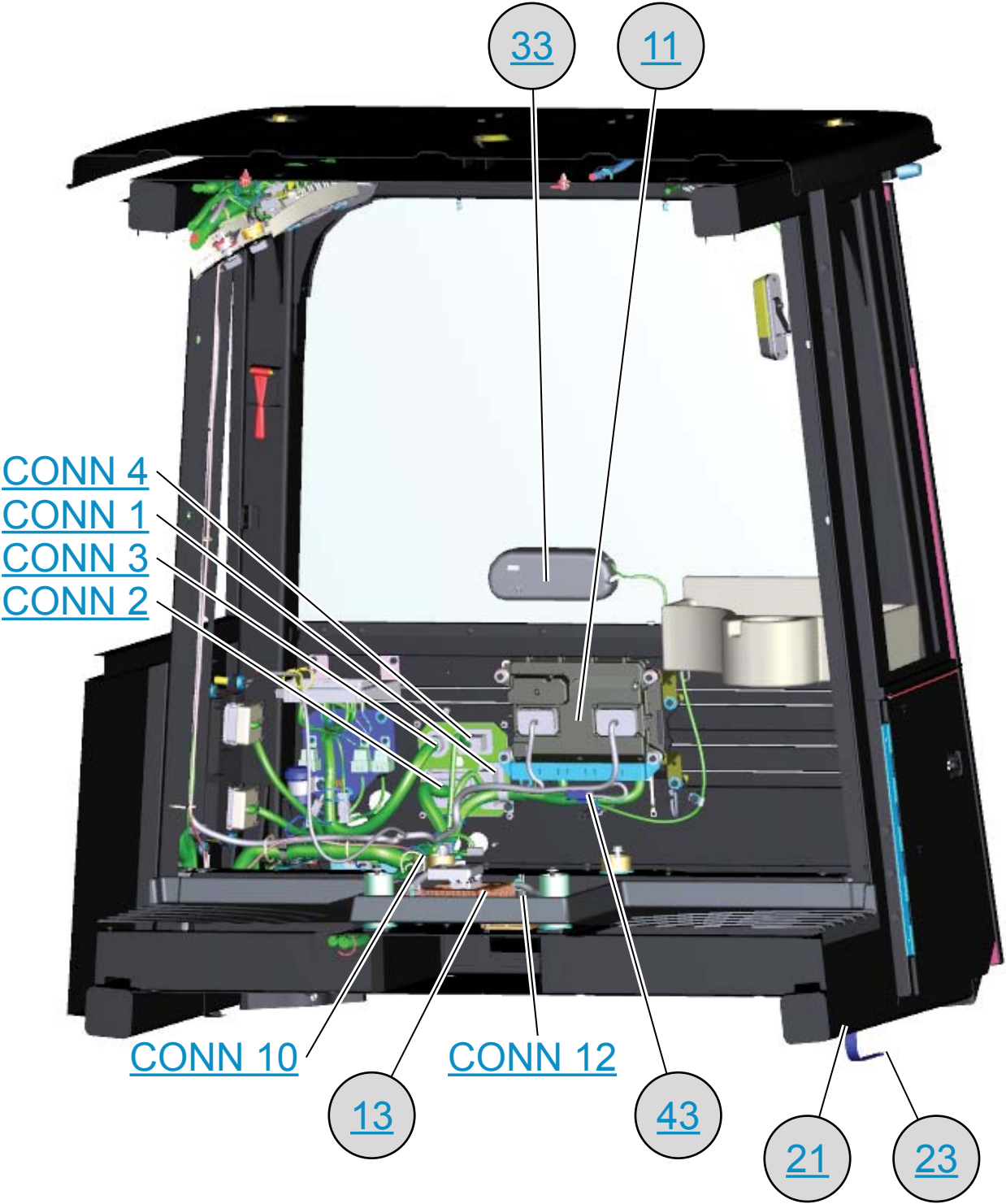
THIS SCHEMATIC IS FOR THE 950H AND 962H WHEEL LOADER  
ELECTRICAL SYSTEM  
VOLUME 1 of 2: CAB WIRING  
MEDIA NUMBER: JEN20203-01  
SCHEMATIC PART NUMBER: 376-2022, CHANGE: 00, VERSION: 1  
Components are shown installed on a fully operable machine with the key and engine off, transmission in neutral 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.



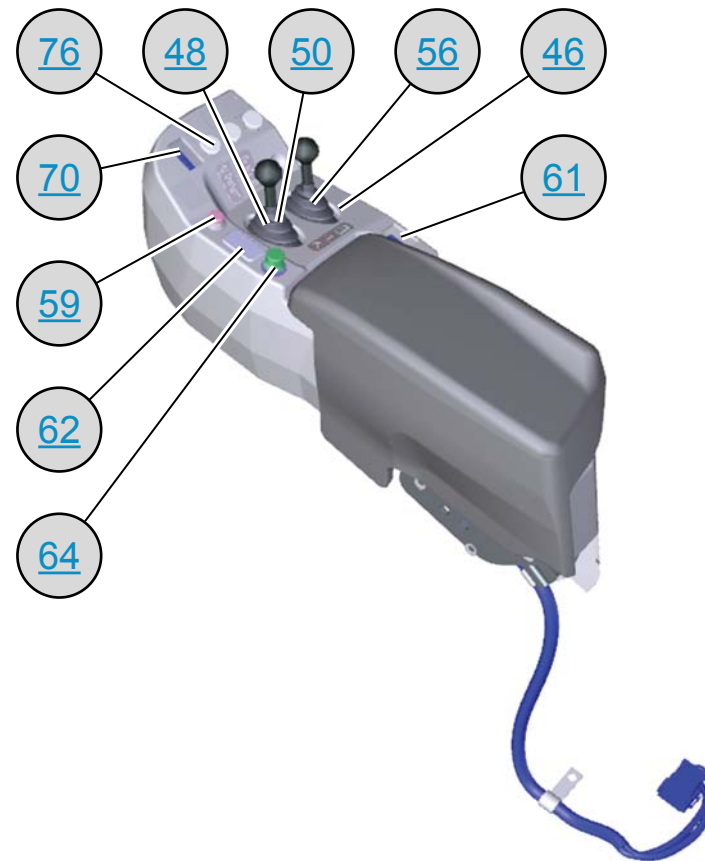
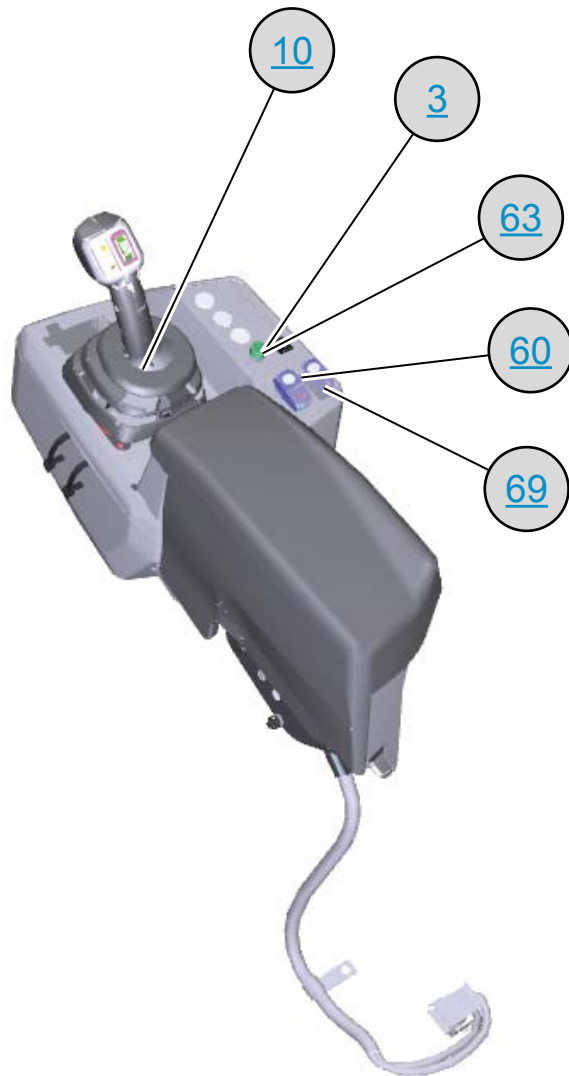






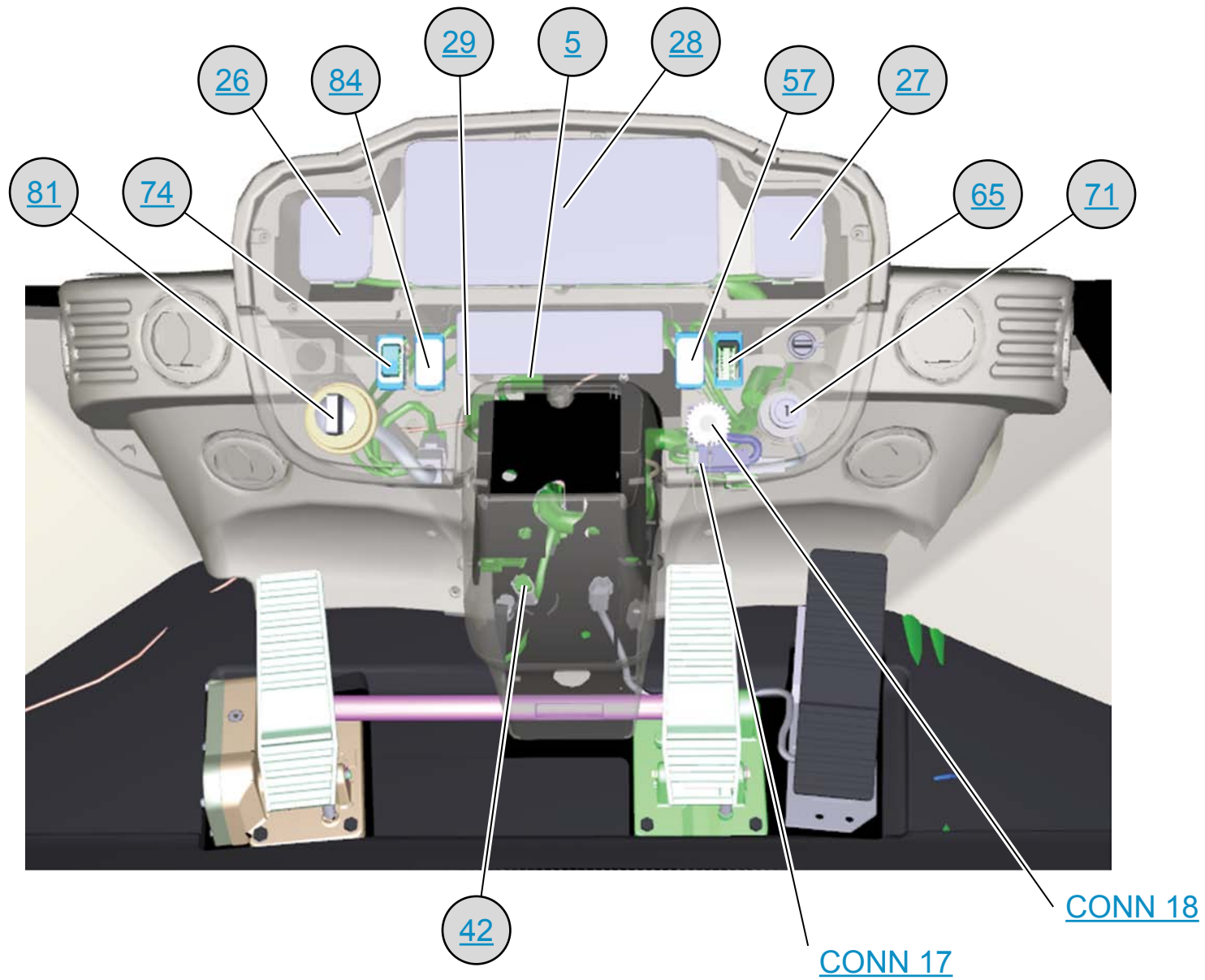


# CONSOLE VIEWS

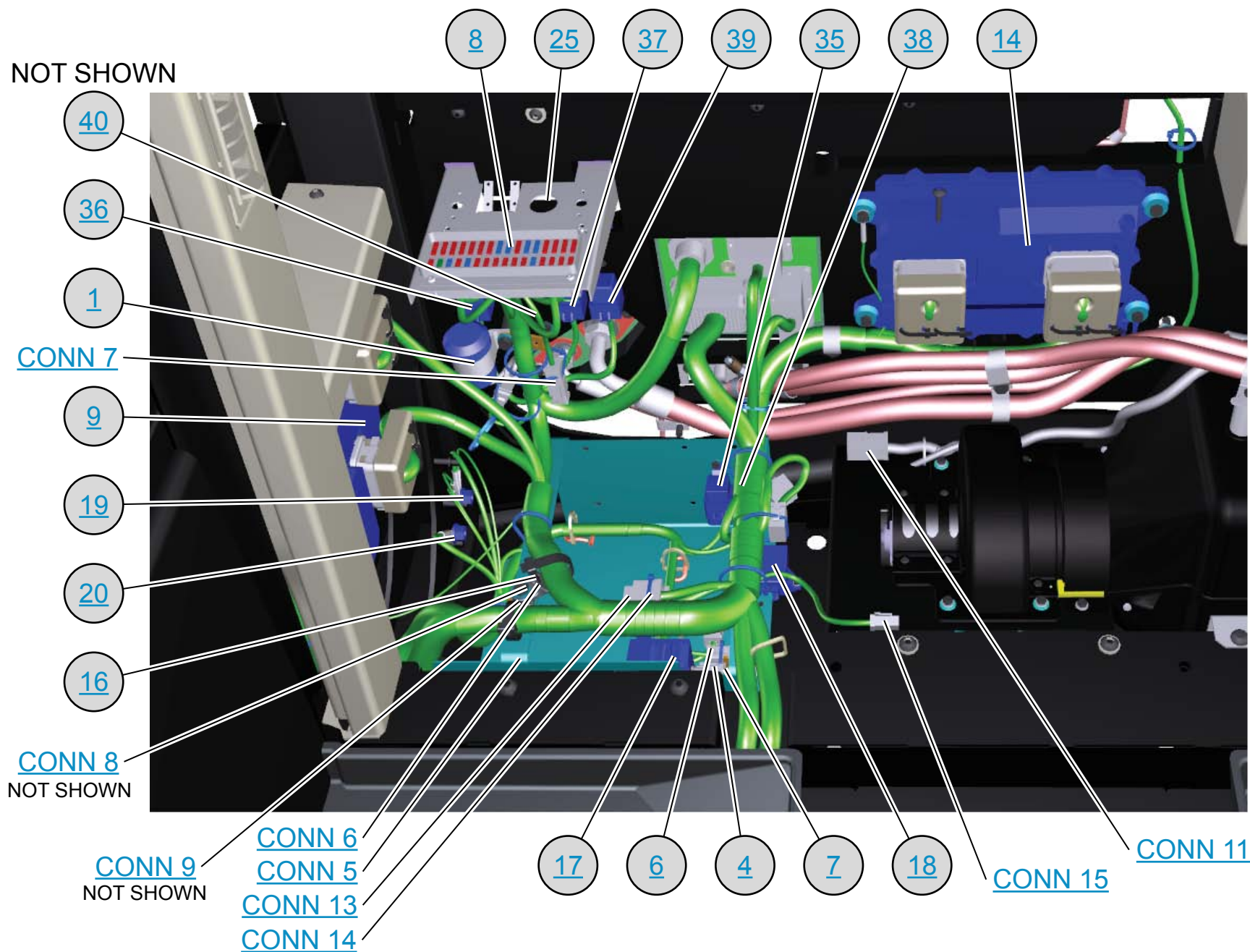


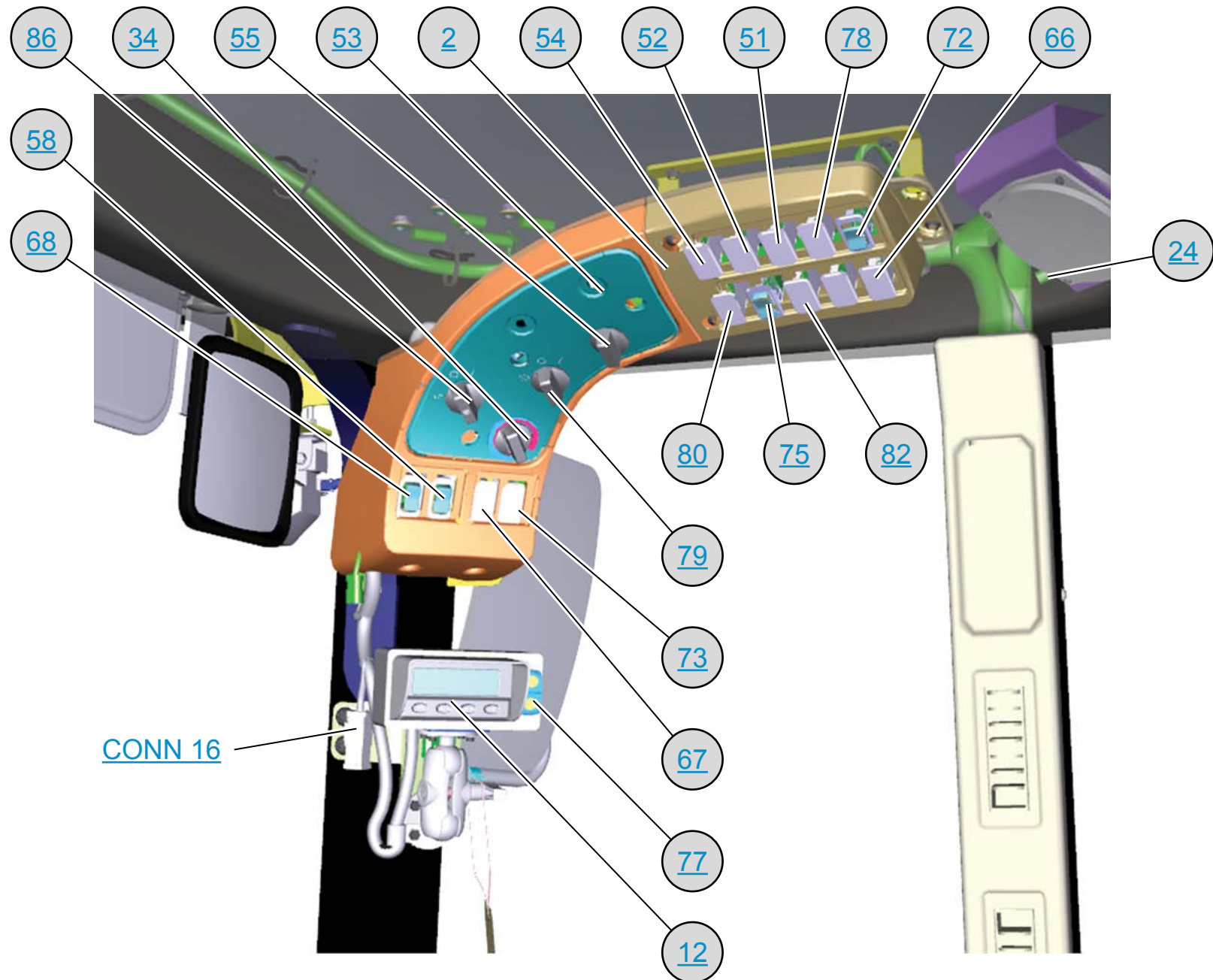


# DASH VIEW



# FUSE PANEL

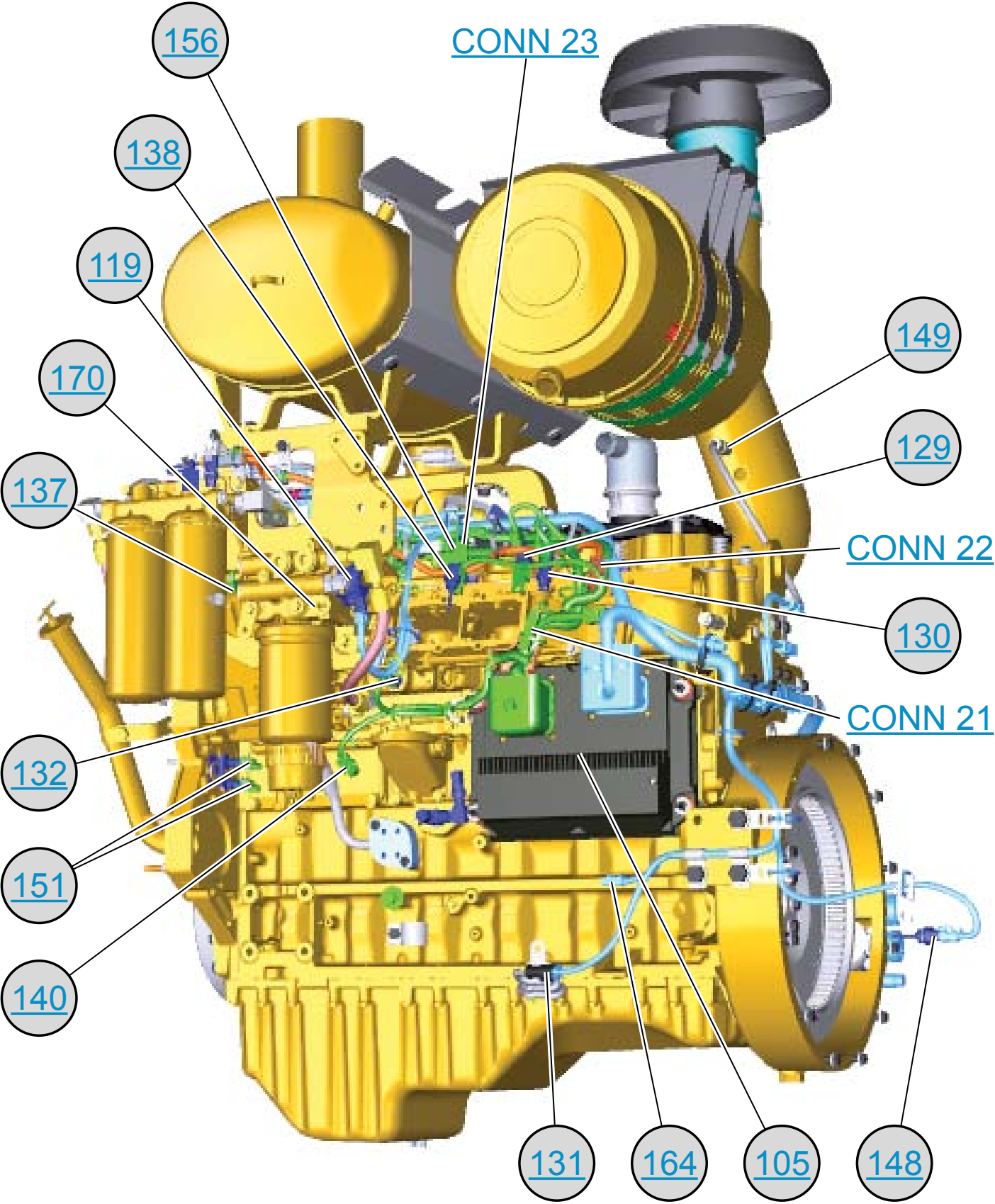


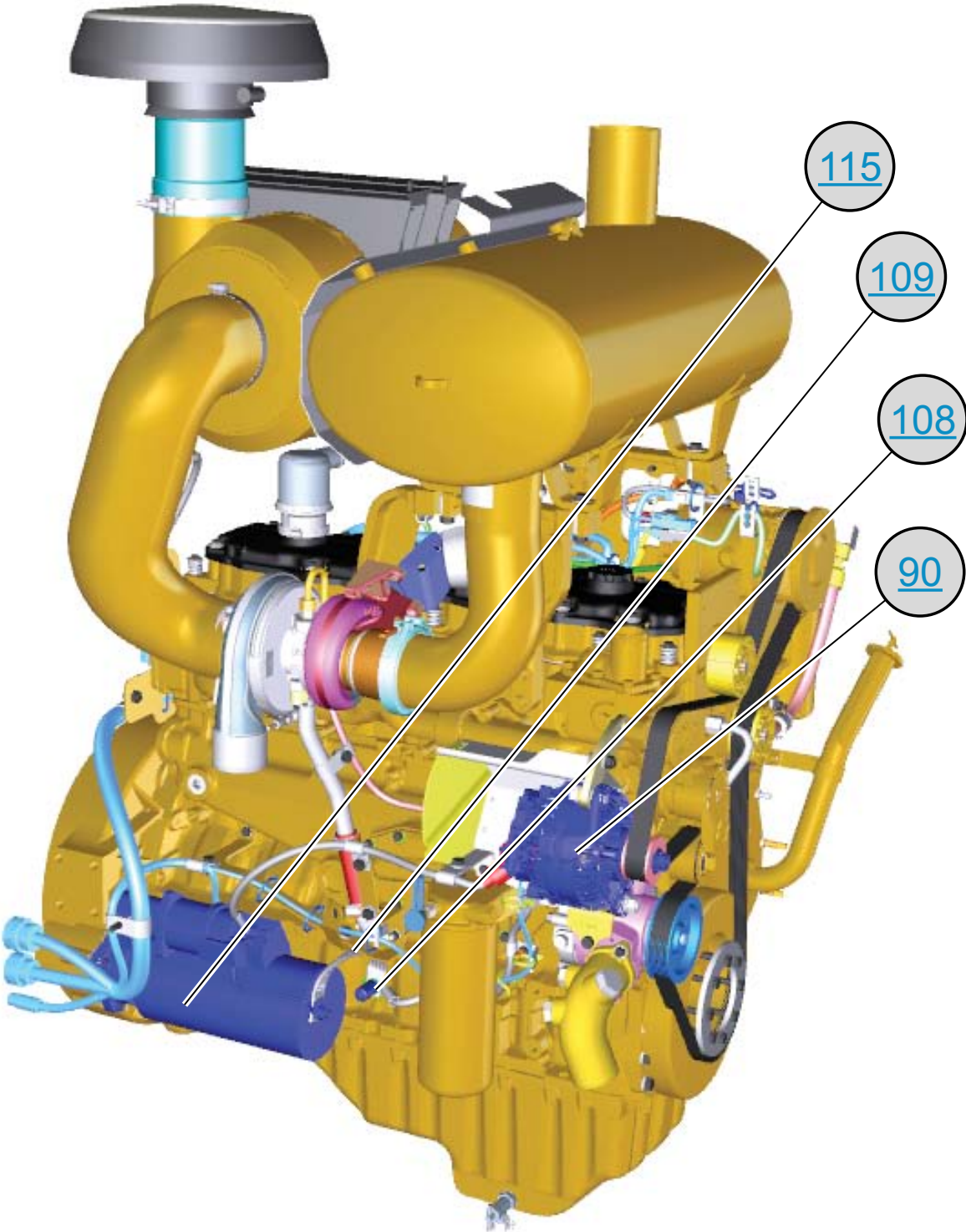


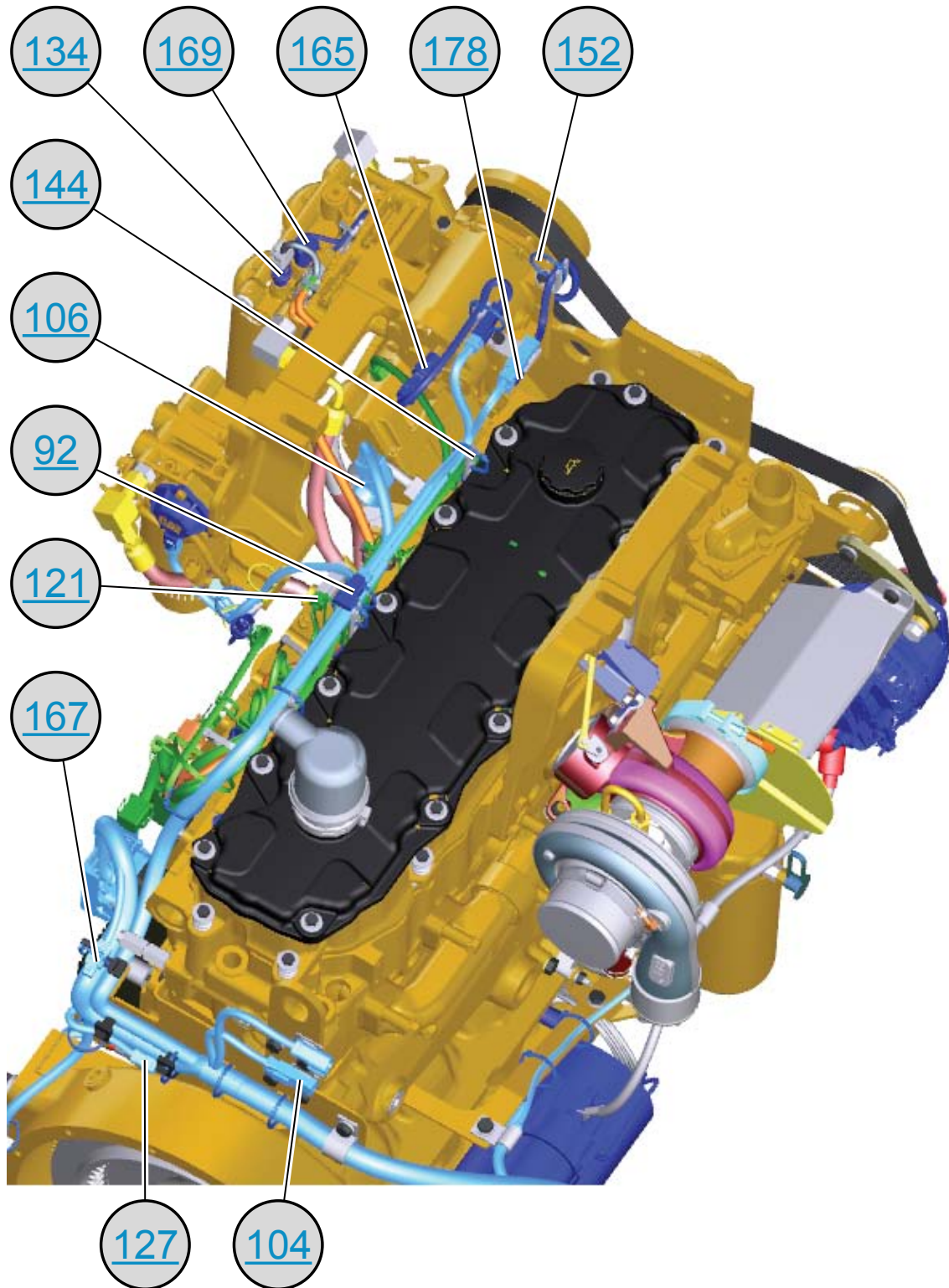




# ENGINE LEFT

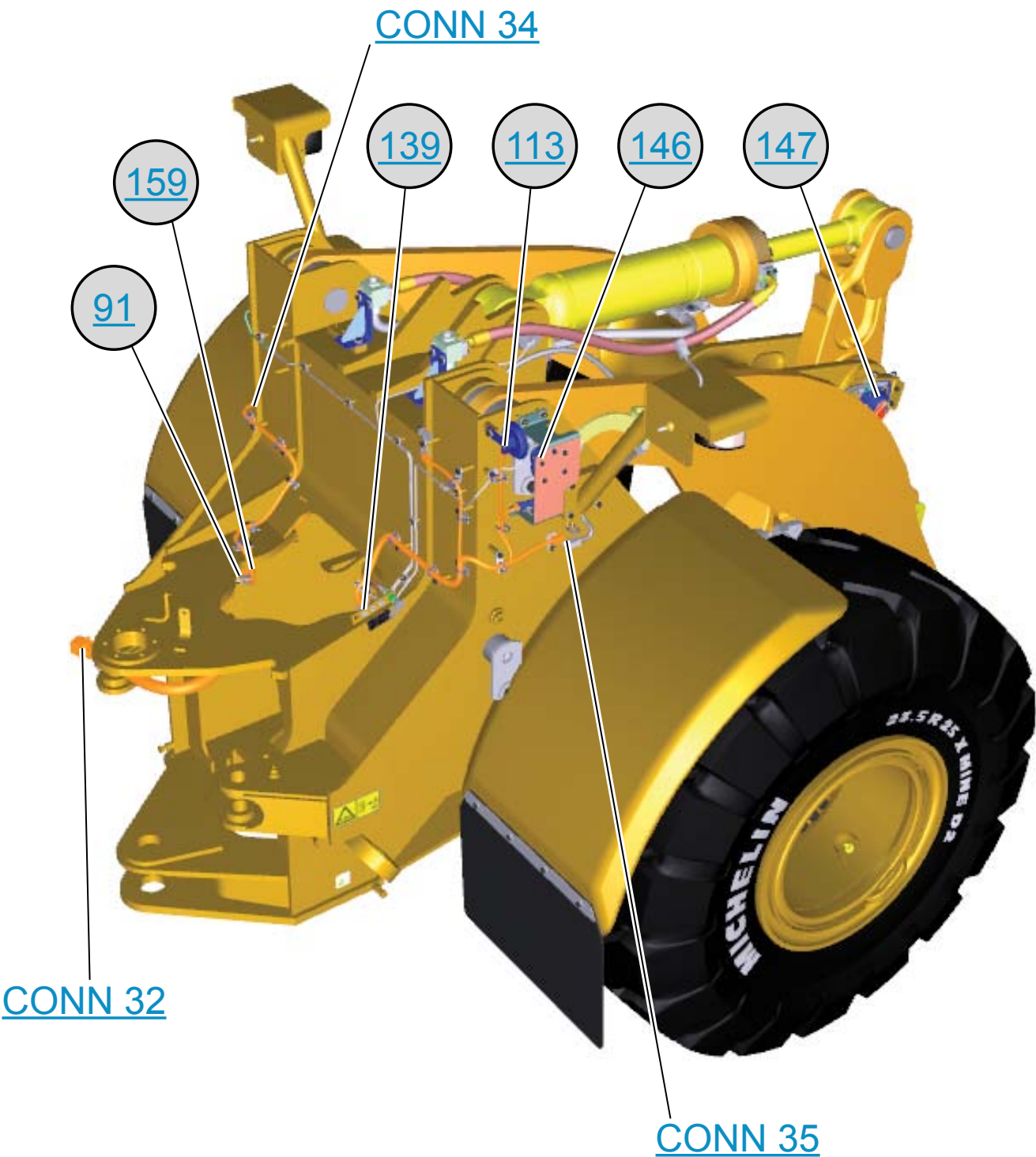




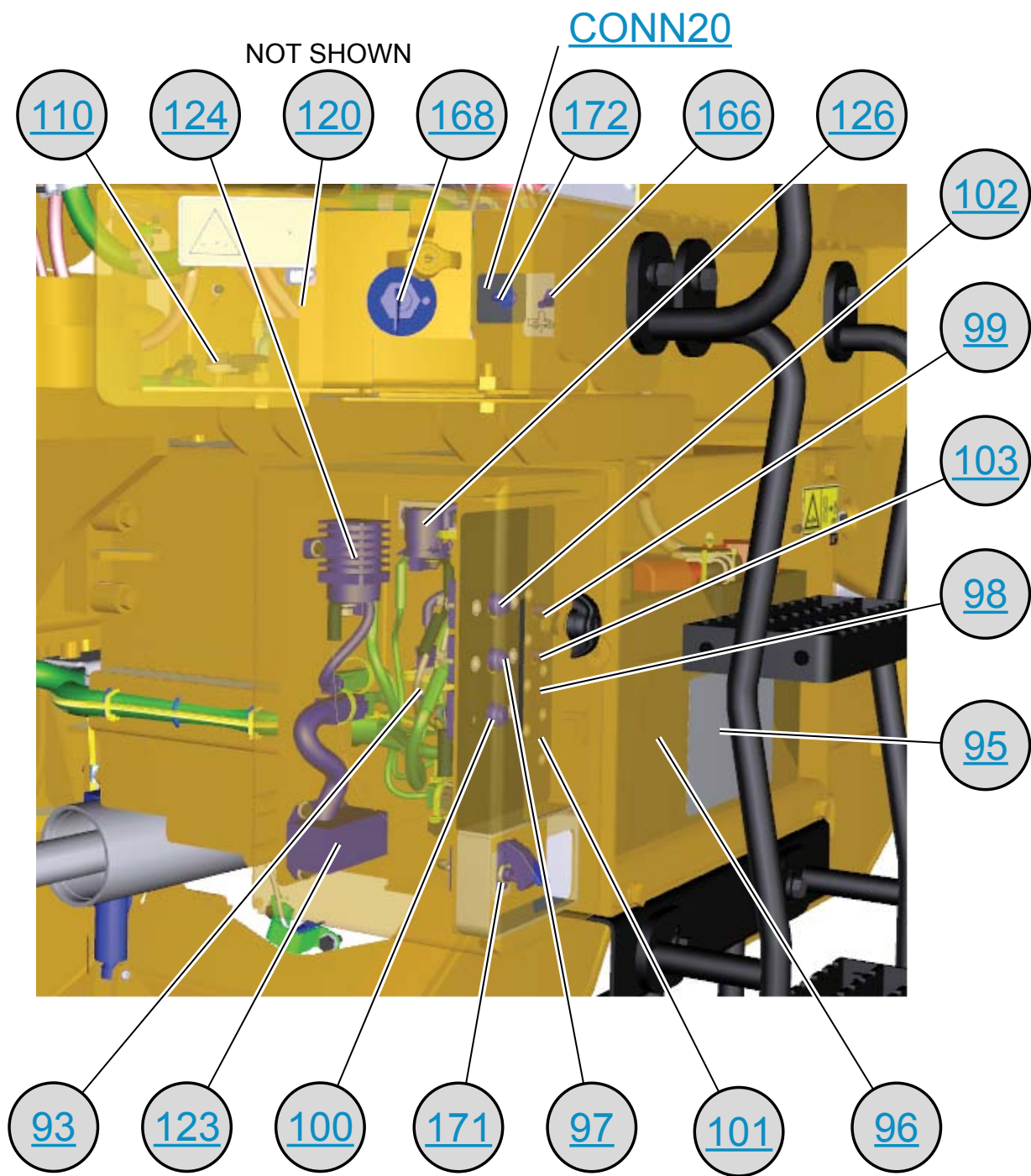


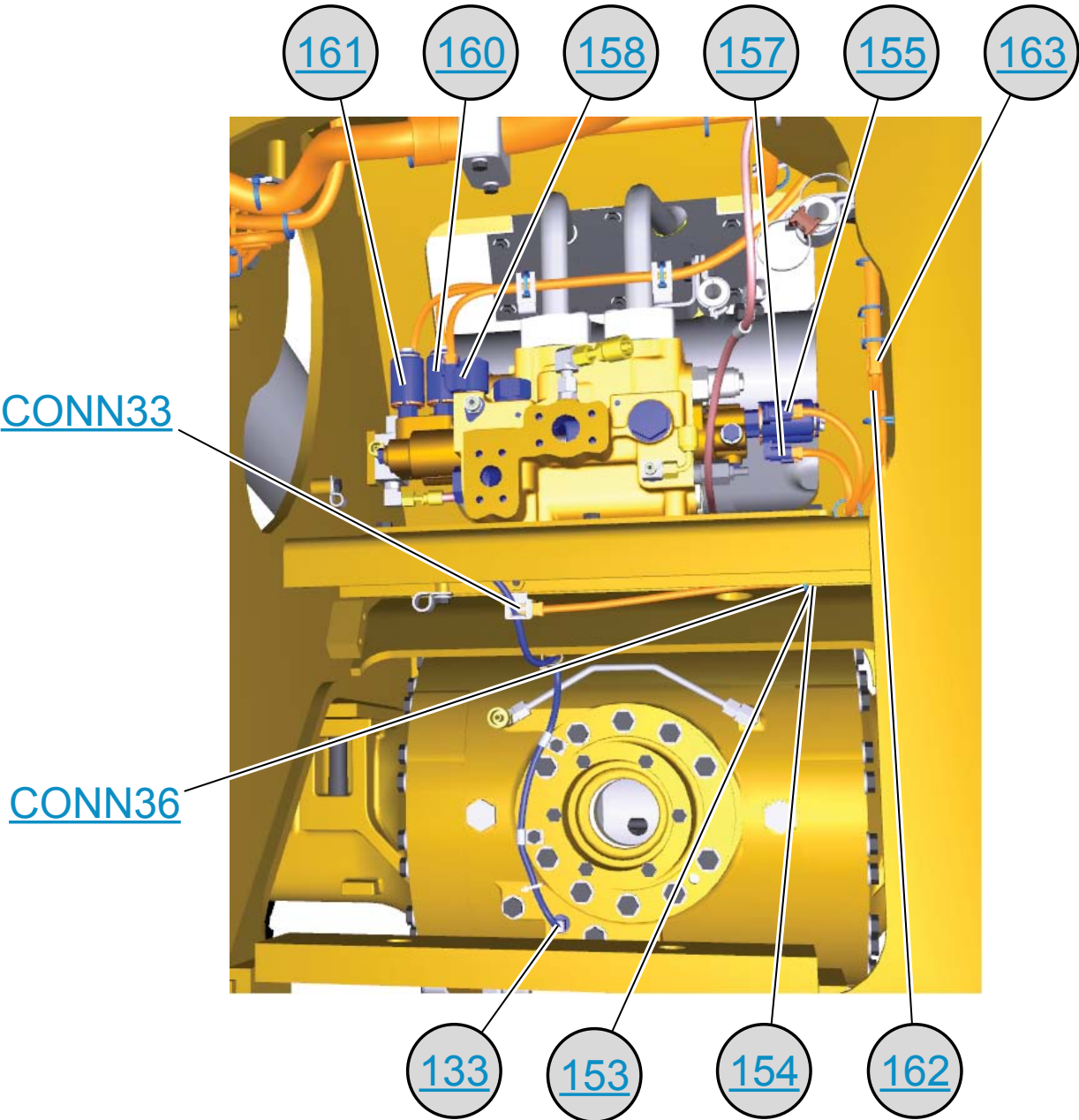


# FRONT FRAME

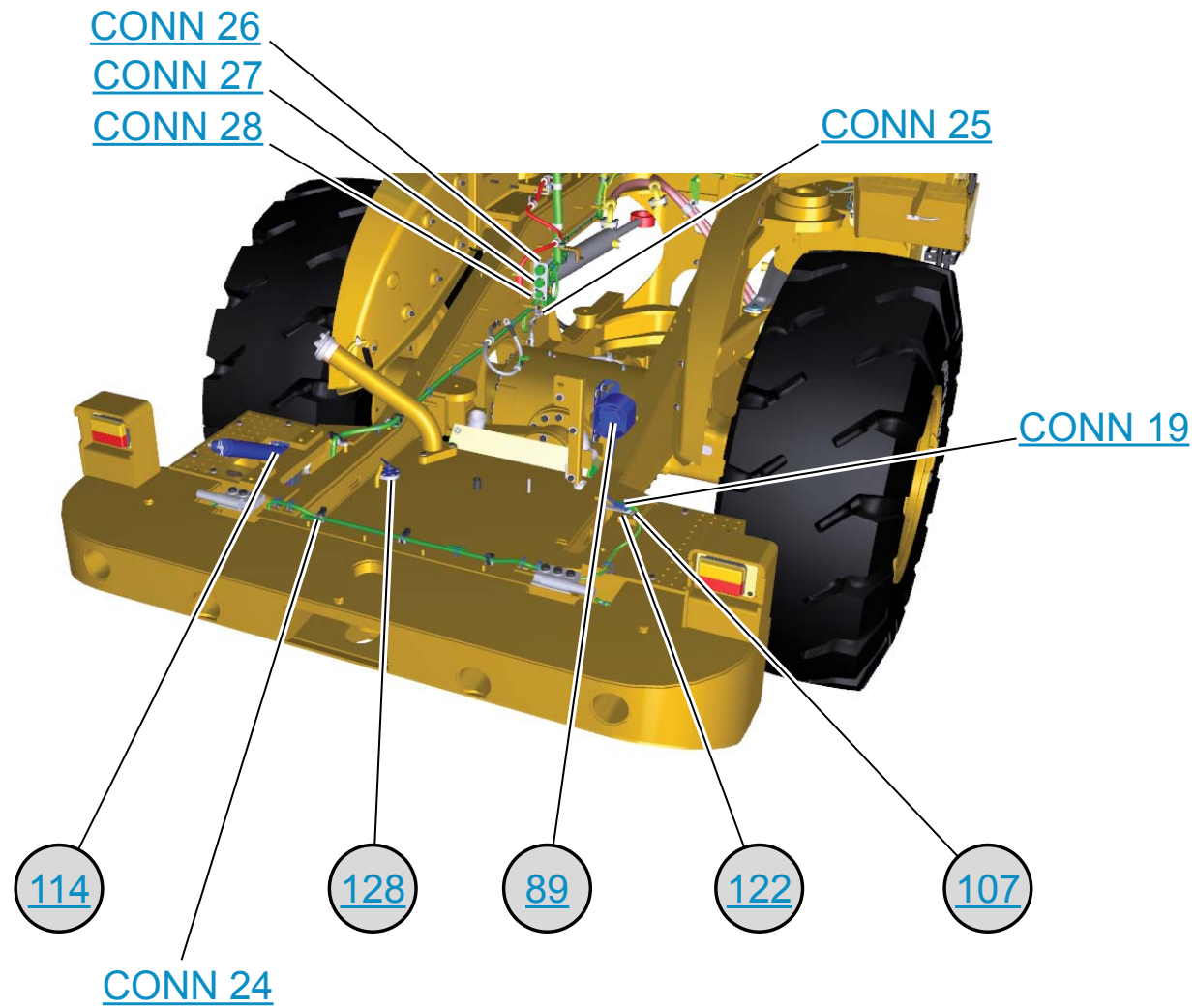


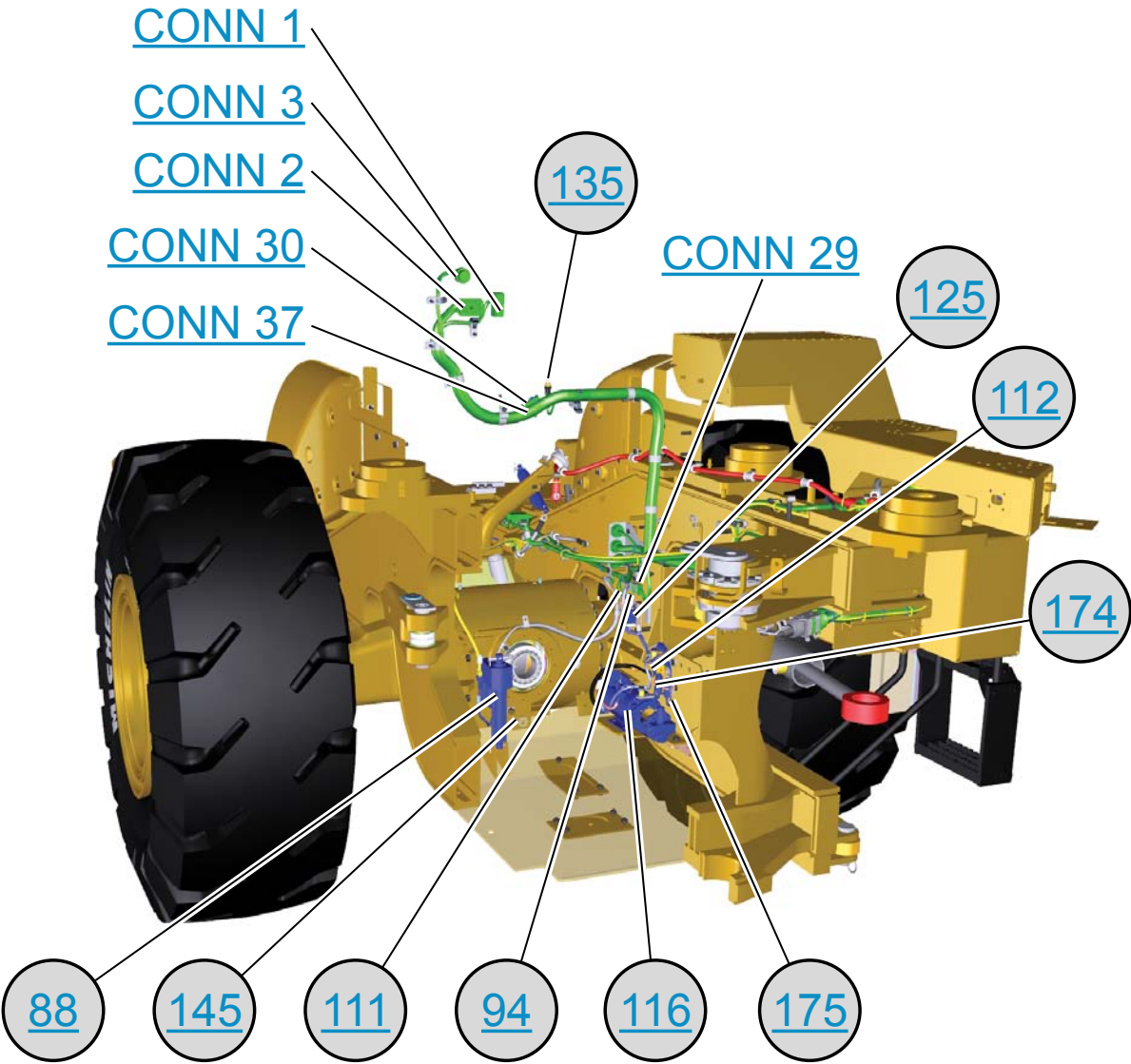






# REAR BUMPER







# RIGHT FRAME

