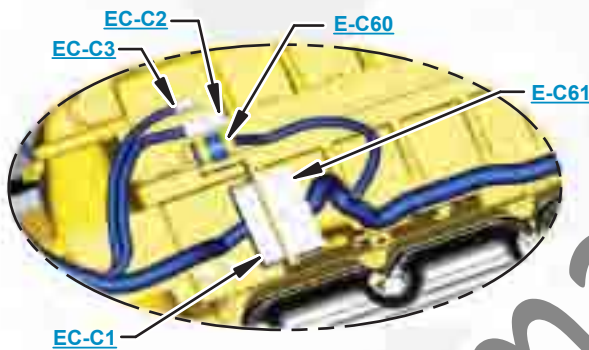


***This document is best viewed at a screen resolution of 1024 X 768.***

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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## **D3K, D4K and D5K Track-Type Tractor Electrical System**

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<b>D3K:</b>	<b>D4K:</b>	<b>D5K:</b>
JTD301-UP (LGP)	MMM1001-UP (XL)	JLF501-UP (LGP)
FFF1101-UP (XL)	RRR801-UP (LGP)	WWW2101-UP (XL)
LLL1601-UP (LGP)		YYY2001-UP (LGP)

**Volume 1 of 4: Cab**

**Volume 2 of 4: Engine and Chassis**

**Volume 3 of 4: Accugrade and Attachments**

**Volume 4 of 4: Fireflow Cab and EROPS Fuse panel**

**For Engine Serial Numbers C4E239-UP**

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# COMPONENT LOCATION

## Volume 1 of 4 - CAB



Component	Schematic Location	Machine Location
Alarm - Action	<a href="#">E-9</a>	<a href="#">1</a>
Breaker - Blower HVAC	<a href="#">H-11</a>	<a href="#">2</a>
Control - HVAC Panel	<a href="#">I-12</a>	<a href="#">3</a>
Control - Hystat Base (LH)	<a href="#">H-9</a>	<a href="#">4</a>
Control - Hystat Handle (LH)	<a href="#">I-9</a>	<a href="#">5</a>
Control - Implement Base (RH)	<a href="#">G-9</a>	<a href="#">6</a>
Control - Implement Handle (RH)	<a href="#">G-9</a>	<a href="#">7</a>
Control - Machine	<a href="#">E-8</a>	<a href="#">8</a>
Ground - Console	<a href="#">A-14</a>	<a href="#">9</a>
Ground - Frame	<a href="#">B-8</a>	<a href="#">10</a>
Ground - Platform	<a href="#">E-8</a>	<a href="#">11</a>
Ground - Roof	<a href="#">C-15</a>	<a href="#">12</a>
Handle - Winch/Ripper	<a href="#">B-10</a>	<a href="#">13</a>
Instrument Cluster	<a href="#">E-9</a>	<a href="#">14</a>
Motor - Front Wiper	<a href="#">H-1</a>	<a href="#">15</a>
Motor - Rear Wiper	<a href="#">E-15</a>	<a href="#">16</a>
Power Port	<a href="#">H-11</a>	<a href="#">17</a>
Relay - Blower (High)	<a href="#">I-11</a>	<a href="#">18</a>
Relay - HVAC	<a href="#">H-11</a>	<a href="#">19</a>
Resistor - Can A Terminal #1	<a href="#">E-9</a>	<a href="#">20</a>
Sensor - Brake Pedal Decelerator	<a href="#">D-9</a>	<a href="#">21</a>
Switch - 4th Valve	<a href="#">C-11</a>	<a href="#">23</a>
Switch - 4th Valve Float	<a href="#">B-11</a>	<a href="#">24</a>
Switch - HVAC	<a href="#">I-12</a>	<a href="#">25</a>
Switch - Implement Lockout	<a href="#">E-11</a>	<a href="#">26</a>
Switch - Key	<a href="#">F-9</a>	<a href="#">27</a>
Switch - Lights	<a href="#">C-11</a>	<a href="#">28</a>
Switch - Operator Parking Brake	<a href="#">F-11</a>	<a href="#">29</a>
Switch - Operator Presence	<a href="#">F-11</a>	<a href="#">30</a>
Switch - Service Brake	<a href="#">E-9</a>	<a href="#">31</a>
Switch - Slow Engine Efficiency Reverse (SEER)	<a href="#">E-11</a>	<a href="#">32</a>
Switch - Throttle	<a href="#">B-10</a>	<a href="#">33</a>
Switch - Winch Drive Away	<a href="#">C-10</a>	<a href="#">34</a>
Switch - Winch Free Spool	<a href="#">C-11</a>	<a href="#">35</a>
Switch - Wiper (Front)	<a href="#">D-11</a>	<a href="#">36</a>
Switch - Wiper (LH)	<a href="#">D-11</a>	<a href="#">37</a>
Switch - Wiper (Rear)	<a href="#">D-11</a>	<a href="#">38</a>
Switch - Wiper (RH)	<a href="#">D-11</a>	<a href="#">39</a>

# COMPONENT LOCATION

## Volume 2 of 4 - ENGINE AND CHASSIS



Component	Schematic Location	Machine Location	Component	Schematic Location	Machine Location
Alarm - Backup	<a href="#">F-15</a>	<a href="#">40</a>	Sensor - Track Speed (Right)	<a href="#">G-15</a>	<a href="#">84</a>
Alternator	<a href="#">F-7</a>	<a href="#">41</a>	Sensor - Water In Fuel	<a href="#">H-5</a>	<a href="#">85</a>
Batteries	<a href="#">G-7</a>	<a href="#">42</a>	Sensor - Winch Pressure	<a href="#">I-4</a>	<a href="#">86</a>
Block - Fuse	<a href="#">C-3</a>	<a href="#">43</a>	Solenoid - A/C Compressor	<a href="#">I-7</a>	<a href="#">87</a>
Block - Junction	<a href="#">D-7</a>	<a href="#">44</a>	Solenoid - Blade (Lower)	<a href="#">D-15</a>	<a href="#">88</a>
Breaker - Main	<a href="#">C-7</a>	<a href="#">46</a>	Solenoid - Blade (Raise)	<a href="#">D-15</a>	<a href="#">89</a>
Control - Engine	<a href="#">I-1</a>	<a href="#">47</a>	Solenoid - Blade Angle (Left)	<a href="#">E-15</a>	<a href="#">90</a>
Control - HVAC	<a href="#">I-8</a>	<a href="#">48</a>	Solenoid - Blade Angle (Right)	<a href="#">D-15</a>	<a href="#">91</a>
Ground - Engine	<a href="#">F-7</a>	<a href="#">49</a>	Solenoid - Blade Tilt (Left)	<a href="#">C-15</a>	<a href="#">92</a>
Ground - Frame #1	<a href="#">E-7</a>	<a href="#">50</a>	Solenoid - Blade Tilt (Right)	<a href="#">C-15</a>	<a href="#">93</a>
Ground - Frame #2	<a href="#">E-7</a>	<a href="#">51</a>	Solenoid - Engine Injector	<a href="#">H-2</a>	<a href="#">94</a>
Ground - OROPS Cab	<a href="#">D-11</a>	<a href="#">52</a>	Solenoid - Fuel Pump	<a href="#">E-4</a>	<a href="#">95</a>
Ground - OROPS Roof	<a href="#">B-15</a>	<a href="#">53</a>	Solenoid - Hystat Override	<a href="#">G-5</a>	<a href="#">96</a>
Handle - Winch/Ripper Control	<a href="#">B-8</a>	<a href="#">54</a>	Solenoid - Implement Override	<a href="#">C-15</a>	<a href="#">97</a>
Horn - Forward	<a href="#">I-4</a>	<a href="#">55</a>	Solenoid - Left Pump (Forward)	<a href="#">H-5</a>	<a href="#">98</a>
Module - PRM	<a href="#">I-4</a>	<a href="#">56</a>	Solenoid - Left Pump (Reverse)	<a href="#">H-5</a>	<a href="#">99</a>
Motor - Door Washer Pump (LH)	<a href="#">I-15</a>	<a href="#">57</a>	Solenoid - Parking Brake	<a href="#">G-5</a>	<a href="#">100</a>
Motor - Door Washer Pump (RH)	<a href="#">I-15</a>	<a href="#">58</a>	Solenoid - Right Pump (Forward)	<a href="#">G-5</a>	<a href="#">101</a>
Motor - Starter	<a href="#">F-7</a>	<a href="#">59</a>	Solenoid - Right Pump (Reverse)	<a href="#">G-5</a>	<a href="#">102</a>
Motor - Washer Pump (Front)	<a href="#">I-15</a>	<a href="#">60</a>	Solenoid - Smart Mast	<a href="#">E-4</a>	<a href="#">103</a>
Motor - Washer Pump (Rear)	<a href="#">H-15</a>	<a href="#">61</a>	Solenoid - Ether	<a href="#">G-5</a>	<a href="#">104</a>
Plugs - Glow	<a href="#">F-4</a>	<a href="#">62</a>	Solenoid - Track Motor (Left)	<a href="#">G-15</a>	<a href="#">105</a>
Port - Power	<a href="#">G-8</a>	<a href="#">63</a>	Solenoid - Track Motor (Right)	<a href="#">G-15</a>	<a href="#">106</a>
Relay - Blower (High)	<a href="#">I-8</a>	<a href="#">64</a>	Solenoid - Winch Reel (In)	<a href="#">I-5</a>	<a href="#">107</a>
Relay - Horn	<a href="#">A-7</a>	<a href="#">65</a>	Solenoid - Winch Reel (Out)	<a href="#">I-5</a>	<a href="#">108</a>
Relay - Lighting #1	<a href="#">A-7</a>	<a href="#">66</a>	Suppressor - Arc	<a href="#">F-5</a>	<a href="#">109</a>
Relay - Lighting #2	<a href="#">A-7</a>	<a href="#">67</a>	Suppressor - HVAC Arc	<a href="#">I-6</a>	<a href="#">110</a>
Relay - Main Power	<a href="#">D-7</a>	<a href="#">68</a>	Switch - 4th Valve	<a href="#">E-8</a>	<a href="#">111</a>
Relay - Start	<a href="#">E-7</a>	<a href="#">69</a>	Switch - 4th Valve Float	<a href="#">H-8</a>	<a href="#">112</a>
Resistor - CAN A Terminal #2	<a href="#">F-5</a>	<a href="#">70</a>	Switch - Air Inlet	<a href="#">F-5</a>	<a href="#">113</a>
Resistor - Excitation	<a href="#">F-5</a>	<a href="#">71</a>	Switch - Disconnect	<a href="#">G-7</a>	<a href="#">114</a>
Sender - Fuel Level	<a href="#">F-15</a>	<a href="#">72</a>	Switch - HVAC Refrigerant Pressure	<a href="#">I-7</a>	<a href="#">115</a>
Sensor - Air Temperature	<a href="#">G-4</a>	<a href="#">80</a>	Switch - Hydraulic Bypass #1	<a href="#">H-15</a>	<a href="#">116</a>
Sensor - Coolant Temperature	<a href="#">G-4</a>	<a href="#">73</a>	Switch - Hydraulic Bypass #2	<a href="#">H-15</a>	<a href="#">117</a>
Sensor - Crank Speed/Timing (Primary)	<a href="#">G-4</a>	<a href="#">74</a>	Switch - Hydraulic Bypass #3	<a href="#">H-14</a>	<a href="#">118</a>
Sensor - Crank Speed/Timing (Secondary)	<a href="#">G-4</a>	<a href="#">75</a>	Switch - Implement Lockout	<a href="#">A-8</a>	<a href="#">119</a>
Sensor - Engine Speed	<a href="#">G-5</a>	<a href="#">76</a>	Switch - Lights	<a href="#">E-8</a>	<a href="#">120</a>
Sensor - Fuel Rail Pressure	<a href="#">F-4</a>	<a href="#">77</a>	Switch - Operator Presence	<a href="#">H-8</a>	<a href="#">45</a>
Sensor - Hydraulic Temperature	<a href="#">F-15</a>	<a href="#">78</a>	Switch - Operator Parking Brake	<a href="#">A-8</a>	<a href="#">121</a>
Sensor - Intake Manifold Pressure	<a href="#">F-4</a>	<a href="#">79</a>	Switch - AEC	<a href="#">H-8</a>	<a href="#">122</a>
Sensor - Oil Pressure	<a href="#">F-4</a>	<a href="#">81</a>	Switch - Throttle	<a href="#">C-8</a>	<a href="#">123</a>
Sensor - Pressure Override Analog	<a href="#">F-15</a>	<a href="#">82</a>	Switch - Winch Drive Away	<a href="#">D-8</a>	<a href="#">124</a>
Sensor - Track Speed (Left)	<a href="#">G-15</a>	<a href="#">83</a>	Switch - Winch Free Spool	<a href="#">D-8</a>	<a href="#">125</a>

# COMPONENT LOCATION

## Volume 3 of 4 - ACCUGRADE AND ATTACHEMENT



Component	Schematic Location	Machine Location
Actuator - Water Valve	<a href="#">D-1</a>	<a href="#">126</a>
Antenna - Product Link Japan	<a href="#">F-5</a>	<a href="#">127</a>
Alarm - Accugrade	<a href="#">F-12</a>	<a href="#">128</a>
Coil - MSS Exciter	<a href="#">H-3</a>	<a href="#">129</a>
Control - Machine Security	<a href="#">H-1</a>	<a href="#">130</a>
Control - Product Link Japan	<a href="#">E-5</a>	<a href="#">131</a>
Control - Product Link PL121SR	<a href="#">I-4</a>	<a href="#">132</a>
Control - Product Link PL300SR	<a href="#">G-4</a>	<a href="#">133</a>
Control - Ripper	<a href="#">A-10</a>	<a href="#">134</a>
Control - Ripper/Winch	<a href="#">C-6</a>	<a href="#">135</a>
Control - Winch	<a href="#">C-10</a>	<a href="#">136</a>
Diode - HVAC	<a href="#">F-1</a>	<a href="#">137</a>
Display - Accugrade (GPS)	<a href="#">F-7</a>	<a href="#">138</a>
Display - Accugrade (Laser)	<a href="#">E-6</a>	<a href="#">139</a>
Fuse - Thermal	<a href="#">D-1</a>	<a href="#">140</a>
Light Bar - Left	<a href="#">I-10</a>	<a href="#">141</a>
Light Bar - Middle	<a href="#">H-10</a>	<a href="#">142</a>
Light Bar - Right	<a href="#">H-10</a>	<a href="#">143</a>
Mast - Electric (LH)	<a href="#">E-1</a>	<a href="#">144</a>
Mast - Electric (RH)	<a href="#">E-10</a>	<a href="#">145</a>
Motor - Blower	<a href="#">E-1</a>	<a href="#">146</a>
Motor - Condenser # 1	<a href="#">F-3</a>	<a href="#">147</a>
Motor - Condenser # 2	<a href="#">F-2</a>	<a href="#">148</a>
Motor - Door Wiper (LH)	<a href="#">I-1</a>	<a href="#">149</a>
Motor - Door Wiper (RH)	<a href="#">H-1</a>	<a href="#">150</a>
Radio - Accugrade	<a href="#">I-15</a>	<a href="#">154</a>
Receiver - GPS (LH)	<a href="#">C-11</a>	<a href="#">155</a>
Receiver - GPS (RH)	<a href="#">A-11</a>	<a href="#">156</a>
Receiver - Laser (LH)	<a href="#">E-12</a>	<a href="#">157</a>
Receiver - Laser (RH)	<a href="#">E-11</a>	<a href="#">158</a>
Relay - Condenser #1	<a href="#">G-2</a>	<a href="#">159</a>
Relay - Condenser #2	<a href="#">F-2</a>	<a href="#">160</a>
Relay - Product Link Japan	<a href="#">E-4</a>	<a href="#">161</a>
Resistor - B Terminal #1	<a href="#">F-10</a>	<a href="#">162</a>
Resistor - B Terminal #2	<a href="#">D-12</a>	<a href="#">163</a>
Resistor - Blower Speed	<a href="#">E-1</a>	<a href="#">164</a>
Resistor - D Terminal #1	<a href="#">F-10</a>	<a href="#">165</a>
Resistor - D Terminal #2	<a href="#">C-12</a>	<a href="#">166</a>
Solenoid - Drive Away (Option #1)	<a href="#">B-3</a>	<a href="#">169</a>
Solenoid - Drive Away (Option #2)	<a href="#">A-7</a>	<a href="#">170</a>
Solenoid - Free Spool (Option #1)	<a href="#">B-3</a>	<a href="#">171</a>
Solenoid - Free Spool (Option #2)	<a href="#">A-7</a>	<a href="#">172</a>
Solenoid - Ripper (Lower) (4th Valve)	<a href="#">C-4</a>	<a href="#">173</a>
Solenoid - Ripper (Lower) (Option #2)	<a href="#">C-8</a>	<a href="#">174</a>
Solenoid - Ripper (Raise) (4th Valve)	<a href="#">C-4</a>	<a href="#">175</a>
Solenoid - Ripper (Raise) (Option #2)	<a href="#">C-8</a>	<a href="#">176</a>
Solenoid - Winch Brake (Option #1)	<a href="#">B-3</a>	<a href="#">177</a>
Solenoid - Winch Brake (Option #2)	<a href="#">A-7</a>	<a href="#">178</a>
Switch - Thermostat	<a href="#">E-1</a>	<a href="#">184</a>
Module - Power	<a href="#">G-12</a>	<a href="#">185</a>

# COMPONENT LOCATION

## Volume 4 of 4 - FIREFLOW CAB AND EROPS FUEL PANEL



Component	Schematic Location	Machine Location
Block - Fuse	<a href="#">F-3</a>	<a href="#">186</a>
Block - Junction	<a href="#">G-7</a>	<a href="#">187</a>
Breaker - Main	<a href="#">F-7</a>	<a href="#">188</a>
Indicator - Seat Belt	<a href="#">D-12</a>	<a href="#">189</a>
Lever - 4th Valve Lever	<a href="#">G-12</a>	<a href="#">190</a>
Lever - 5th Valve Lever	<a href="#">G-12</a>	<a href="#">191</a>
Motor - Wiper (Front)	<a href="#">H-10</a>	<a href="#">192</a>
Motor - Wiper (Rear)	<a href="#">F-15</a>	<a href="#">193</a>
Relay - Horn	<a href="#">D-7</a>	<a href="#">194</a>
Relay - Lighting #1	<a href="#">D-7</a>	<a href="#">195</a>
Relay - Lighting #2	<a href="#">D-7</a>	<a href="#">196</a>
Relay - Main Power	<a href="#">G-7</a>	<a href="#">197</a>
Relay - Seat Belt Indicator	<a href="#">D-12</a>	<a href="#">198</a>
Solenoid - 5th Valve (Lower)	<a href="#">C-13</a>	<a href="#">199</a>
Solenoid - 5th Valve (Raise)	<a href="#">C-13</a>	<a href="#">200</a>
Switch - 5th Valve Float	<a href="#">F-12</a>	<a href="#">201</a>
Switch - Lights (Front #1)	<a href="#">E-12</a>	<a href="#">202</a>
Switch - Lights (Front #2)	<a href="#">E-12</a>	<a href="#">203</a>
Switch - Lights (Rear)	<a href="#">E-12</a>	<a href="#">204</a>
Switch - Seat Belt	<a href="#">D-12</a>	<a href="#">205</a>

# CONNECTOR LOCATION

## Volume 1 of 4 - CAB



Connector Number	Schematic Location
<a href="#">CONN 1</a>	<a href="#">G-15</a>
<a href="#">CONN 2</a>	<a href="#">G-15</a>
<a href="#">CONN 3</a>	<a href="#">B-14</a>
<a href="#">CONN 4</a>	<a href="#">C-14</a>
<a href="#">CONN 5</a>	<a href="#">H-14</a>
<a href="#">CONN 6</a>	<a href="#">I-14</a>
<a href="#">CONN 7</a>	<a href="#">I-14</a>
<a href="#">CONN 8</a>	<a href="#">E-12</a>
<a href="#">CONN 9</a>	<a href="#">G-12</a>
<a href="#">CONN 10</a>	<a href="#">G-11</a>
<a href="#">CONN 11</a>	<a href="#">H-11</a>
<a href="#">CONN 12</a>	<a href="#">I-11</a>
<a href="#">CONN 13</a>	<a href="#">H-7</a>
<a href="#">CONN 14</a>	<a href="#">B-3</a>
<a href="#">CONN 15</a>	<a href="#">B-3</a>
<a href="#">CONN 16</a>	<a href="#">B-3</a>
<a href="#">CONN 17</a>	<a href="#">C-3</a>
<a href="#">CONN 18</a>	<a href="#">C-3</a>
<a href="#">CONN 19</a>	<a href="#">C-3</a>
<a href="#">CONN 20</a>	<a href="#">D-3</a>
<a href="#">CONN 21</a>	<a href="#">D-3</a>
<a href="#">CONN 22</a>	<a href="#">E-3</a>
<a href="#">CONN 23</a>	<a href="#">F-3</a>
<a href="#">CONN 24</a>	<a href="#">G-3</a>
<a href="#">CONN 25</a>	<a href="#">H-3</a>
<a href="#">CONN 26</a>	<a href="#">I-3</a>
<a href="#">CONN 27</a>	<a href="#">I-3</a>
<a href="#">CONN 28</a>	<a href="#">A-8</a>
<a href="#">CONN 29</a>	<a href="#">D-9</a>
<a href="#">CONN 30</a>	<a href="#">B-2</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.

# CONNECTOR LOCATION

## Volume 2 of 4 - ENGINE AND CHASSIS



Connector Number	Schematic Location
<a href="#">CONN 8</a>	<a href="#">F-8</a>
<a href="#">CONN 9</a>	<a href="#">G-8</a>
<a href="#">CONN 10</a>	<a href="#">F-8</a>
<a href="#">CONN 11</a>	<a href="#">G-8</a>
<a href="#">CONN 13</a>	<a href="#">F-11</a>
<a href="#">CONN 15</a>	<a href="#">B-7</a>
<a href="#">CONN 21</a>	<a href="#">H-12</a>
<a href="#">CONN 22</a>	<a href="#">H-12</a>
<a href="#">CONN 23</a>	<a href="#">H-7</a>
<a href="#">CONN 24</a>	<a href="#">C-12</a>
<a href="#">CONN 31</a>	<a href="#">F-14</a>
<a href="#">CONN 32</a>	<a href="#">I-13</a>
<a href="#">CONN 33</a>	<a href="#">B-12</a>
<a href="#">CONN 34</a>	<a href="#">H-11</a>
<a href="#">CONN 35</a>	<a href="#">H-11</a>
<a href="#">CONN 36</a>	<a href="#">I-11</a>
<a href="#">CONN 37</a>	<a href="#">C-7</a>
<a href="#">CONN 38</a>	<a href="#">I-7</a>
<a href="#">CONN 39</a> Service Connector	<a href="#">A-3</a>
<a href="#">CONN 40</a>	<a href="#">I-5</a>
<a href="#">CONN 41</a>	<a href="#">I-5</a>
<a href="#">CONN 42</a>	<a href="#">H-3</a>
<a href="#">CONN 43</a>	<a href="#">I-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.



# CONNECTOR LOCATION

## Volume 3 of 4 - ACCUGRADE AND ATTACHEMENT



Connector Number	Schematic Location
<a href="#">CONN 1</a>	<a href="#">E-1</a>
<a href="#">CONN 2</a>	<a href="#">G-1</a>
<a href="#">CONN 5</a>	<a href="#">H-14</a>
<a href="#">CONN 6</a>	<a href="#">E-3</a>
<a href="#">CONN 7</a>	<a href="#">E-3</a>
<a href="#">CONN 12</a>	<a href="#">I-2</a>
<a href="#">CONN 14</a>	<a href="#">G-14</a>
<a href="#">CONN 16</a>	<a href="#">I-5</a>
<a href="#">CONN 17</a>	<a href="#">I-5</a>
<a href="#">CONN 18</a>	<a href="#">G-5</a>
<a href="#">CONN 19</a>	<a href="#">G-5</a>
<a href="#">CONN 20</a>	<a href="#">H-5</a>
<a href="#">CONN 25</a>	<a href="#">B-15</a>
<a href="#">CONN 26</a>	<a href="#">D-10</a>
<a href="#">CONN 27</a>	<a href="#">D-10</a>
<a href="#">CONN 28</a>	<a href="#">H-2</a>
<a href="#">CONN 29</a>	<a href="#">H-3</a>
<a href="#">CONN 44</a>	<a href="#">B-15</a>
<a href="#">CONN 45</a>	<a href="#">B-4</a>
<a href="#">CONN 46</a>	<a href="#">A-8</a>
<a href="#">CONN 47</a>	<a href="#">A-12</a>
<a href="#">CONN 48</a>	<a href="#">B-12</a>
<a href="#">CONN 49</a>	<a href="#">C-12</a>
<a href="#">CONN 50</a> Accugrade Service Connector	<a href="#">G-14</a>
<a href="#">CONN 51</a>	<a href="#">I-14</a>
<a href="#">CONN 52</a> Accugrade Test Port	<a href="#">B-12</a>
<a href="#">CONN 53</a>	<a href="#">H-12</a>
<a href="#">CONN 54</a>	<a href="#">I-12</a>
<a href="#">CONN 55</a>	<a href="#">G-10</a>
<a href="#">CONN 56</a>	<a href="#">H-10</a>
<a href="#">CONN 57</a> Product Link Service Tool	<a href="#">I-4</a>
<a href="#">CONN 58</a>	<a href="#">D-5</a>
<a href="#">CONN 59</a>	<a href="#">D-5</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.

# CONNECTOR LOCATION

## Volume 4 of 4 - FIREFLOW CAB AND EROPS FUEL PANEL



Connector Number	Schematic Location
<a href="#">CONN 1</a>	<a href="#">G-15</a>
<a href="#">CONN 2</a>	<a href="#">G-15</a>
<a href="#">CONN 3</a>	<a href="#">C-12</a>
<a href="#">CONN 4</a>	<a href="#">C-12</a>
<a href="#">CONN 5</a>	<a href="#">H-12</a>
<a href="#">CONN 15</a>	<a href="#">E-7</a>
<a href="#">CONN 37</a>	<a href="#">F-8</a>
<a href="#">CONN 39</a> Service Connector	<a href="#">D-4</a>

The connectors shown in this chart are for harness to harness connectors. Connectors that join a harness to a component are generally located at or near the component.

See the Component Location Chart.



<b>Machine Control System (MID No. 039)</b>	
<b>CID</b>	<b>Component</b>
0041	Sensor Power Supply (8 DCV)
0070	Parking Brake Switch
0091	Throttle Position Switch
0096	Fuel Level Sensor
0133	Transmission Pilot Pressure Solenoid
0148	Hystat Drive Pressure Sensor
0168	Electrical System Voltage
0190	Engine Speed Sensor
0247	J1939 Data Link
0262	5 Volt Sensor DC Power Supply
0268	Programmable Parameter
0271	Action Alarm
0298	Service Brake Pedal Switch
0352	Lift Lever Position Sensor
0358	Implement Pilot Pressure Supply
0444	Starter Motor Relay
0490	Hydraulic Lockout Switch
0497	Tilt Right Solenoid
0498	Tilt Left Solenoid
0590	Engine Control Module
0600	Hydraulic Oil Temp Sensor
0681	Parking Brake Solenoid
0811	Gauge Cluster #1
1078	Blade Control Handle Raise/Lower Position
1079	Blade Control Handle Tilt Position Sensor
1197	Blade Lower Solenoid
1198	Blade Raise Solenoid
1251	Alternator R-Terminal Signal
1482	Sensor Power Supply (10 DCV)
1558	Electronic Implement Control
1699	Joystick Forward/Reverse Position Sensor
1700	Joystick Left/Right Position Sensor
1703	Left Drive Pump Forward Proportional
1704	Left Drive Pump Reverse Proportional
1705	Right Drive Pump Forward Proportional
1706	Right Drive Pump Reverse Proportional
1707	Left Drive Motor Solenoid
1708	Right Drive Motor Solenoid
1870	Blade Control Handle Thumb Rocker
1884	Winch Spool In Solenoid
1885	Winch Spool Out Solenoid
1933	Blade Angle Left Solenoid
1934	Blade Angle Right Solenoid
1960	Ignition Key Reader
2213	Operator In Seat Switch
2143	Electronic Implement Control #3
2204	Auxiliary Lever #1 Position Sensor
2205	Auxiliary Lever #2 Position Sensor
2211	Auxiliary Valve #1 Port B Solenoid
2212	Auxiliary Valve #1 Port A Solenoid
2213	Auxiliary Valve #2 Port B Solenoid
2214	Auxiliary Valve #2 Port A Solenoid

<b>Machine Control System (MID No. 039)</b>	
2225	Hydraulic System Master ECM
2268	Winch Free Spool Solenoid
2305	Brake/Decelerator Pedal Position Sensor
2438	Winch Free Spool Switch
2440	Winch Brake Solenoid
2441	Winch Motor Pressure Sensor
2481	Winch Drive Away Switch
2482	Winch Drive Away Solenoid
2500	Powertrain Speed Range Control Position
2532	Operator Gear Ratio Set/Recall Switch
2679	Blade Shake Switch
2685	Left Drive Motor Speed Sensor #1
2686	Left Drive Motor Speed Sensor #2
2687	Right Drive Motor Speed Sensor #1
2688	Right Drive Motor Speed Sensor #2
2754	Auxiliary #1 Switch
2755	Blade Control Mode Switch
2954	Unknown Electronic Implement Control
3020	Auxiliary Valve #1 Float Switch
3033	Fuel Efficient Reverse Switch

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

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



<b>Component Identifiers (CID)<sup>1</sup></b>	
<b>Module Identifier (MID<sup>2</sup>)</b>	
<b>Engine Control System</b>	
<b>(MID No. 036)</b>	
<b>CID</b>	<b>Component</b>
0001	Injector Cylinder #1
0002	Injector Cylinder #2
0003	Injector Cylinder #3
0004	Injector Cylinder #4
0005	Injector Cylinder #5
0006	Injector Cylinder #6
0041	8 Volt DC Supply
0091	Throttle Position Sensor
0100	Engine Oil Level Sensor
0110	Engine Coolant Temperature Sensor
0168	Electrical System Voltage
0172	Intake Manifold Air Temperature Sensor
0174	Fuel Temperature Sensor
0190	Engine Speed Sensor
0247	SAE J1939 Data Link
0248	CAT Data Link
0253	Personality Module
0261	Engine Timing Calibration
0262	5 Volt Sensor DC Power Supply
0266	Crank Without Injection Input
0267	Remote Shutdown Input
0268	Programmed Parameter Fault
0291	Engine Cooling Fan Solenoid
0296	Transmission Control
0342	Secondary Engine Speed Sensor
0444	Starter Motor Relay
0526	Turbo Wastegate Actuator
1603	Machine Control Module
1639	Machine Security System Module
1779	Fuel Rail Pressure Valve 1 Solenoid
1785	Inlet Manifold Pressure Sensor
1797	Fuel Rail Pressure Sensor
1834	Ignition Key Switch
2417	Ether Injection Control Solenoid

<b>Failure Mode Identifiers (FMI)<sup>1</sup></b>	
<b>FMI No.</b>	<b>Failure Description</b>
	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.



Machine Control System (MID No. 039)	
CID	Component
0041	Sensor Power Supply (8 DCV)
0070	Parking Brake Switch
0091	Throttle Position Switch
0096	Fuel Level Sensor
0133	Transmission Pilot Pressure Solenoid
0148	Hystat Drive Pressure Sensor
0168	Electrical System Voltage
0190	Engine Speed Sensor
0247	J1939 Data Link
0262	5 Volt Sensor DC Power Supply
0268	Programmable Parameter
0271	Action Alarm
0298	Service Brake Pedal Switch
0352	Lift Lever Position Sensor
0358	Implement Pilot Pressure Supply
0444	Starter Motor Relay
0490	Hydraulic Lockout Switch
0497	Tilt Right Solenoid
0498	Tilt Left Solenoid
0590	Engine Control Module
0600	Hydraulic Oil Temp Sensor
0681	Parking Brake Solenoid
0811	Gauge Cluster #1
1078	Blade Control Handle Raise/Lower Position
1079	Blade Control Handle Tilt Position Sensor
1197	Blade Lower Solenoid
1198	Blade Raise Solenoid
1251	Alternator R-Terminal Signal
1482	Sensor Power Supply (10 DCV)
1558	Electronic Implement Control
1699	Joystick Forward/Reverse Position Sensor
1700	Joystick Left/Right Position Sensor
1703	Left Drive Pump Forward Proportional
1704	Left Drive Pump Reverse Proportional
1705	Right Drive Pump Forward Proportional
1706	Right Drive Pump Reverse Proportional
1707	Left Drive Motor Solenoid
1708	Right Drive Motor Solenoid
1870	Blade Control Handle Thumb Rocker
1884	Winch Spool In Solenoid
1885	Winch Spool Out Solenoid
1933	Blade Angle Left Solenoid
1934	Blade Angle Right Solenoid
1960	Ignition Key Reader
2213	Operator In Seat Switch
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2204	Auxiliary Lever #1 Position Sensor
2205	Auxiliary Lever #2 Position Sensor
2211	Auxiliary Valve #1 Port B Solenoid
2212	Auxiliary Valve #1 Port A Solenoid
2213	Auxiliary Valve #2 Port B Solenoid
2214	Auxiliary Valve #2 Port A Solenoid
2225	Hydraulic System Master ECM

Machine Control System (MID No. 039)	
CID	Component
2268	Winch Free Spool Solenoid
2305	Brake/Decelerator Pedal Position Sensor
2438	Winch Free Spool Switch
2440	Winch Brake Solenoid
2441	Winch Motor Pressure Sensor
2481	Winch Drive Away Switch
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2500	Powertrain Speed Range Control Position
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2687	Right Drive Motor Speed Sensor #1
2688	Right Drive Motor Speed Sensor #2
2754	Auxiliary #1 Switch
2755	Blade Control Mode Switch
2954	Unknown Electronic Implement Control
3020	Auxiliary Valve #1 Float Switch
3033	Fuel Efficient Reverse Switch

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

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



Component Identifiers (CID <sup>1</sup> ) Module Identifier (MID <sup>2</sup> ) Engine Control System (MID No. 036)	
CID	Component
0001	Injector Cylinder #1
0002	Injector Cylinder #2
0003	Injector Cylinder #3
0004	Injector Cylinder #4
0005	Injector Cylinder #5
0006	Injector Cylinder #6
0041	8 Volt DC Supply
0091	Throttle Position Sensor
0100	Engine Oil Level Sensor
0110	Engine Coolant Temperature Sensor
0168	Electrical System Voltage
0172	Intake Manifold Air Temperature Sensor
0174	Fuel Temperature Sensor
0190	Engine Speed Sensor
0247	SAE J1939 Data Link
0248	CAT Data Link
0253	Personality Module
0261	Engine Timing Calibration
0262	5 Volt Sensor DC Power Supply
0266	Crank Without Injection Input
0267	Remote Shutdown Input
0268	Programmed Parameter Fault
0291	Engine Cooling Fan Solenoid
0296	Transmission Control
0342	Secondary Engine Speed Sensor
0444	Starter Motor Relay
0526	Turbo Wastegate Actuator
1603	Machine Control Module
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1779	Fuel Rail Pressure Valve 1 Solenoid
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1797	Fuel Rail Pressure Sensor
1834	Ignition Key Switch
2417	Ether Injection Control Solenoid

Failure Mode Identifiers (FMI) <sup>1</sup>	
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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 3 of 4 - ACCUGRADE AND ATTACHEMANT

### Page 1 of 2



Component Identifiers (CID <sup>1</sup> ) Module Identifier (MID <sup>2</sup> ) Accugrade Laser System Implement ECM (MID No. 114)	
CID-FMI	Component
168 - 03	Electrical System Voltage Above Normal
168 - 04	Electrical System Voltage Below Normal
248 - 02	Invalid Cat Data Link Data
248 - 09	Cat Data Link Not Communicating
248 - 12	Cat Data Link Malfunction
262 - 03	5 Volt Sensor Power Supply Voltage Above Normal
262 - 04	5 Volt Sensor Power Supply Voltage Below Normal
497 - 3	Tilt Right Solenoid Shorted High
497 - 5	Tilt Right Solenoid Open Circuit
497 - 6	Tilt Right Solenoid Current Above Normal
498 - 3	Tilt Left Solenoid Shorted High
498 - 5	Tilt Left Solenoid Open Circuit
498 - 6	Tilt Left Solenoid Current Above Normal
874 - 3	Mode Select Switch Open/Shorted High
874 - 4	Mode Select Switch Short to Ground
875 - 3	Manual Select Switch Open/Shorted High
875 - 4	Manual Select Switch Short to Ground
1197 - 3	Blade Lower Solenoid Shorted High
1197 - 5	Blade Lower Solenoid Open Circuit
1197 - 6	Blade Lower Solenoid Current Above Normal
1198 - 3	Blade Raise Solenoid Shorted High
1198 - 5	Blade Raise Solenoid Open Circuit
1198 - 6	Blade Raise Solenoid Current Above Normal
2114 - 3	Blade Control Handle Trigger Switch Open/Shorted High
2114 - 4	Blade Control Handle Trigger Switch Short to Ground
2233 - 0	Blade Lower Pilot Pressure Data Above Normal
2233 - 1	Blade Lower Pilot Pressure Data Below Normal
2233 - 3	Blade Lower Pilot Pressure Voltage Above Normal
2233 - 4	Blade Lower Pilot Pressure Voltage Below Normal
2234 - 3	Hydraulic Pump Boost Pressure Solenoid Shorted High
2234 - 5	Hydraulic Pump Boost Pressure Solenoid Open Circuit
2234 - 6	Hydraulic Pump Boost Pressure Solenoid Current Above Normal
2235 - 3	Counterbalance Valve Bypass Solenoid Shorted High
2235 - 5	Counterbalance Valve Bypass Solenoid Open Circuit
2235 - 6	Counterbalance Valve Bypass Solenoid Current Above Normal
2324 - 3	Voltage of the solenoid circuit is above normal for the solenoid valve (2) for the counterbalance valve.
2324 - 5	An open in the circuit exists for the solenoid valve (2) for the counterbalance valve.
2324 - 6	There is a short to ground in the solenoid circuit for the solenoid valve (2) for the counterbalance valve.

Failure Mode Identifiers (FMI) <sup>1</sup>	
FMI No.	Failure Description
	Data valid but above normal operational range.
1	Data valid but below normal operational range.
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3	Voltage above normal or shorted high.
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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.

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

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

# CID / MID / FMI

## Volume 3 of 4 - ACCUGRADE AND ATTACHEMANT

### Page 2 of 2



Diagnostic Codes For The Accugrade Laser System	
Display (CB), Electronic Mast (EM), Laser Receiver (LR)	
Diagnostic Code	Description
<b>Display Fault Messages</b>	
CB 1	Set Limits Fault
CB 2	Lost Beam, Check Setup
CB 3	Calibration Failure, Check Setup
CB 4	Calibration Failure, Check Valve Hardware
CB 5	Calibration Failure, Restart
CB 6	Wrong Blade Motion, Check Valve Hardware
CB 7	Calibration Failure, Restart
CB 8	No Blade Movement, Check Valve Hardware
CB 9	Calibration Failure, Restart
CB 10	Set Limits Fault, Restart
CB 11	Low Voltage, Service
CB 12	System Hours Lost, Continue
CB 13	Valve Calibration Lost, Recalibrate
CB 14	Memory Error, Recalibrate Valves
CB 15	Memory Fault, Service
CB 16	Linked Mode Sensor Missing, Check EM and LR Connections
CB 17	CAN Network Failure, Service
CB 18	CAN Network Failure, Service
CB 19	CAN Network Failure, Service
CB 20	CAN Controller Hardware Error, Check
CB 21	Remote AM Switch Failure, Service
CB 22	VM Missing, Service
CB 23	Unsupported Device, Cycle Power
CB 24	Duplicate Left/Right Device, Service
CB 25	Elevation Limit Left, Check Bench Setup
CB 26	Elevation Limit Right, Check Bench Setup
CB 27	Internal Fault, Cycle Power
CB 28	Invalid Serial Number, Service
CB 29	VM Intermittant, Check Connection
CB 30	Duplicate Sensor Serial Number, Service
CB 31	Recalibrate Linked Mode Elevation
CB 32	ECM Disconnected, Service
CB 33	VM Failure, Service
CB 34	VM Failure, Service
CB 35	VM Fault, Service
CB 36	Left Laser Receiver Missing
CB 40	Laser receiver hardware failure, Service
CB 41	Control Latency, Cycle Power
CB 42	Control Latency, Cycle Power
CB 43	Laser Interference, Check Laser Setup
CB 44	Laser Interference, Check Laser Setup
CB 46	Slope ratio out of limits
CB 47	Sensor Missing, Check Harness Connections
CB 48	Invalid Password
CB 49	Password Expired
CB 50	Serial Number Fault, Service
CB 52	Sensor not Supported, Reconfigure

Diagnostic Codes For The Accugrade Laser System	
Display (CB), Electronic Mast (EM), Laser Receiver (LR)	
Diagnostic Code	Description
<b>Display Fault Messages</b>	
CB 56	Reference Target Not Found, Service
CB 57	Password Expired
CB 61	Service Agreement Expired
CB 62	VM Fault, Service
CB 63	Calibration Fault, Check Setup
<b>Laser Receiver Fault Messages</b>	
LR 0	Communication Fault, Service
LR 1	Memory Fault, Service
LR 2	Memory Fault, Service
LR 3	Serial Number Format Fault, Service
LR 4	Serial Number Format Fault, Service
LR 5	Serial Number Format Fault, Service
LR 6	Flash Program Fault, Retry
LR 20	End of Travel, Check Setup
LR 21	Check Connection
LR 148	Elevation Limit, Check Bench Setup
<b>Electric Mast Fault Messages</b>	
EM 1	Internal Failure, Service
EM 2	Limit Switch Failure, Service
EM 15	Motor/Encoder Fault, Service
EM 21	Elevation Fault, Verify Bench
EM 23	Memory Fault, Service
EM 24	Memory Fault, Service
EM 25	Memory Fault, Service
EM 26	Memory Fault, Service
EM 29	Internal Fault, Service
EM 30	Motor/Encoder Fault, Service
EM 31	Memory Fault, Service
EM 32	Check Connection, Check Harness Connection



# SPECIFICATIONS AND RELATED MANUALS

## Volume 1 of 4 - CAB



Resistor Specifications		
Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
134-2540	Resistor: CAN A (Dash)	120 ± 12

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

Related Electrical Service Manuals	
Title	Form Number
Machine Control:	KENR6176
Engine Control:	KENR5390

# SPECIFICATIONS AND RELATED MANUALS

## Volume 2 of 4 - ENGINE AND CHASSIS



Related Electrical Service Manuals	
Title	Form Number
Machine Control:	KENR6176
Engine Control:	KENR5390

Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
134-2540	Resistor: CAN A	120 ± 12
178-9570	Solenoid: A/C Compressor	3.5 ± 0.15
238-9397	Resistor: Excitation	120 ± 6
252-4734	Solenoid: Hystat Override, Parking Brake	7.5 ± 0.4
257-8924	Sender: Fuel Level	Empty - 240-250 Full - 28-33
269-4669	Solenoid: Left Pump (Forward), Left Pump (Reverse), Track Motor (Left), Track Motor (Right), Winch Reel (In), Winch Reel (Out), Right Pump (Forward), Right Pump (Reverse)	4.26
273-5070	Solenoid: Start Aid	13.25 ± 0.5

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

Part No.	Function	Actuate	Deactuate	Contact Position
236-6923	A/C Refrigerant	Low: 275 kPa (40 psi) High: 2800 ± 140 kPa <sup>1</sup> (406 ± 20.3 psi)	Low: 170 ± 55 kPa <sup>1</sup> (25 ± 8 psi) High: 1750 ± 200 kPa (254 ± 29 psi)	Held Closed <sup>2</sup>

<sup>1</sup> 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).

<sup>2</sup> Contact position is normally open below low setting deactuation. Closed from low setting actuation to high setting deactuation. Open above high setting actuation.

# SPECIFICATIONS AND RELATED MANUALS

## Volume 3 of 4 - ACCUGRADE AND ATTACHEMENT



Volume 3 - Resistor Specifications		
Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
134-2540	Resistor: CAN B & CAN D	120 ± 12

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

Related Electrical Service Manuals	
Title	Form Number
Machine Control:	KENR6176
Engine Control:	KENR5390

# SPECIFICATIONS AND RELATED MANUALS

## Volume 4 of 4 - FIREFLOW CAB AND EROPS FUEL PANEL



Volume 4 - Resistor, Sender and Solenoid Specifications		
Part No.	Component Description	Resistance (Ohms) <sup>1</sup>
304-1142	Solenoid: Valve (Lower & Raise)	3.3

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

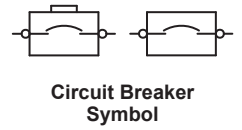
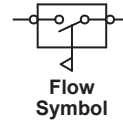
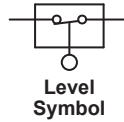
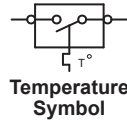
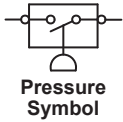
Related Electrical Service Manuals	
Title	Form Number
Machine Control:	KENR6176
Engine Control:	KENR5390

# HARNESS and WIRE

## Electrical Schematic Symbols



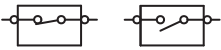
### Symbols



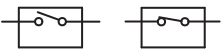
### Symbols and Definitions



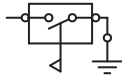
**Fuse:** A component in an electrical circuit that will open the circuit if too much current flows through it.



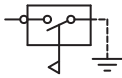
**Switch (Normally Open):** A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



**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.



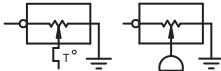
**Ground (Wired):** This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



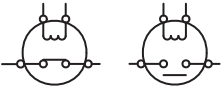
**Ground (Case):** This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



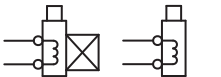
**Reed Switch:** A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



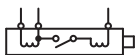
**Sender:** A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



**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.



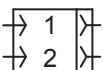
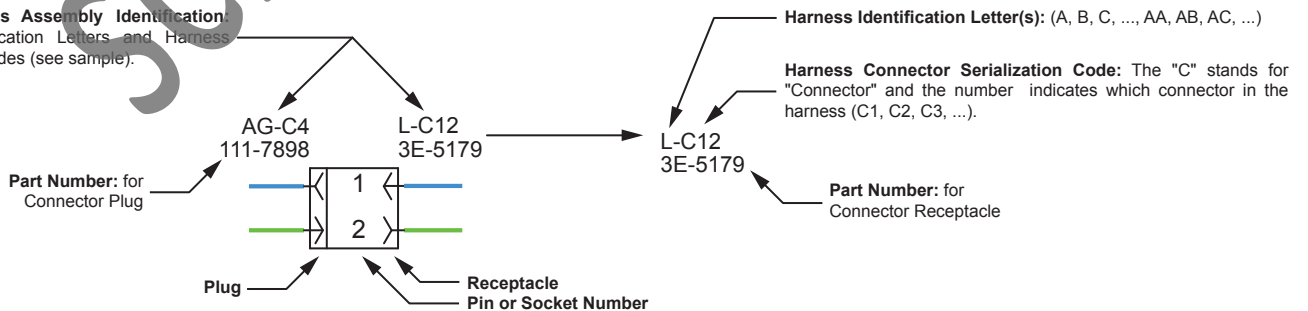
**Solenoid:** A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



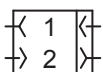
**Magnetic Latch Solenoid:** A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch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

### Harness and Wire Symbols

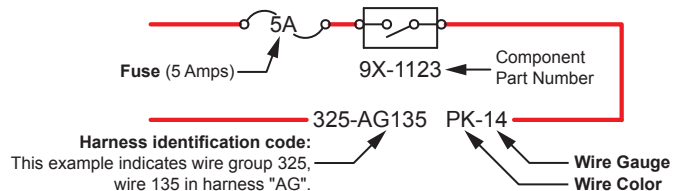
**Wire, Cable, or Harness Assembly Identification:** Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).

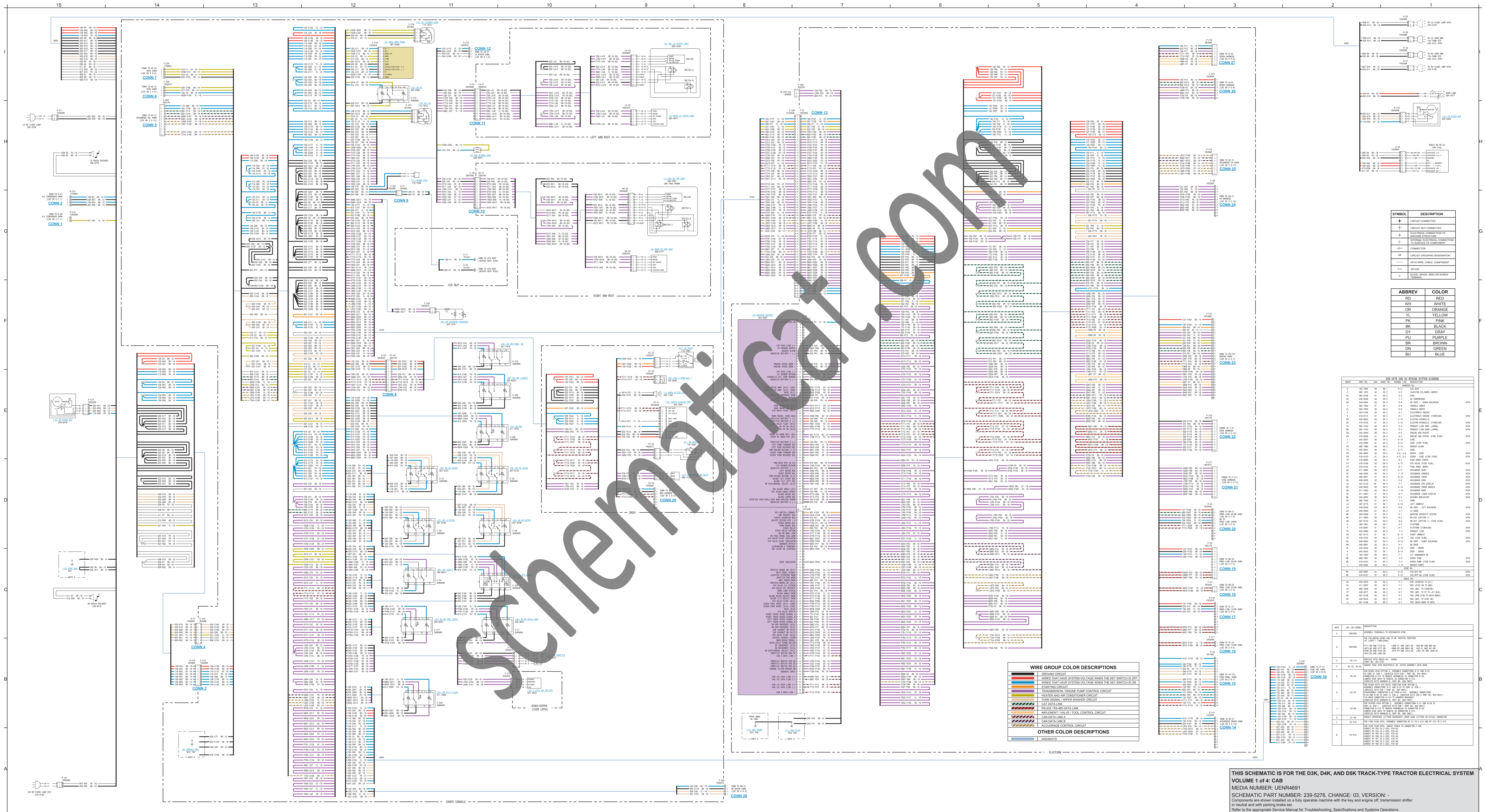


**Deutsch connector:** Typical representation of a Deutsch connector. The plug contains all sockets and the receptacle contains all pins.



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





SYMBOL	DESCRIPTION
+	GROUND CONNECTION
+	GROUND NOT CONNECTED
+	ELECTRICAL CONNECTION TO ELECTRICAL CONNECTION TO SUBSTRATE OR COMPONENT
+	CONNECTION
+	GROUND GROUPING DESIGNATION
+	WIRE WITH CABLE COMPANION
+	SPARE
+	WIRE GROUPING INFO OR SYSTEM SYMBOL

ABBREV	COLOR
RD	RED
WH	WHITE
OR	ORANGE
YL	YELLOW
PK	PINK
BL	BLACK
GY	GRAY
PKL	PINK/BLACK
BR	BROWN
GN	GREEN
BLU	BLUE

WIRE GROUP	DESCRIPTION
1	IGNITION SWITCH
2	IGNITION SWITCH
3	IGNITION SWITCH
4	IGNITION SWITCH
5	IGNITION SWITCH
6	IGNITION SWITCH
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100	IGNITION SWITCH

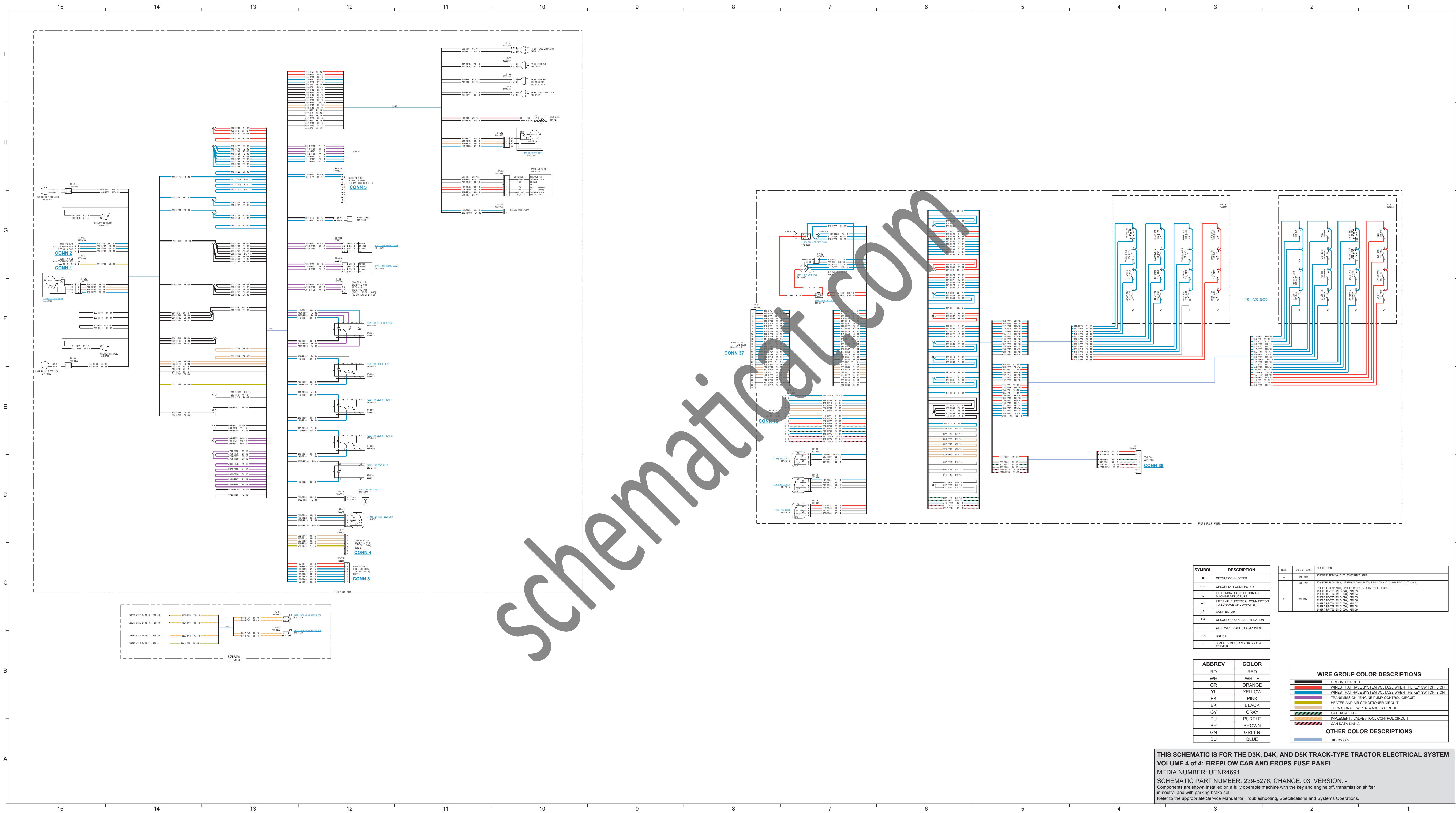
WIRE GROUP	DESCRIPTION
1	GROUND CIRCUIT
2	WIRE THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS OFF
3	WIRE THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS ON
4	IGNITION CIRCUIT
5	TRANSMISSION ENGINE PUMP CONTROL CIRCUIT
6	STARTER MOTOR CONTROL CIRCUIT
7	CLAMP SIGNAL / WATER WASHER CIRCUIT
8	IGNITION CIRCUIT
9	IGNITION CIRCUIT
10	IGNITION CIRCUIT
11	IGNITION CIRCUIT
12	IGNITION CIRCUIT
13	IGNITION CIRCUIT
14	IGNITION CIRCUIT
15	IGNITION CIRCUIT
16	IGNITION CIRCUIT
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99	IGNITION CIRCUIT
100	IGNITION CIRCUIT

THIS SCHEMATIC IS FOR THE D3K, D4K, AND D5K TRACK-TYPE TRACTOR ELECTRICAL SYSTEM  
 VOLUME 1 of 4: CAB  
 MEDIA NUMBER: UENR4691  
 SCHEMATIC PART NUMBER: 239-5276, CHANGE: 03, VERSION: -  
 Components are shown installed on a fully operational machine with the key and engine off. Transmission shift  
 is neutral and with parking brake set.  
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.









SYMBOL	DESCRIPTION
+	CIRCUIT CONNECTED
-	CIRCUIT NOT CONNECTED
↓	ELECTRICAL CONNECTION TO MACHINE STRUCTURE
⊥	INTERNAL ELECTRICAL CONNECTION TO SURFACE OF COMPONENT
→	CONNECTION
HA	CIRCUIT GROUPING DESIGNATION
---	ATCH WIRE, CABLE COMPONENT
∞	SPLICE
○	BLADE, SPRING, RING OR SCREW TERMINAL

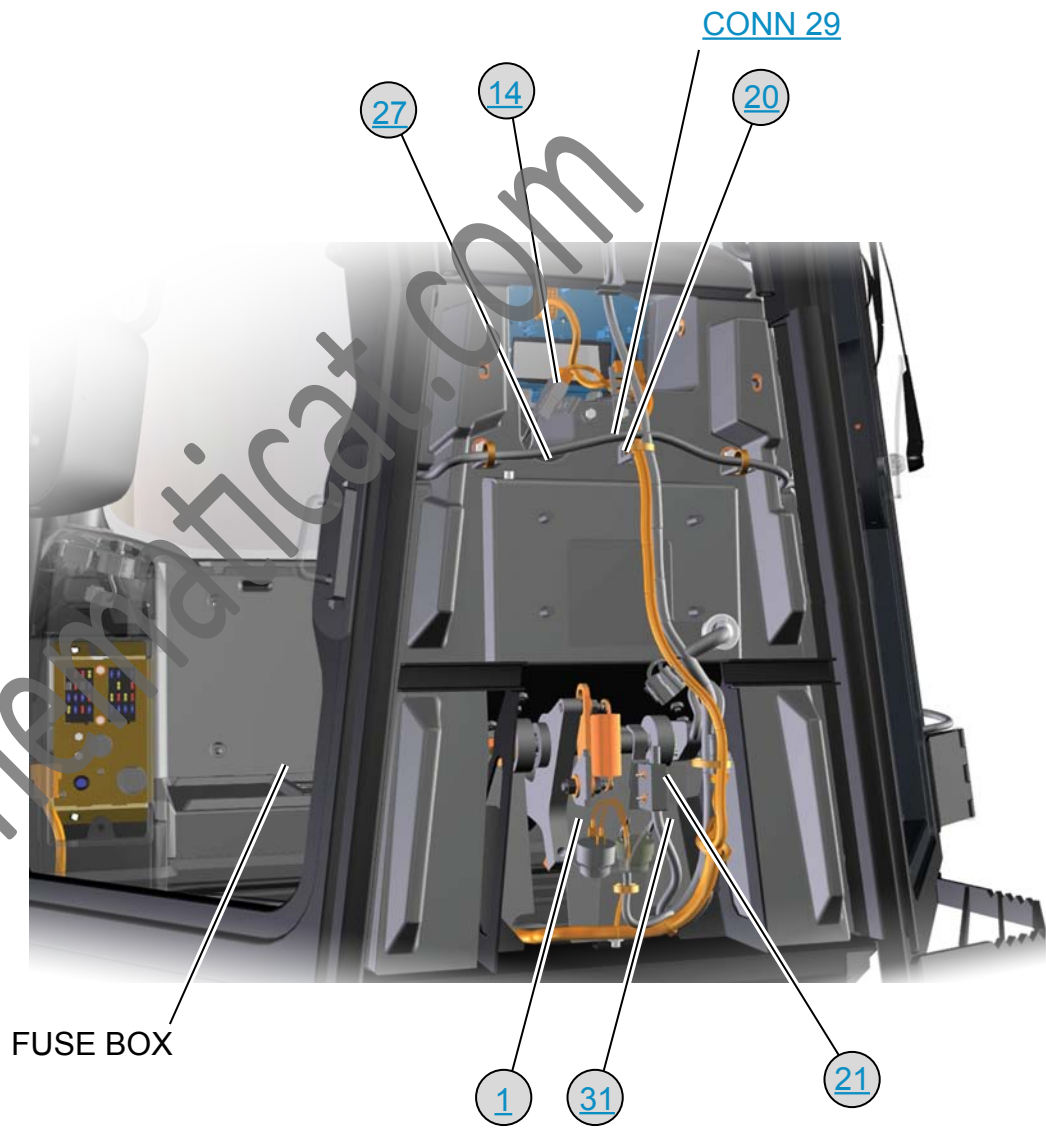
NOTE	LOC. (IF APPLICABLE)	DESCRIPTION
A	WIRING	ASSEMBLY TERMINALS TO DESIGNATED STOP
L	84-02	FOR FIRE PUMP PUMP, INTERNAL CONNECTION FROM 84-02 TO 11 C-020 AND 84-020 TO C-020
B	84-02	FOR FIRE PUMP STOP, INTERNAL CONNECTION FROM 84-02 TO 11 C-020 AND 84-020 TO C-020

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

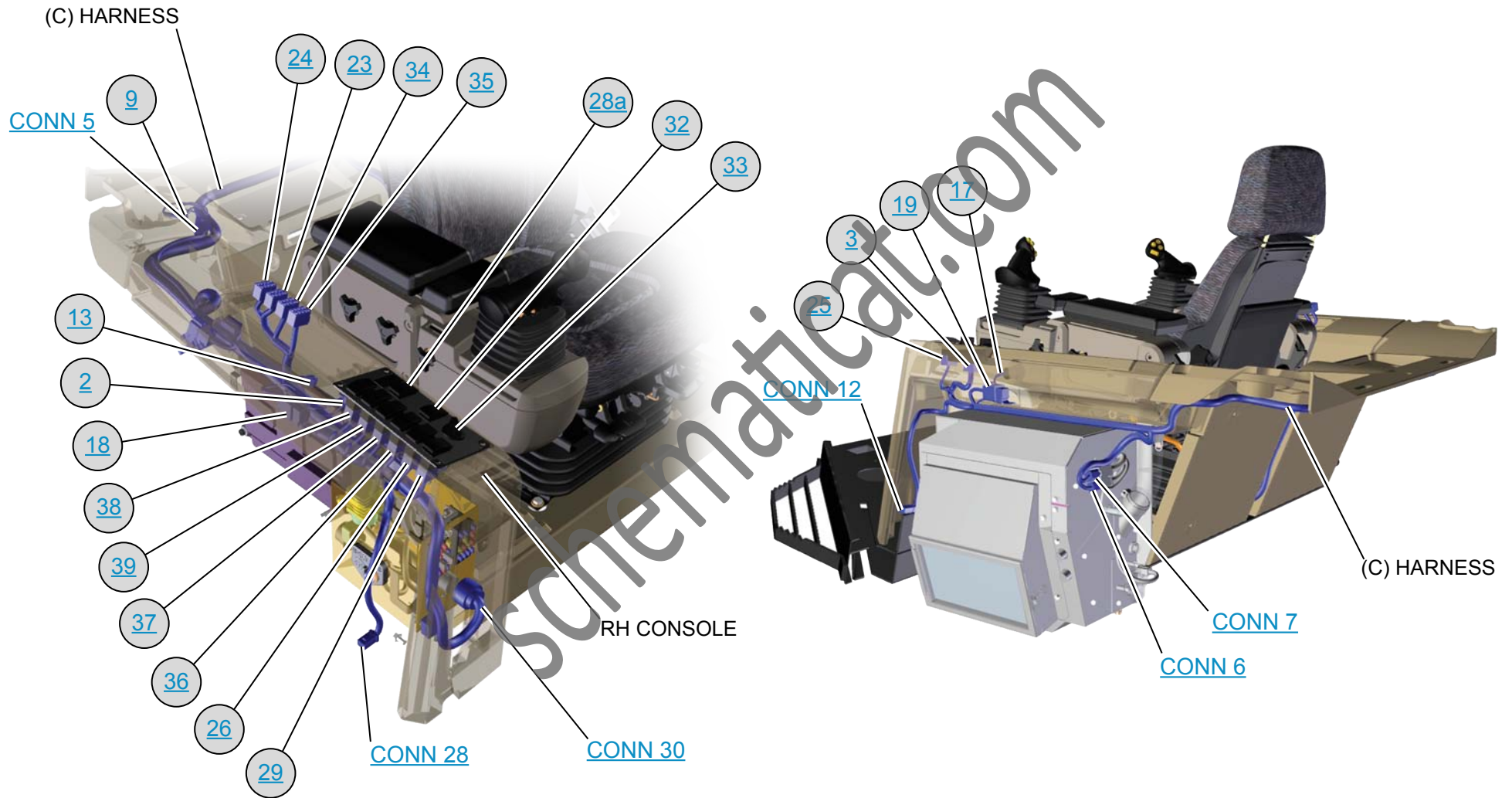
WIRE GROUP COLOR DESCRIPTIONS	
—	GROUND CIRCUIT
—	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS OFF
—	WIRES THAT HAVE SYSTEM VOLTAGE WHEN THE KEY SWITCH IS ON
—	TRANSMISSION / ENGINE PUMP CONTROL CIRCUIT
—	HEATER AND AIR CONDITIONER CIRCUIT
—	TURN SIGNAL WIPER WASHER CIRCUIT
—	CAN DATA LINK
—	CAN DATA LINK A
—	IMPLEMENT / VALVE / TOOL CONTROL CIRCUIT
—	CAN DATA LINK A
OTHER COLOR DESCRIPTIONS	
—	HIGHWAYS

**THIS SCHEMATIC IS FOR THE D3K, D4K, AND D5K TRACK-TYPE TRACTOR ELECTRICAL SYSTEM VOLUME 4 of 4: FIREPLOW CAB AND EROPS FUSE PANEL.**  
 MEDIA NUMBER: UENR4691  
 SCHEMATIC PART NUMBER: 239-5276, CHANGE: 03, VERSION: -  
 Components are shown installed on a fully operable machine with the key and engine off, transmission shifter in neutral and with parking brake set.  
 Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operations.

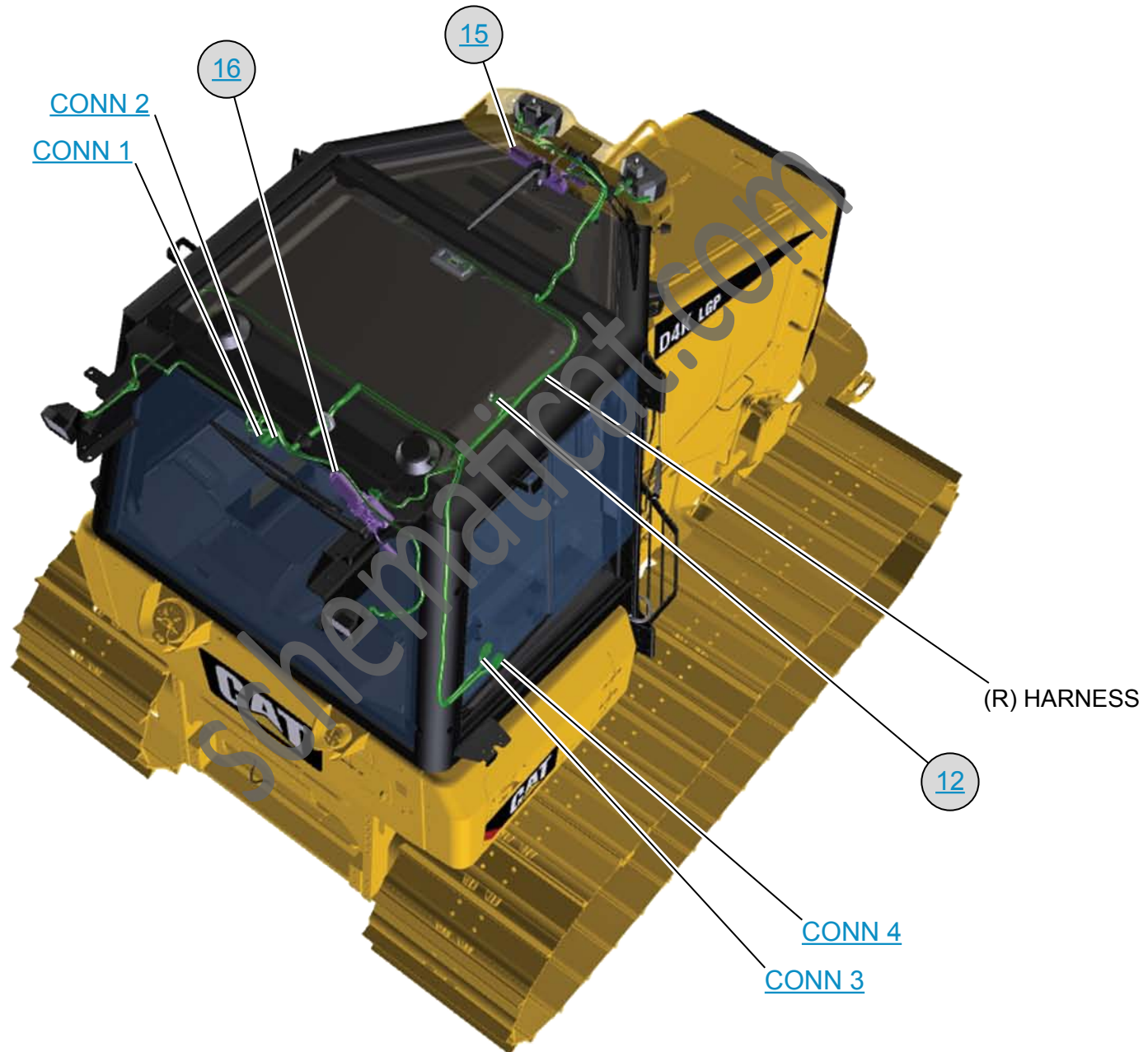
# DASH WIRING



# EROPS CONSOLE WIRING



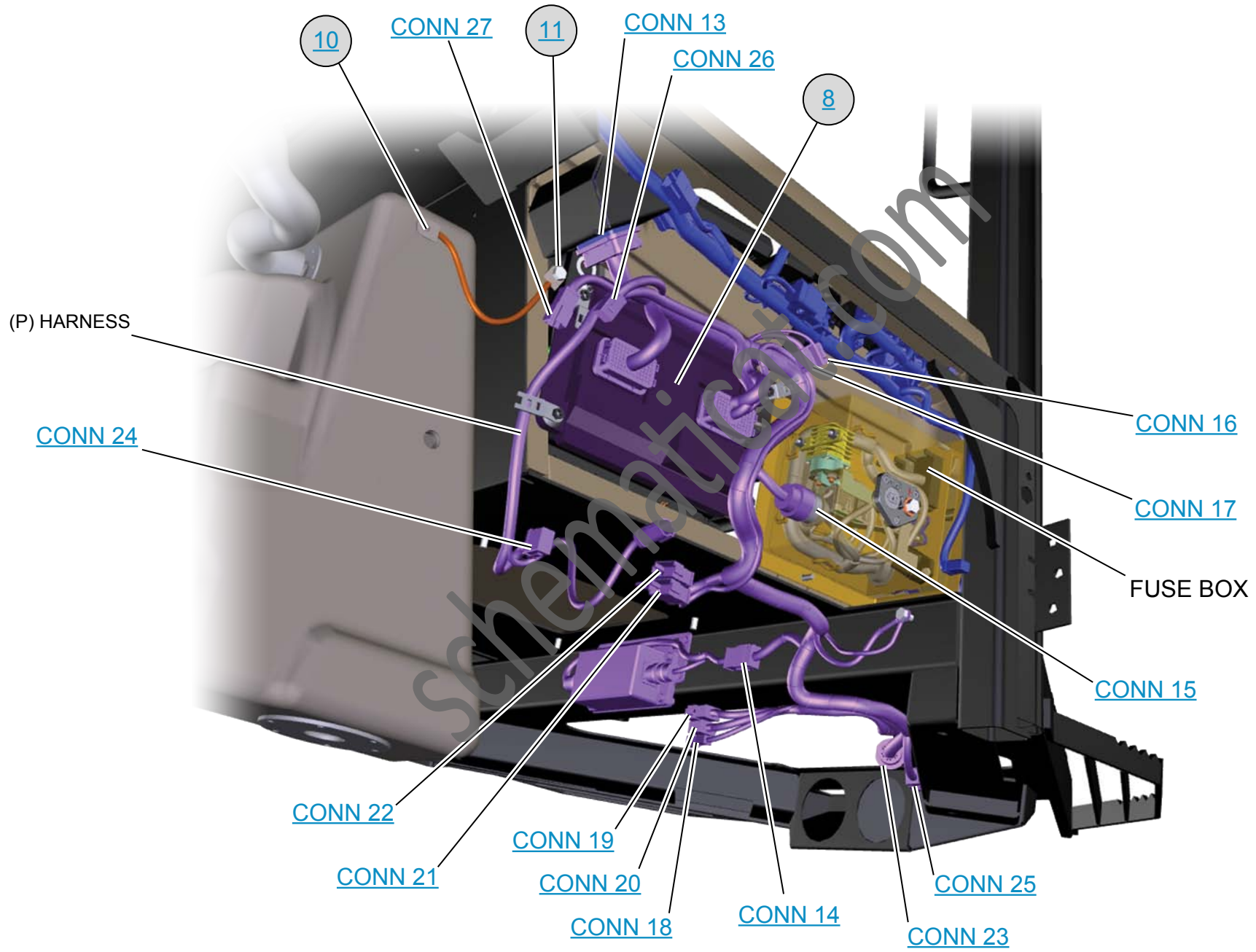
# EROPS ROOF WIRING



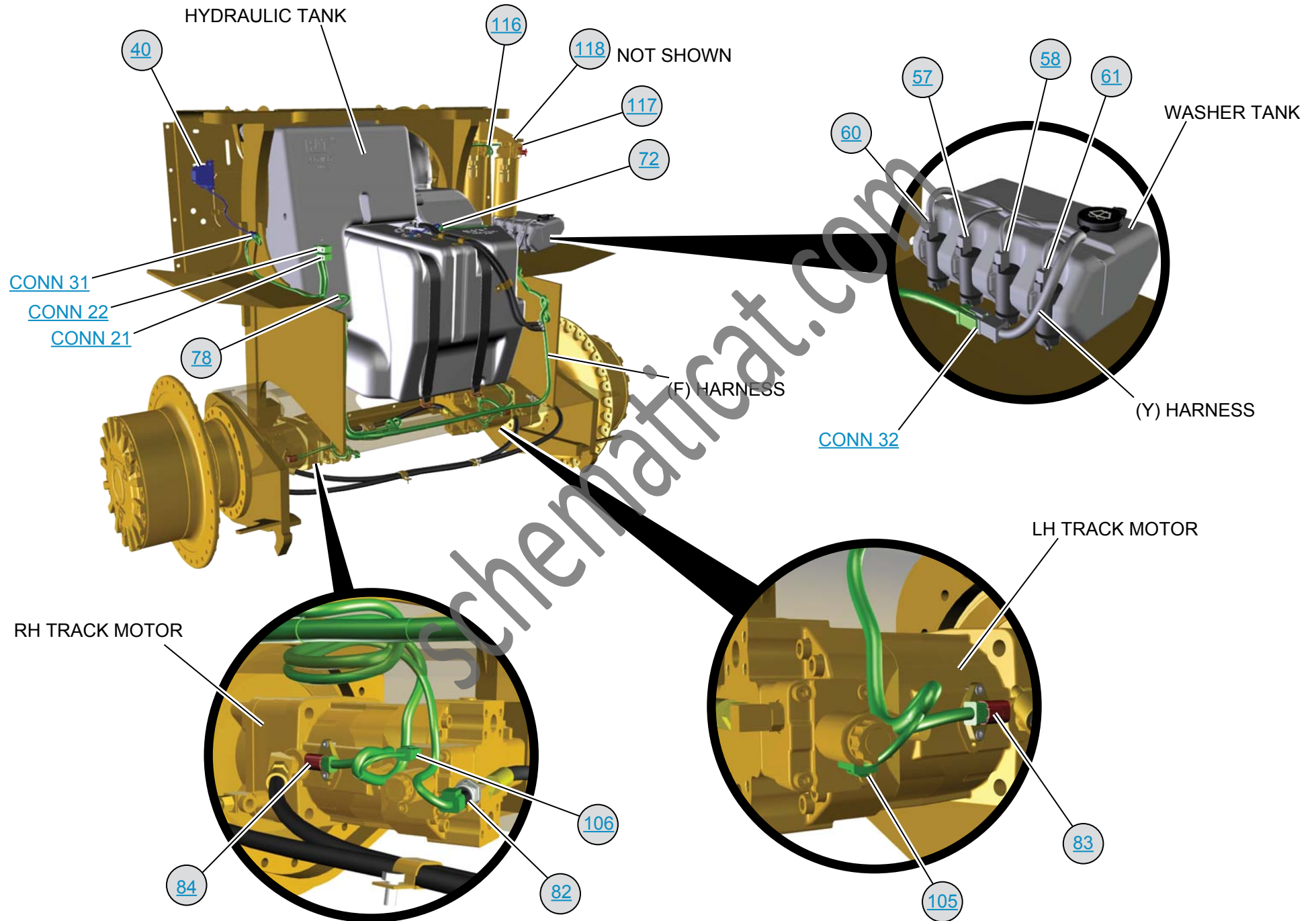
# OPERATOR CONSOLE WIRING



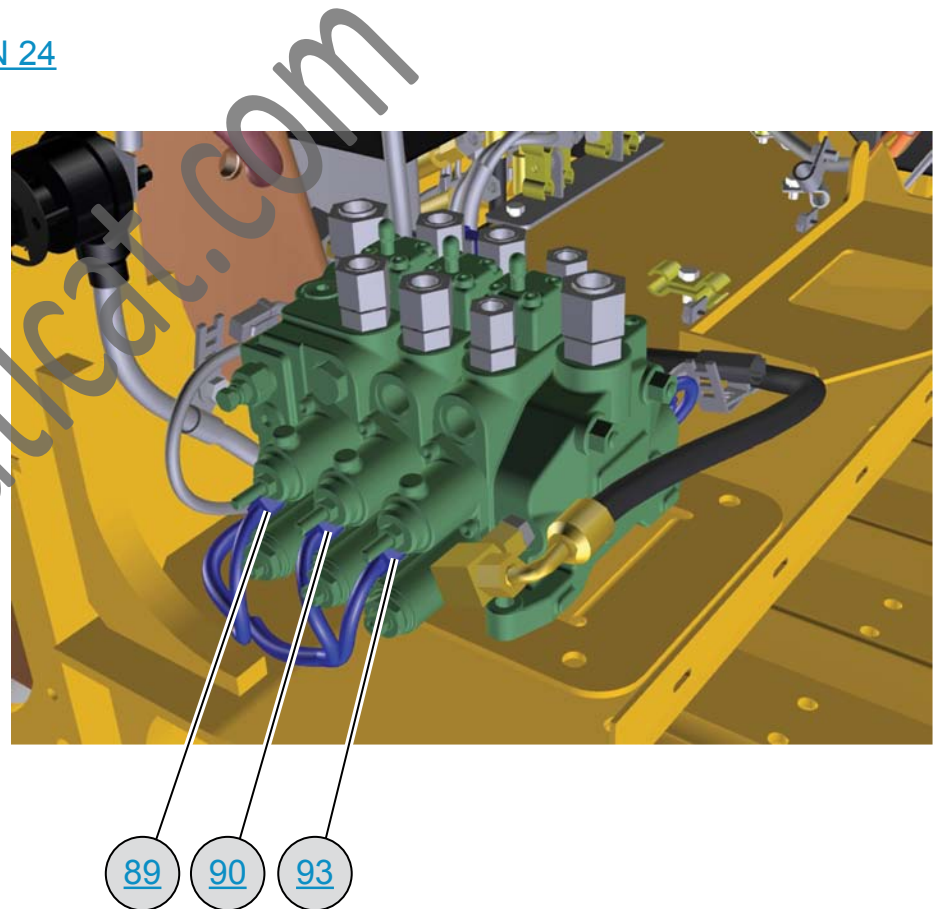
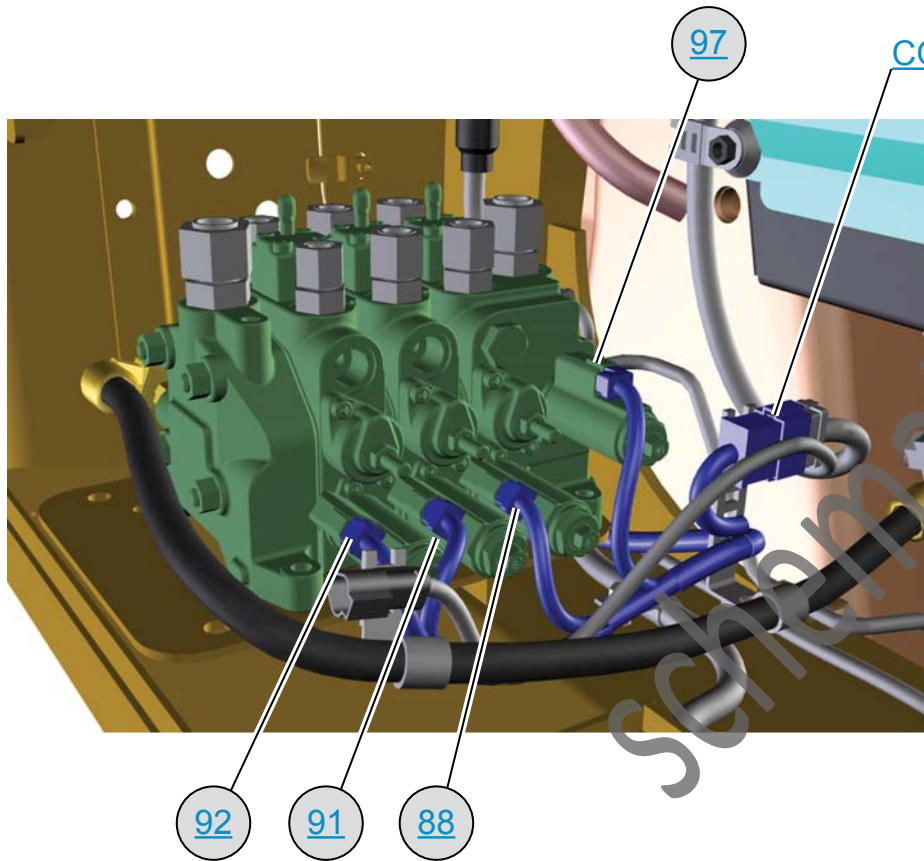
# PLATFORM WIRING



# CASE WIRING

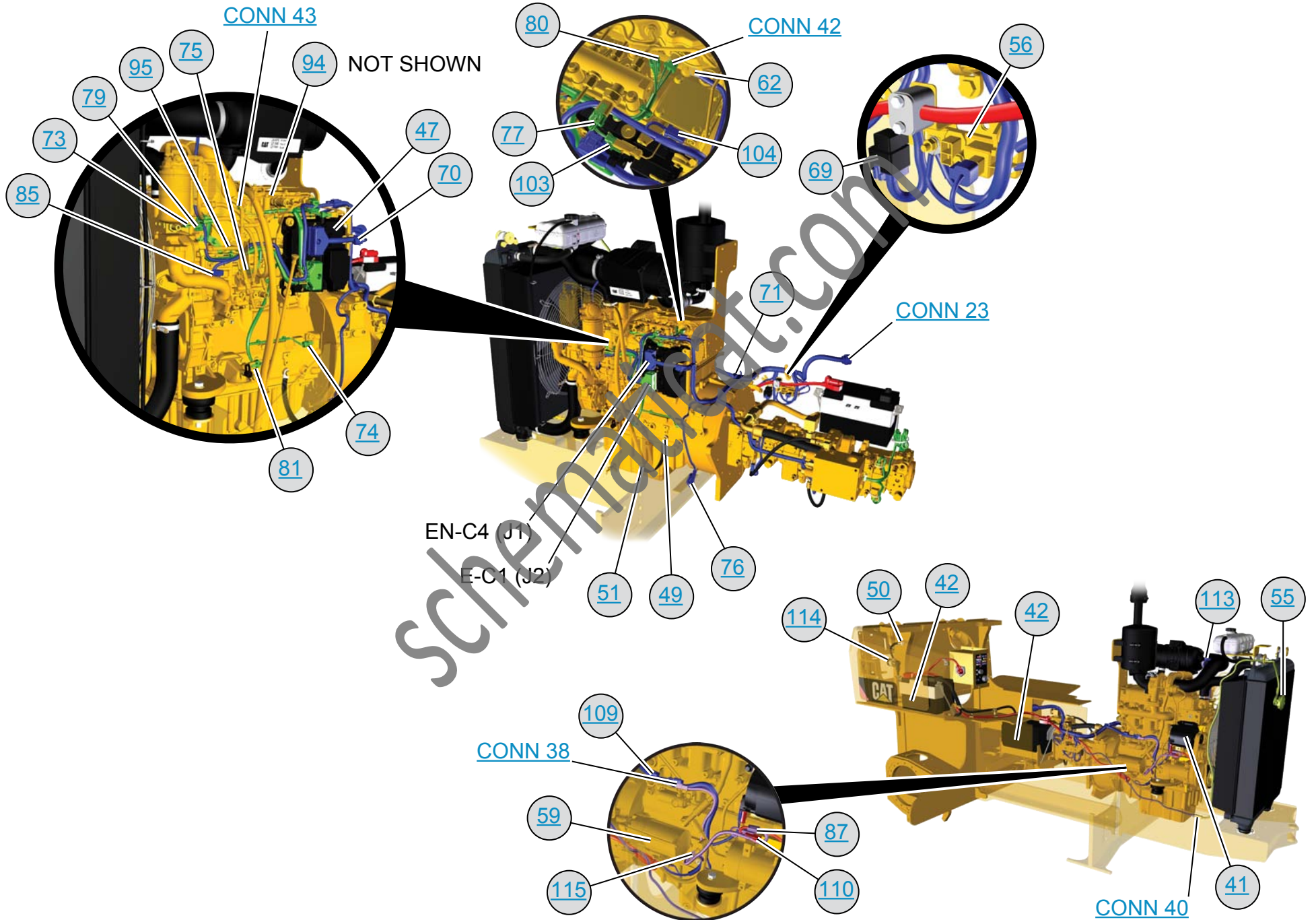


# ELECTRO - HYDRAULIC VALVE

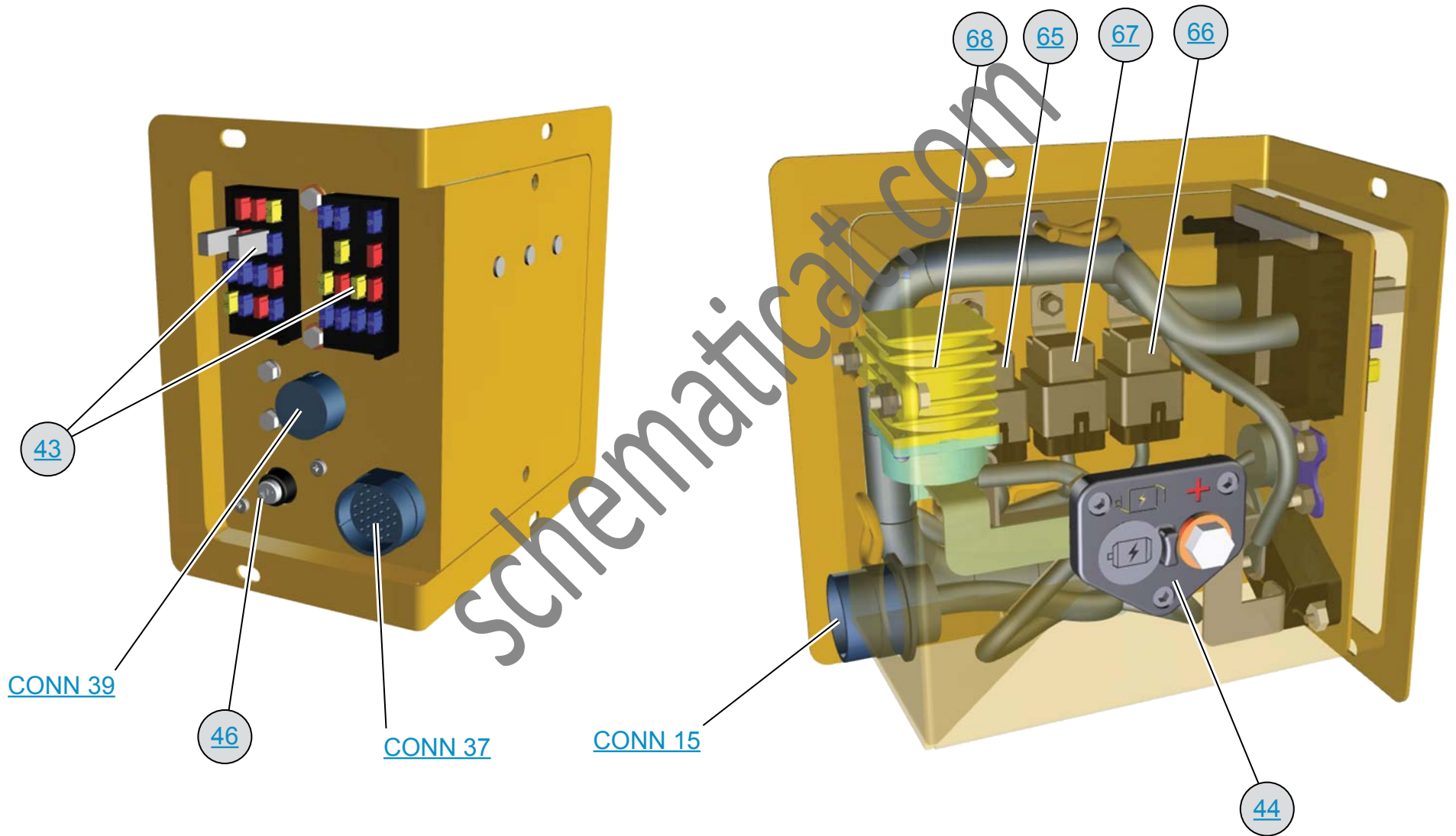




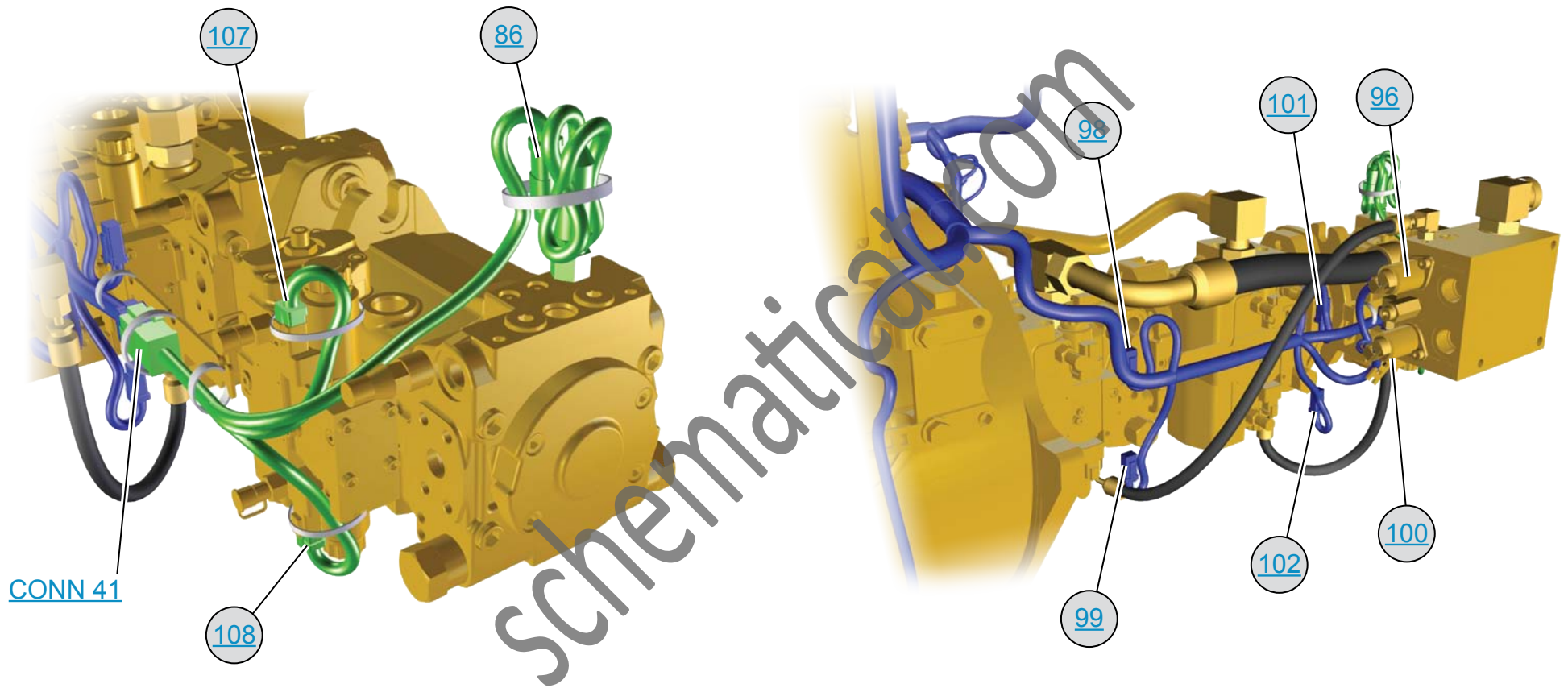
# ENGINE WIRING



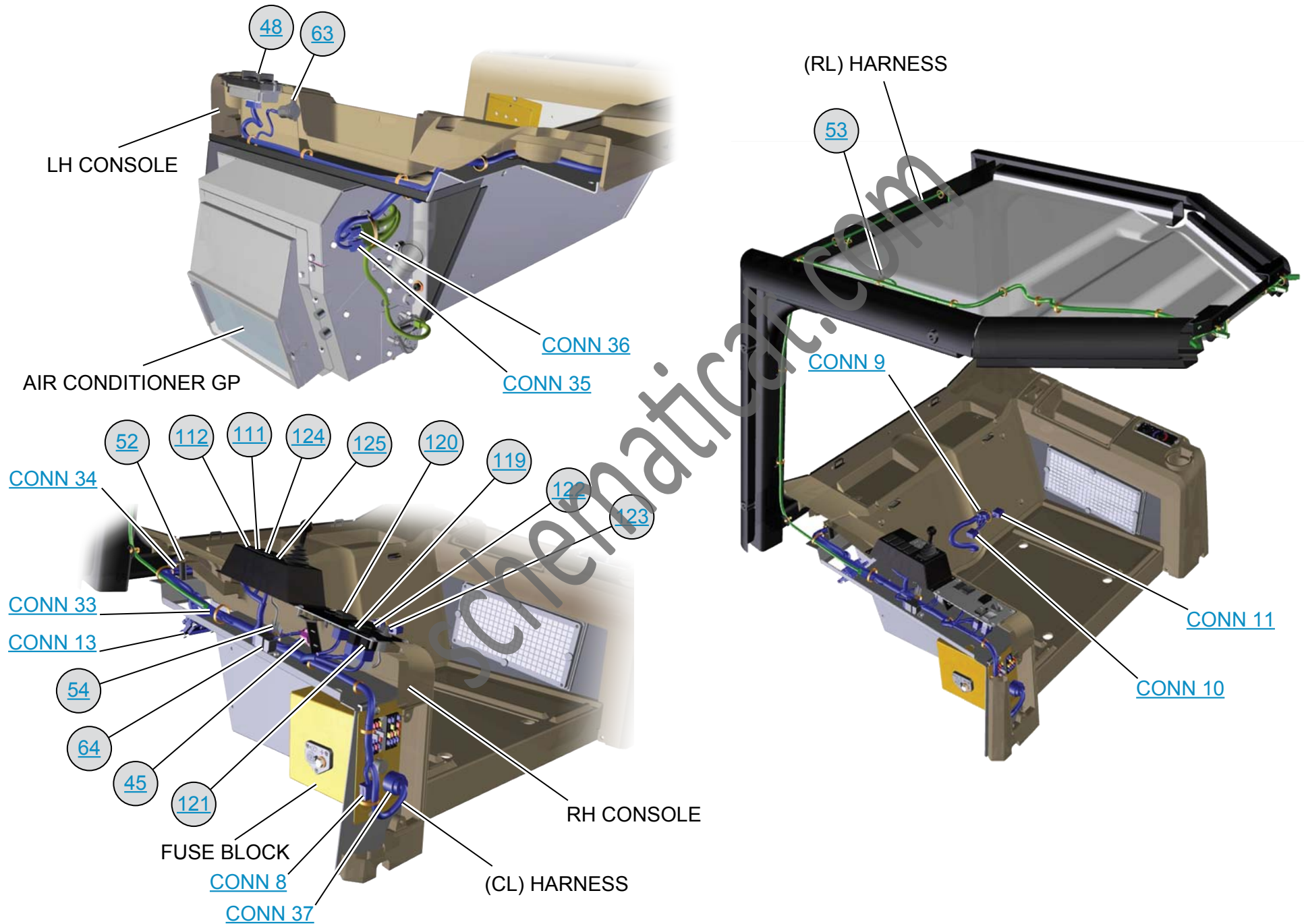
# FUSE BLOCK WIRING



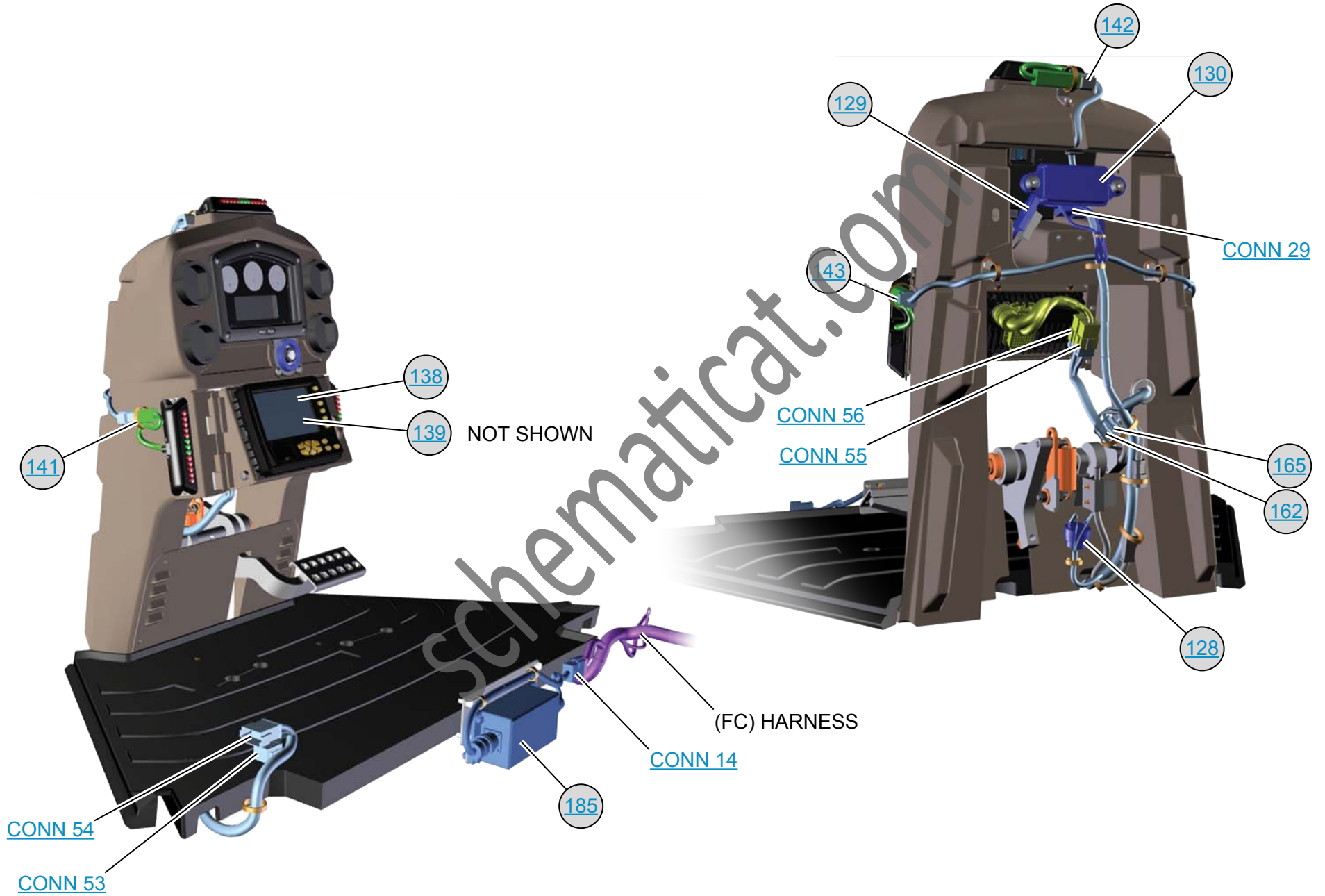
# HYDRAULIC PUMP WIRING



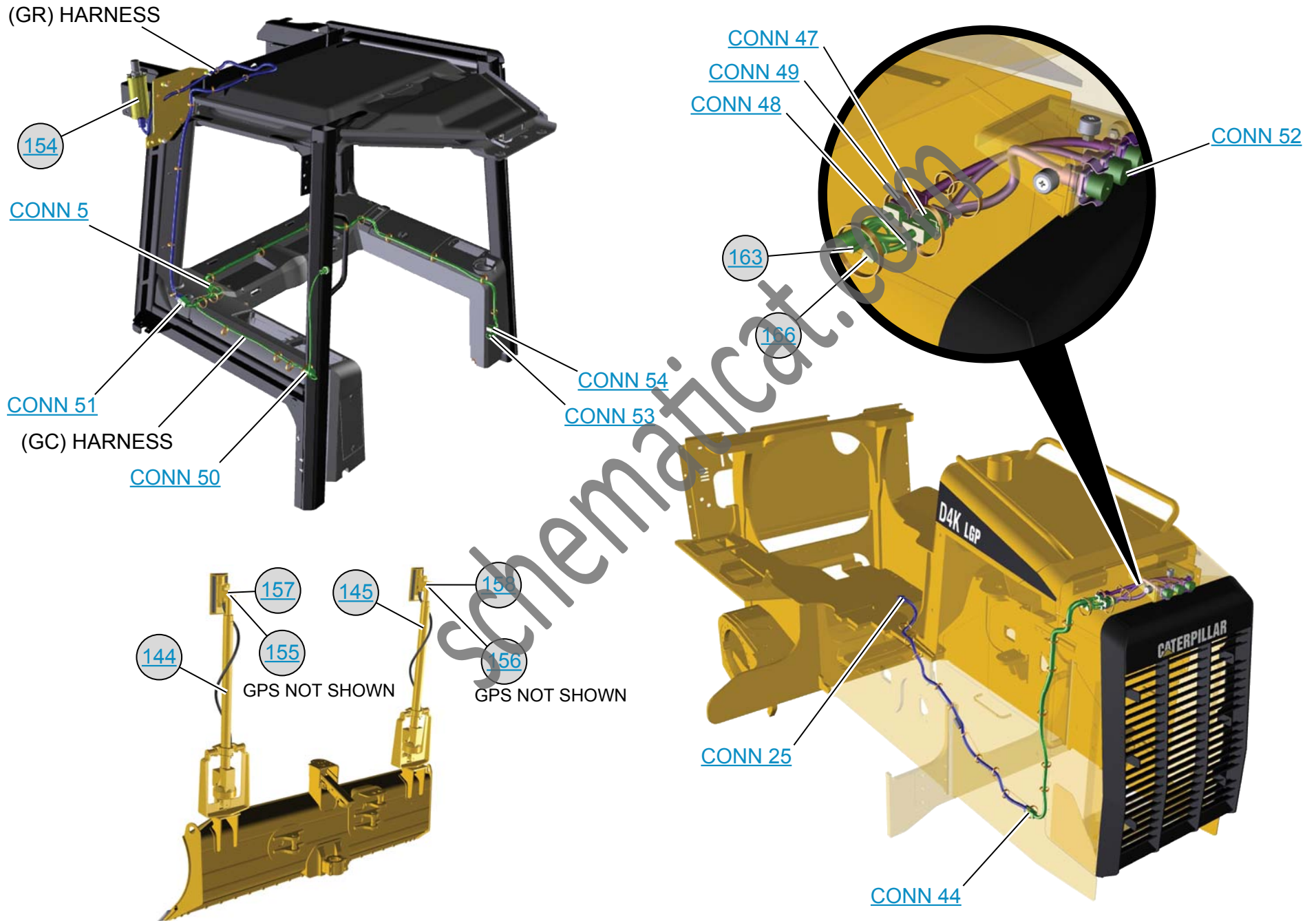
# OOPS ROOF WIRING



# ACCUGRADE CONSOLE WIRING

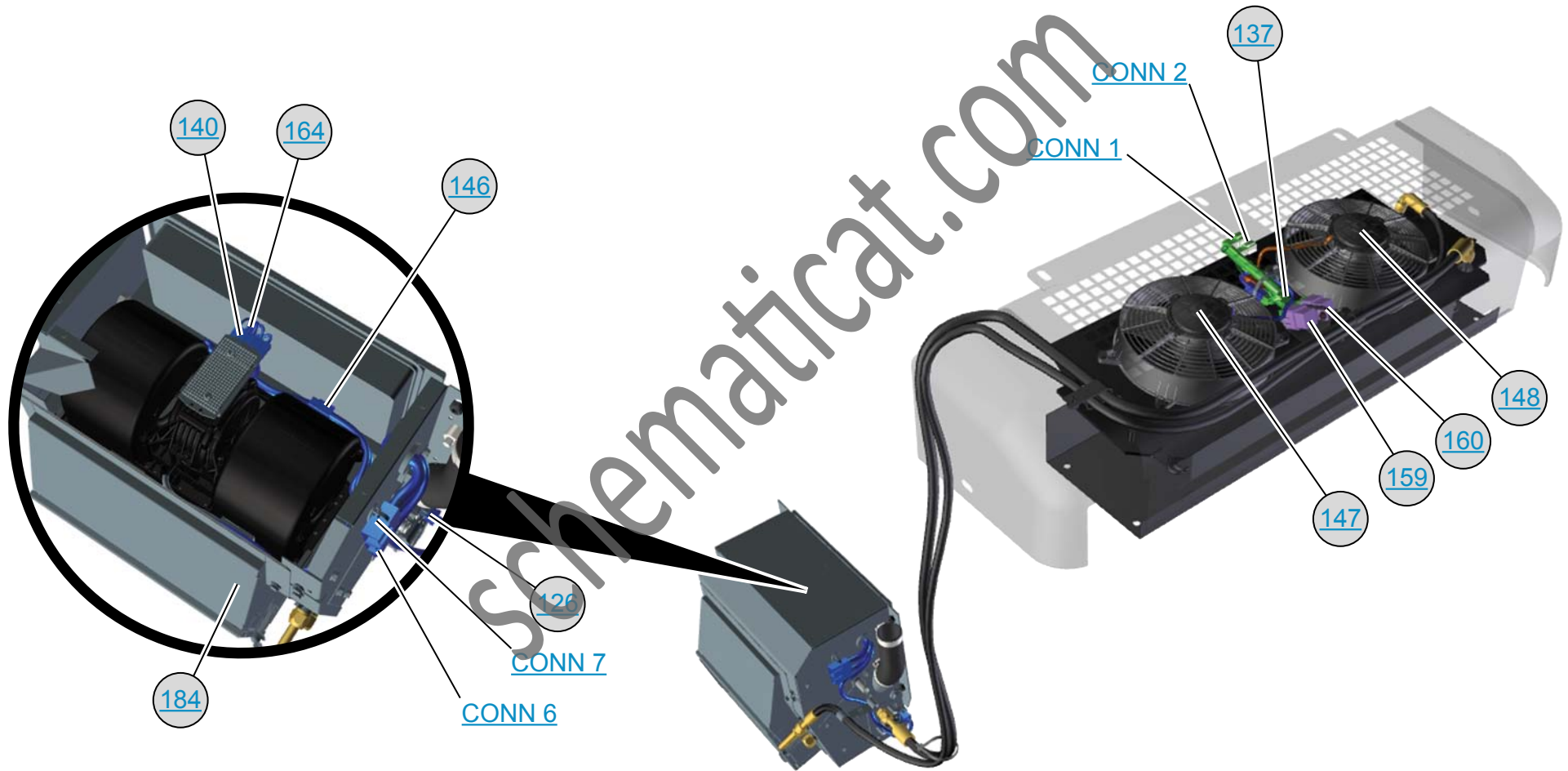


# ACCUGRADE HOOD WIRING



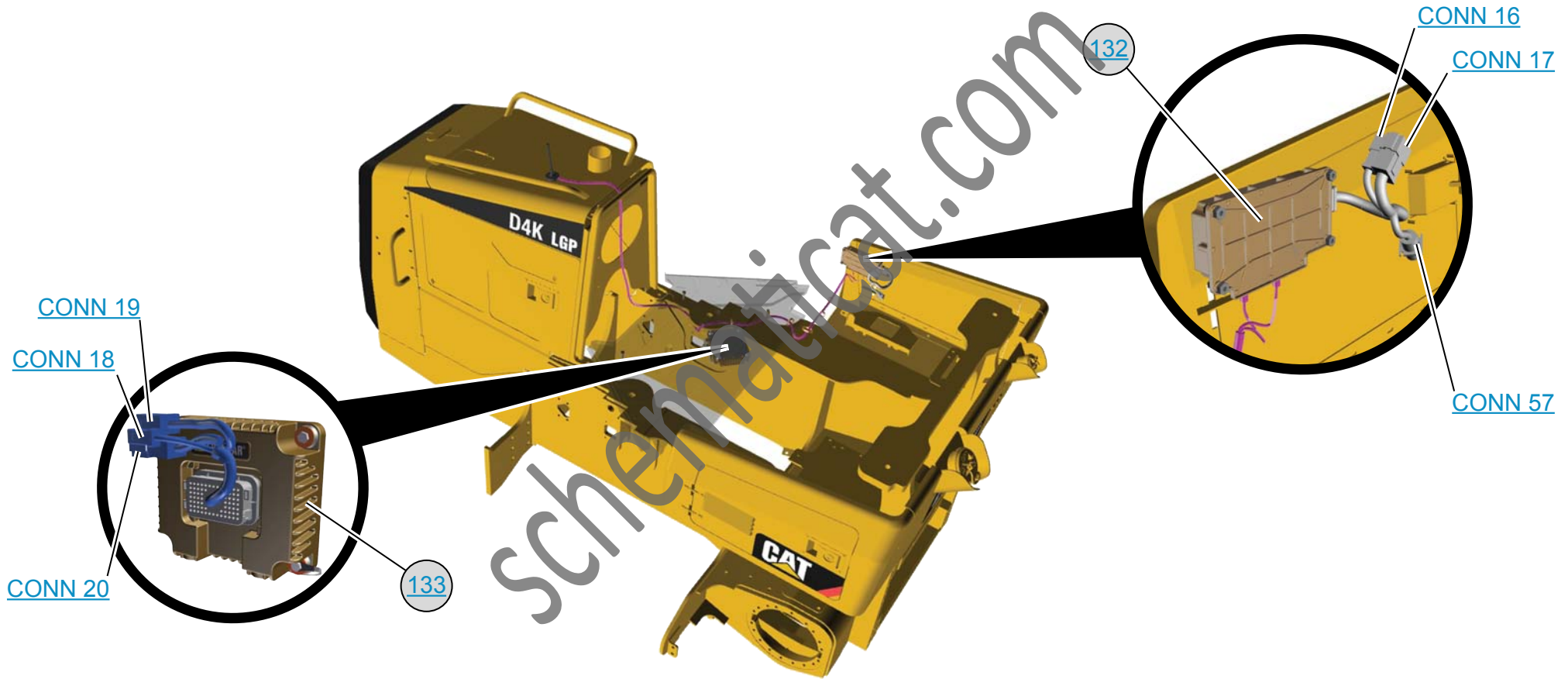
# DOOR WIPER WIRING

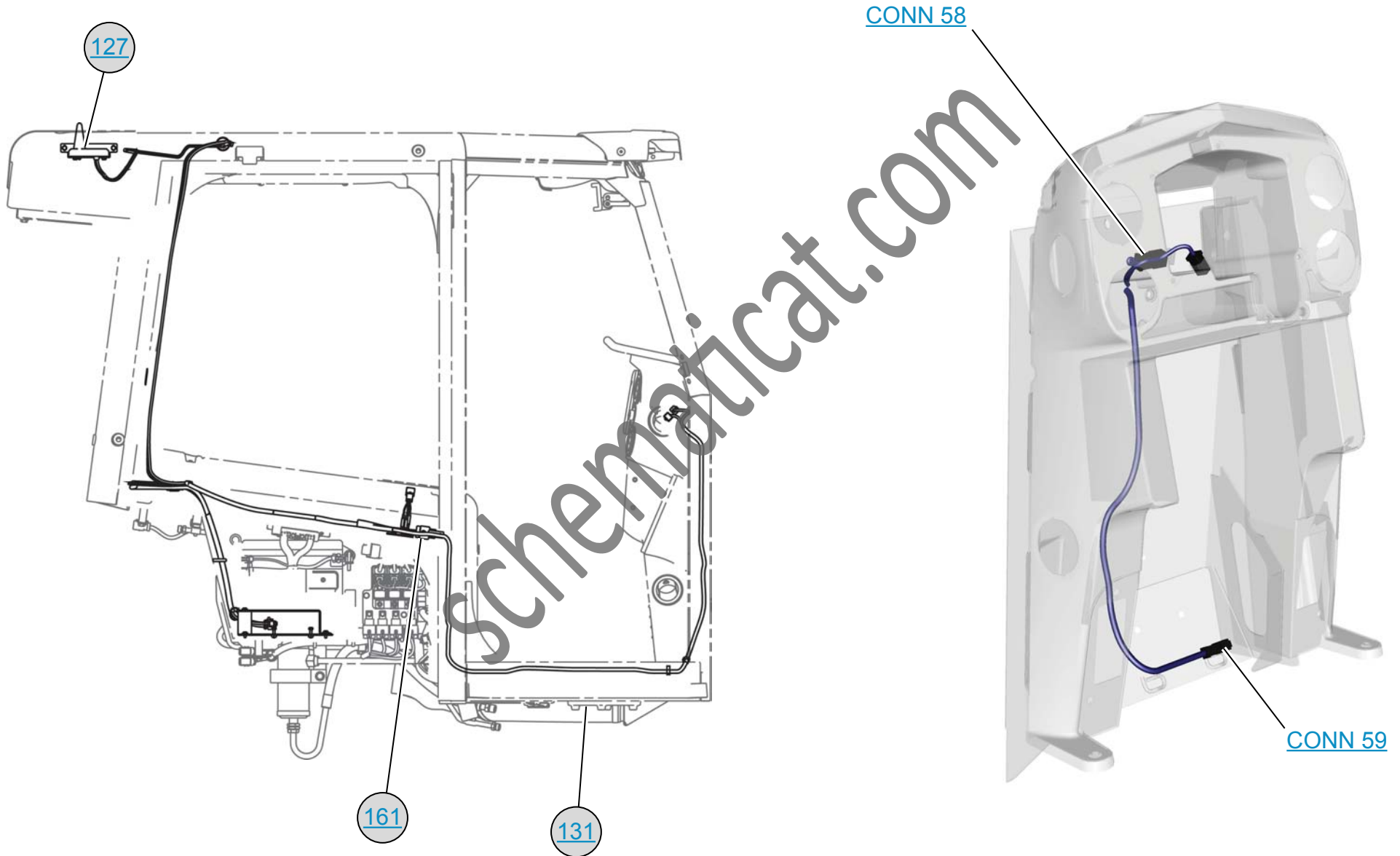




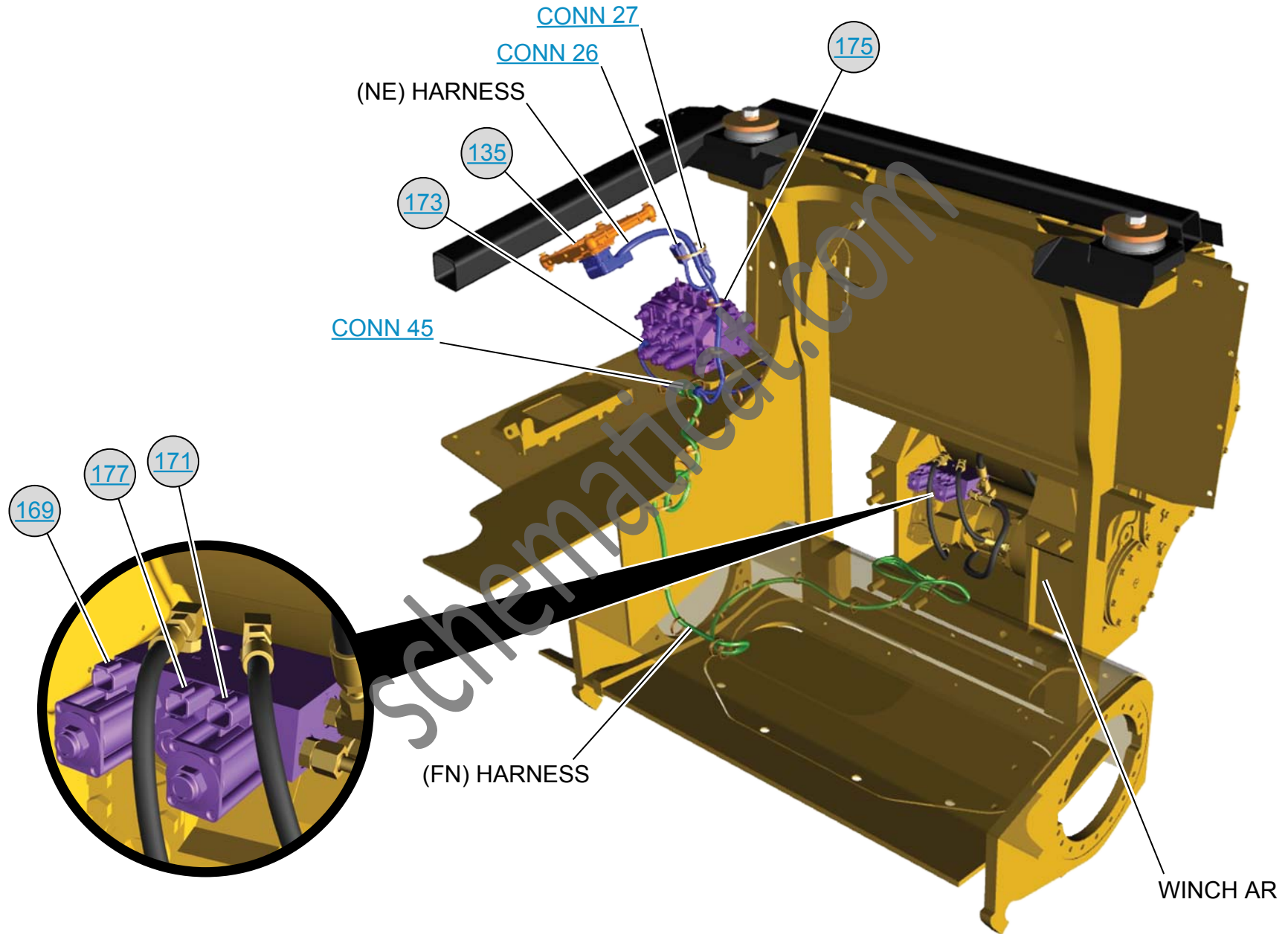


# PRODUCT LINK WIRING

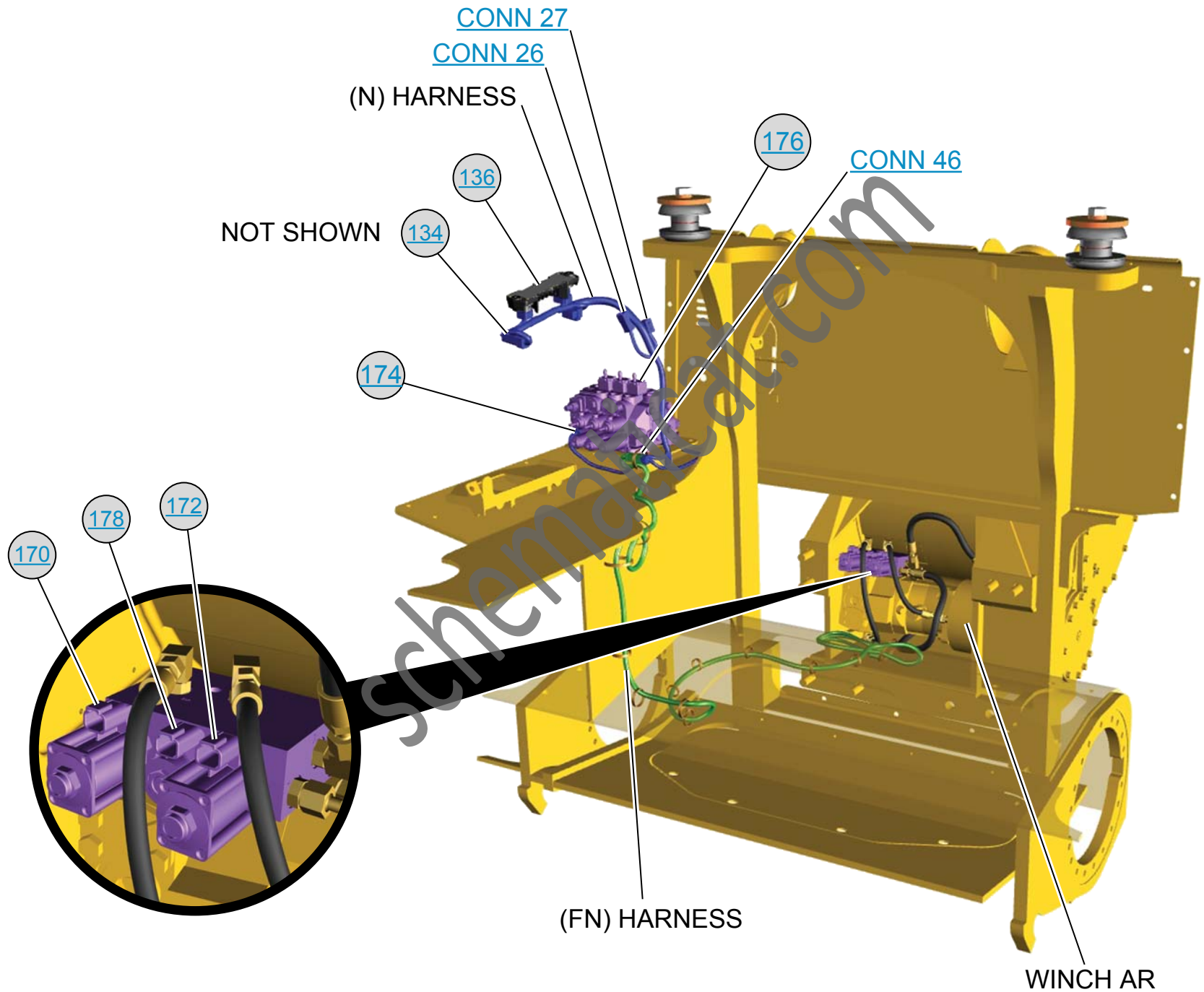




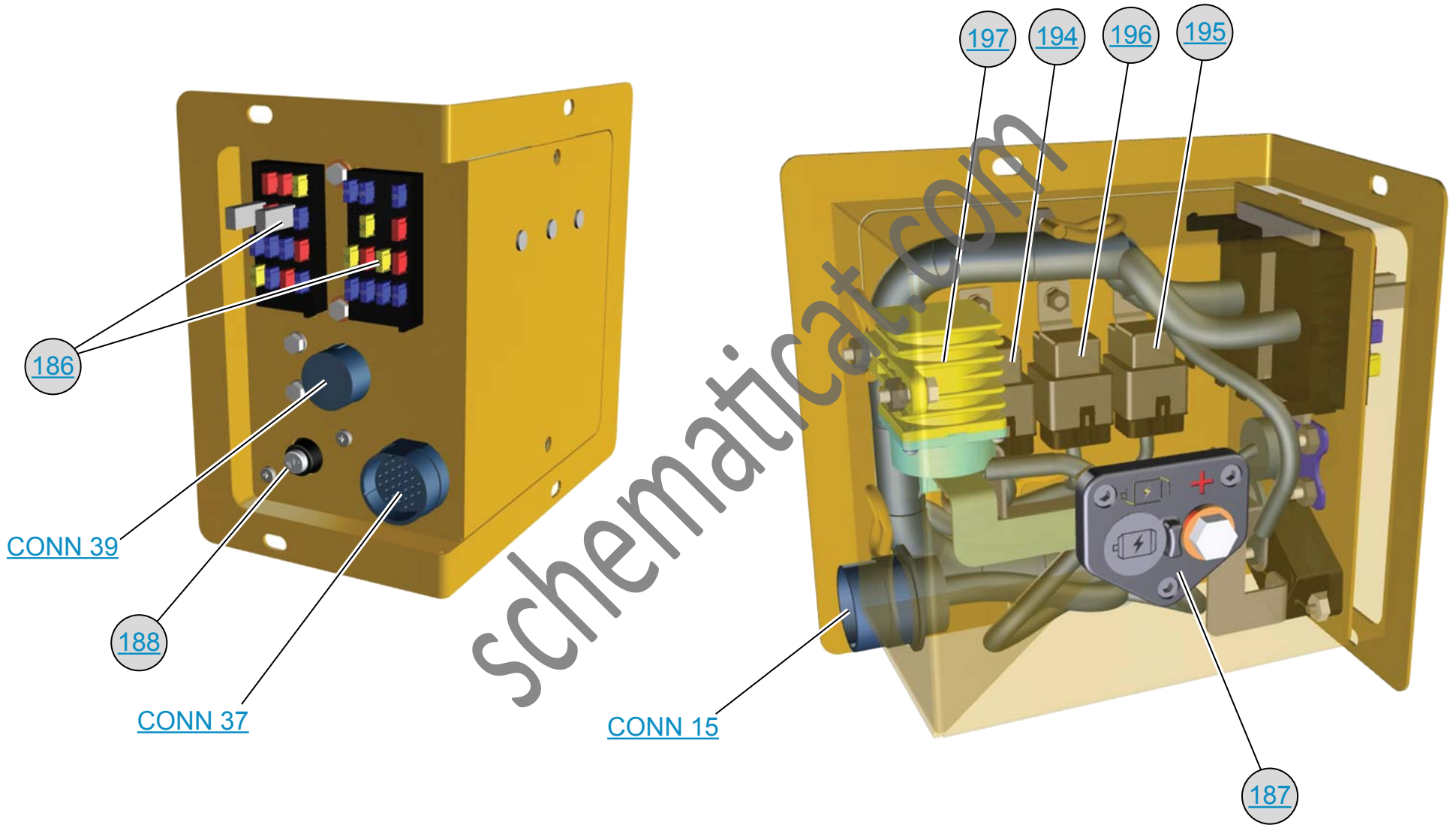
# WINCH \ RIPPER WIRING (OPTION 1)



# WINCH \ RIPPER WIRING (OPTION 2)



# EROPS FUSE PANEL



# FIREPLOW CAB WIRING



# FIREPLOW 5TH VALVE WIRING

