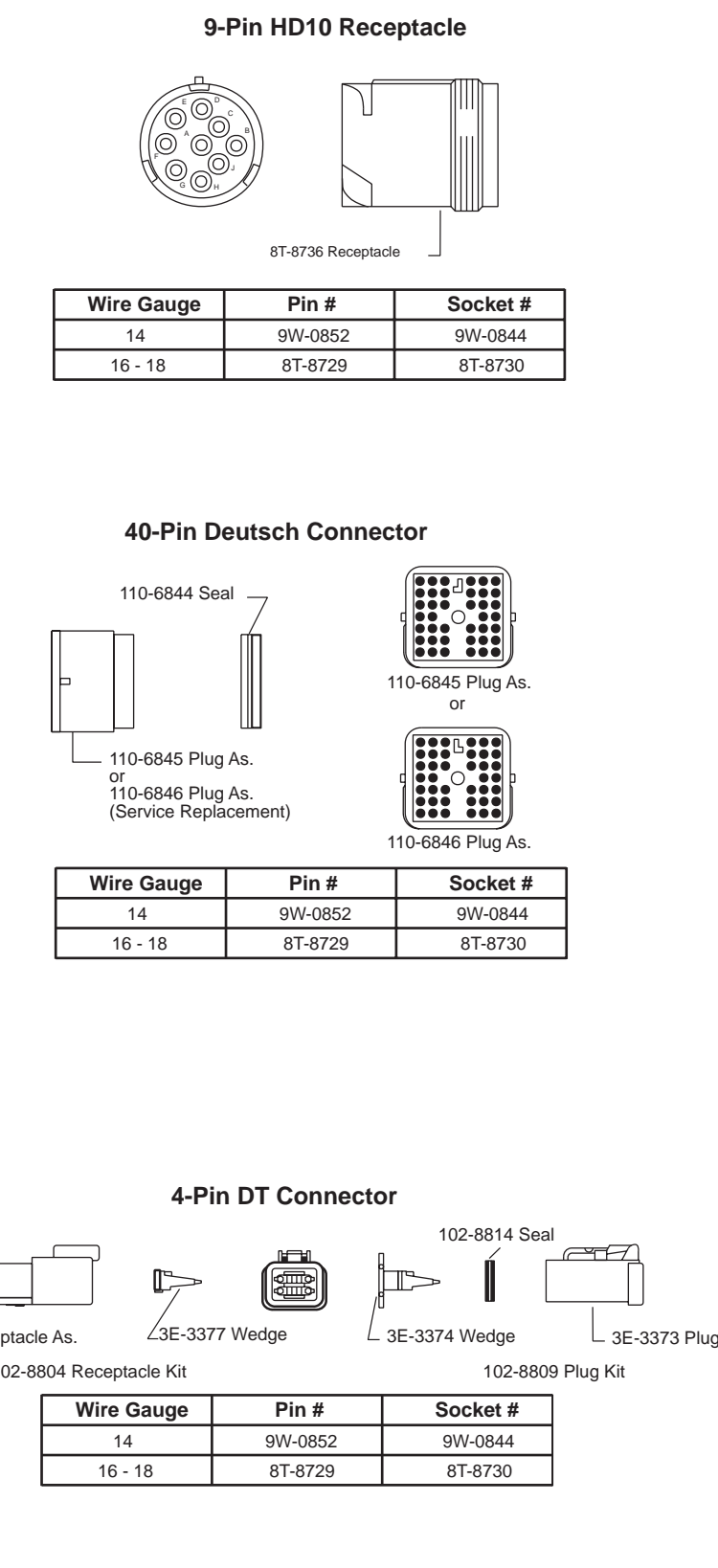
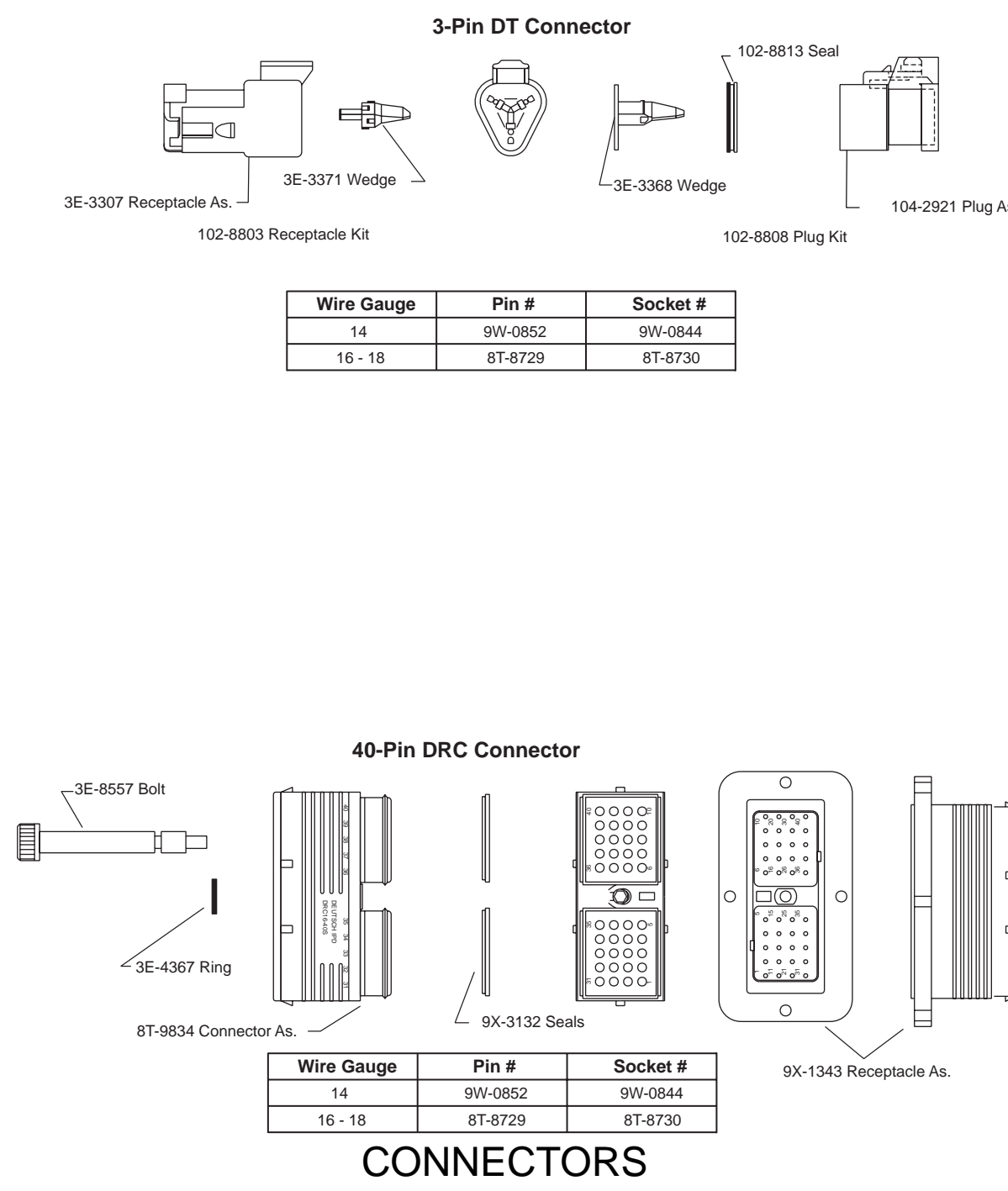


Component Identifiers (CID) <sup>1</sup> Module Identifier (MID) <sup>2</sup> Engine Control Module (MID No. 036)	
CID	Component
1	Injector Cylinder 1
2	Injector Cylinder 2
3	Injector Cylinder 3
4	Injector Cylinder 4
5	Injector Cylinder 5
6	Injector Cylinder 6
7	Injector Cylinder 7
8	Injector Cylinder 8
9	Injector Cylinder 9
10	Injector Cylinder 10
11	Injector Cylinder 11
12	Injector Cylinder 12
42	Injector Actuation Valve
91	Throttle Switch
100	Engine Oil Pressure Sensor
110	Engine Coolant Temperature Sensor
164	Injector Actuation Pressure Control Valve
168	System Voltage High
172	Intake Manifold Air Temp Sensor
174	Fuel Temperature Sensor
175	Engine Oil Temperature Sensor
190	Engine Speed Sensor
248	Car Data Link
253	Personality Module
254	Electronic Control Module
261	Engine Timing Calibration
262	5 Volt Sensor Dc Power
263	Digital Sensor Supply
264	Decel Throttle Position
266	Crank Without Injection Input
268	Programmed Parameter Fault
273	Manifold Pressure Sensor
274	Atmospheric Pressure Sensor
275	Right Turbo Inlet Pressure Sensor
277	Timing Calibration Sensor
291	Engine Cooling Fan Solenoid
342	Secondary Engine Speed Sensor
544	Engine Cooling Fan Speed Sensor
545	Ether Injection Control Relay
596	Implement Control
799	Service Tool
1599	Engine Fan Blade Position Pull Solenoid
1600	Engine Fan Blade Position Push Solenoid

<sup>1</sup> The CID 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.



**CONNECTORS**



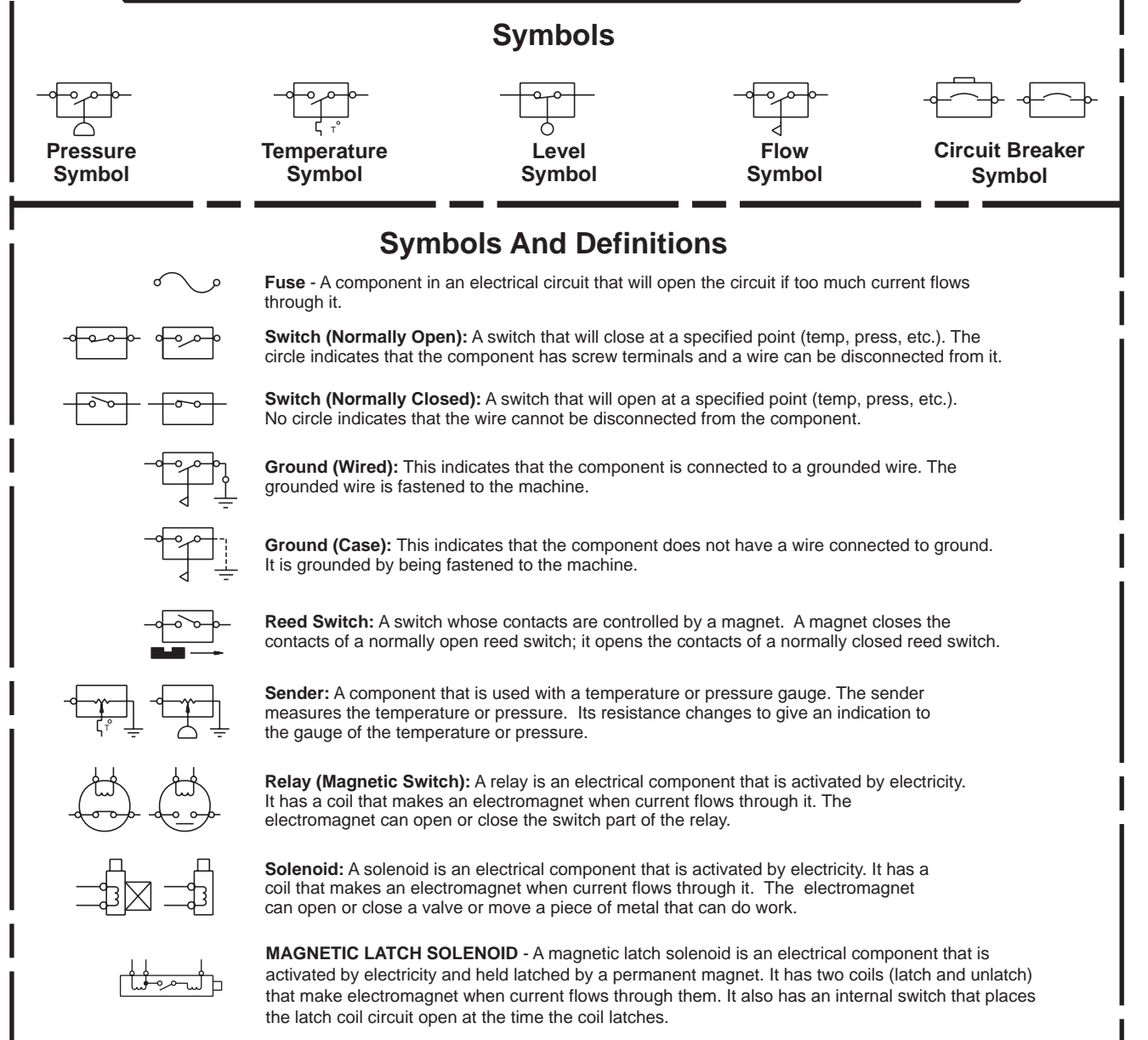
SENR1026-01  
November 2006

# Schematic

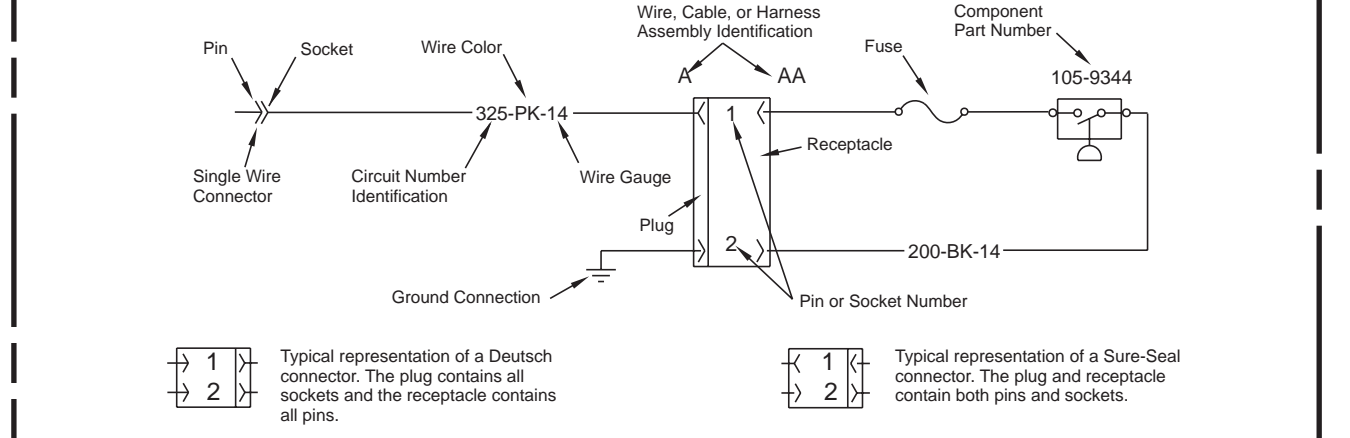
## 3408E and 3412E Engines Electrical System

99C1-UP  
80M1-UP

**Electrical Schematic Symbols And Definitions**



**Harness And Wire Symbols**



**3408E And 3412E Engines For Caterpillar Built Machines**

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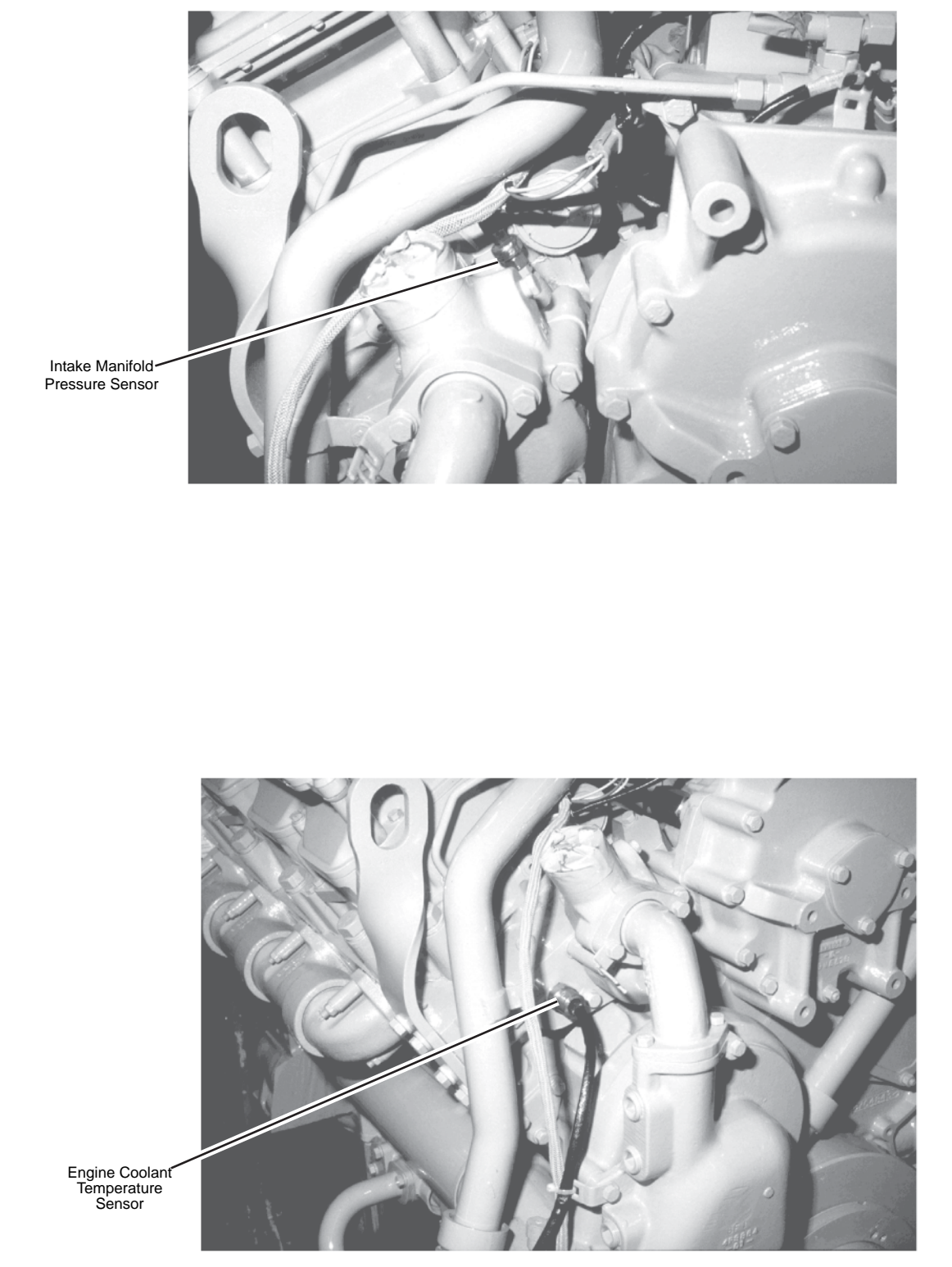
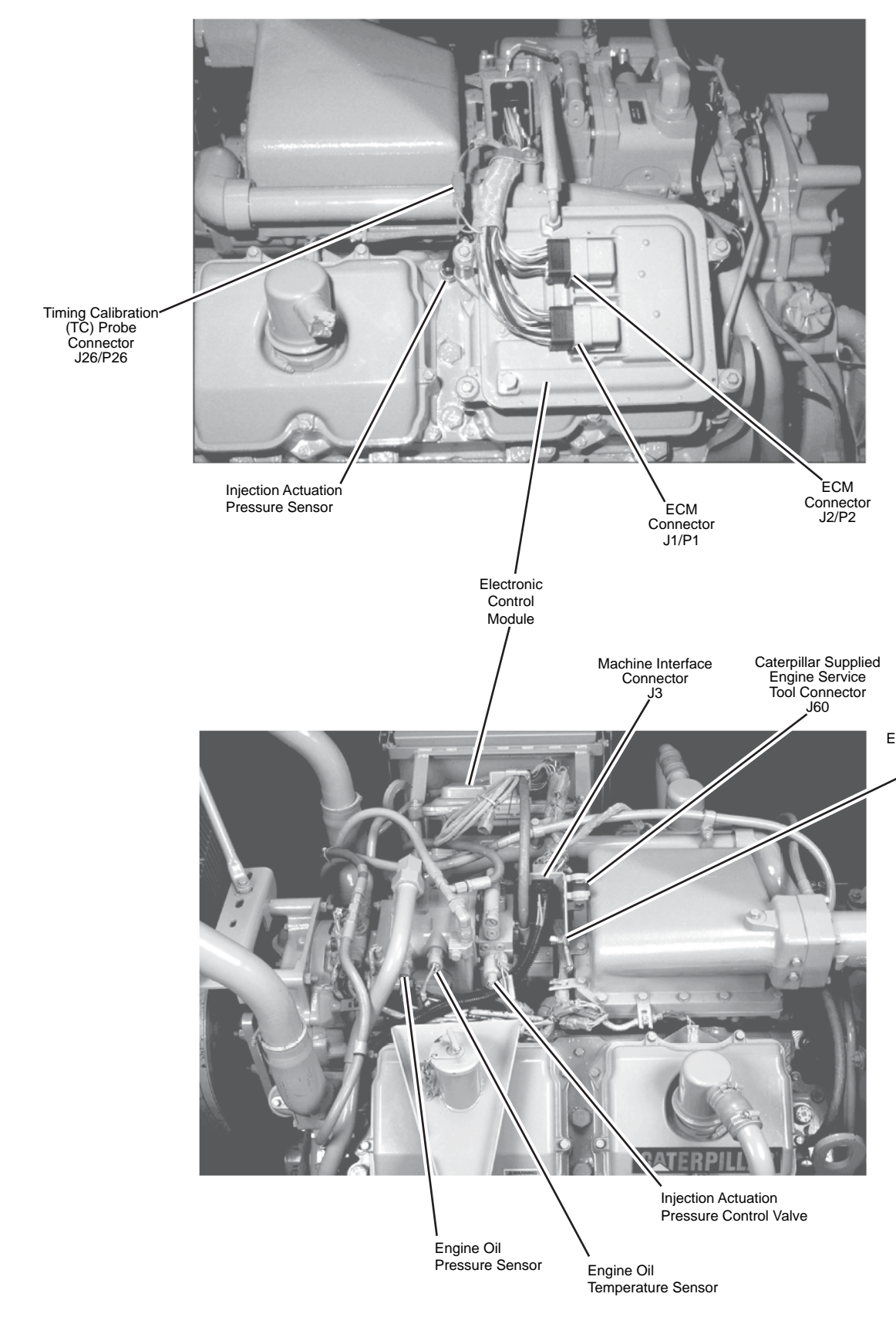
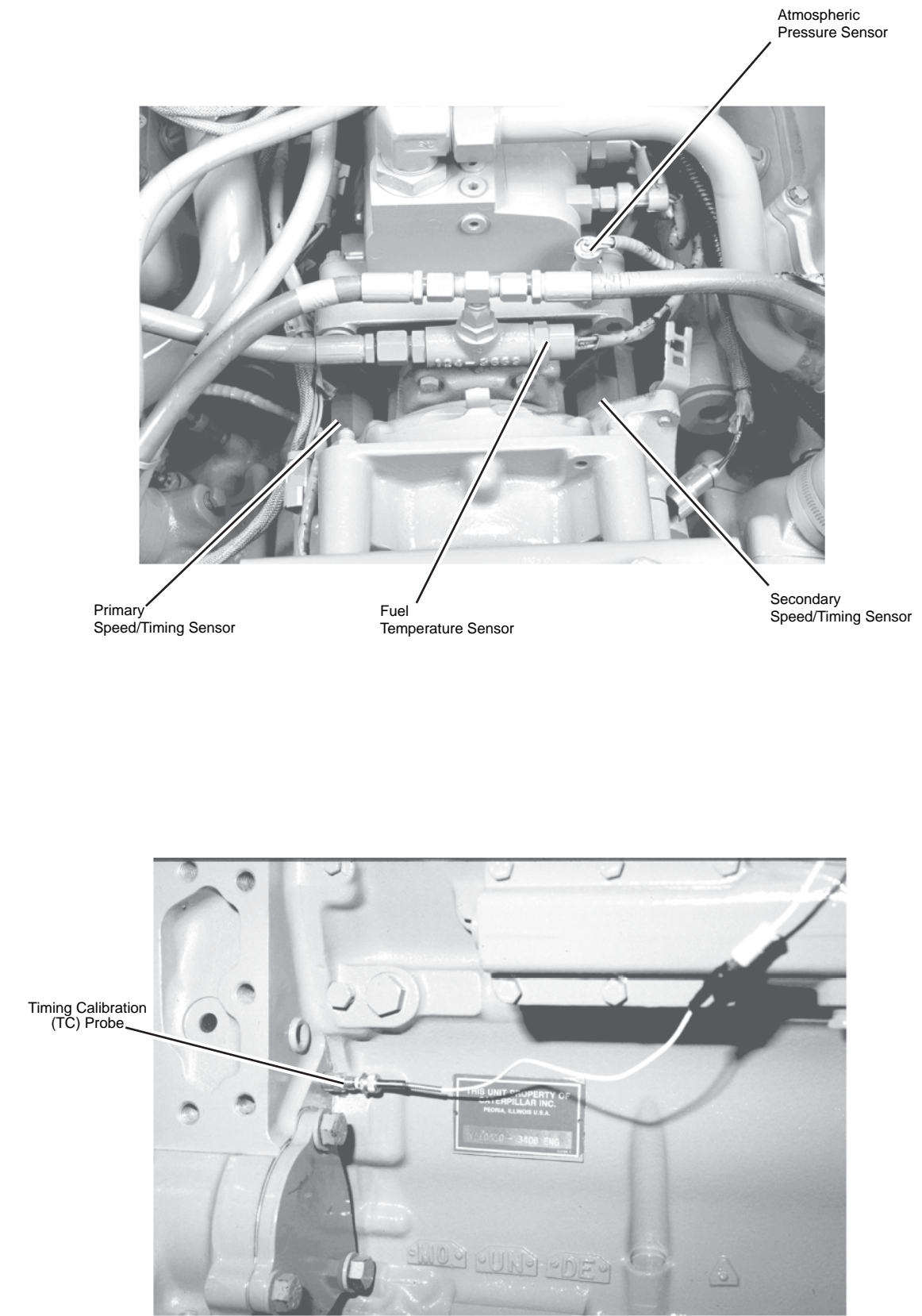
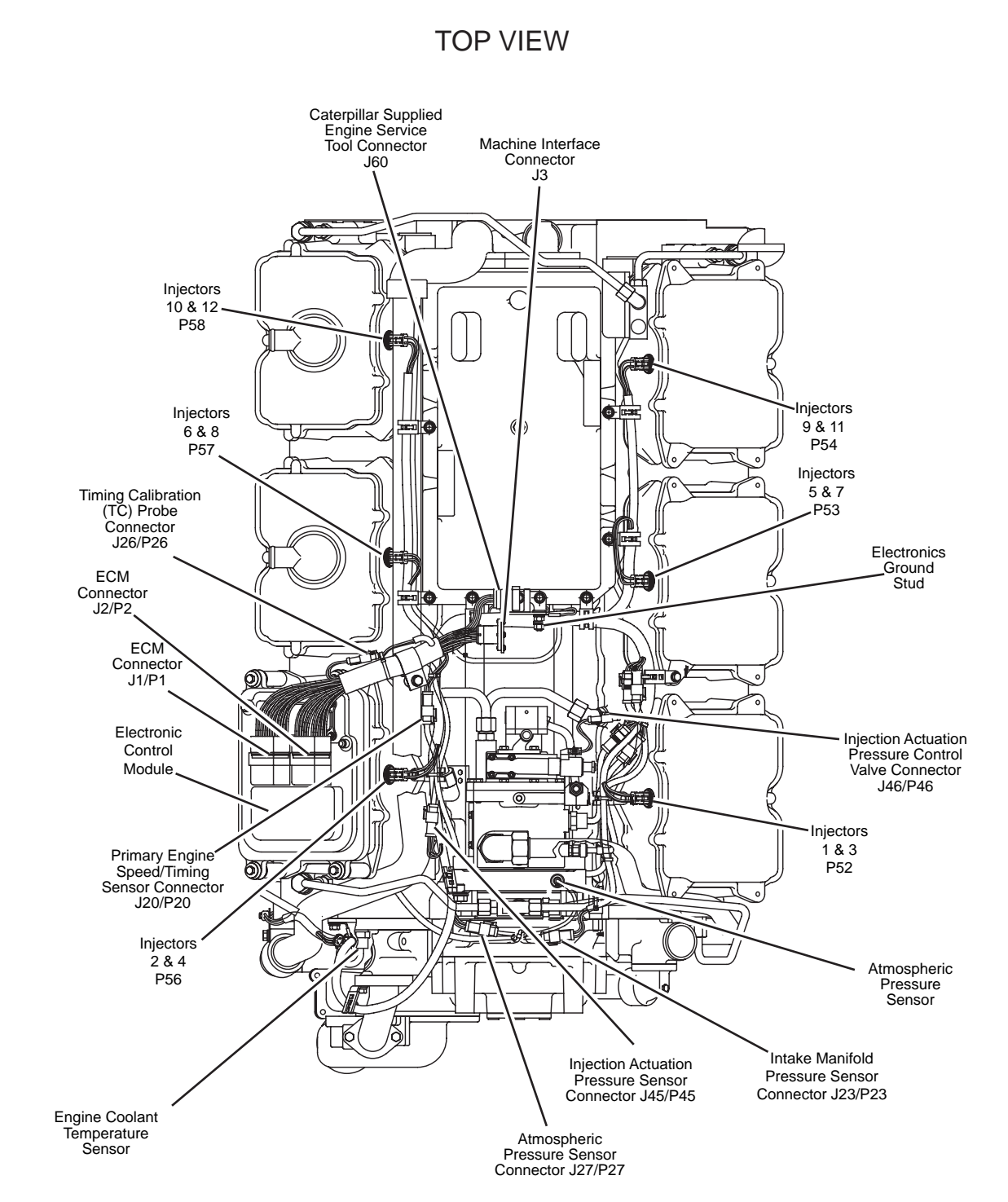
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Failure Mode Identifiers (FMI) <sup>1</sup>	
FMI No.	Failure Description
0	Data valid but above normal operational range.
1	Data valid but below normal operational range.
2	Data erratic, intermittent, or incorrect.
3	Voltage above normal or shorted 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.

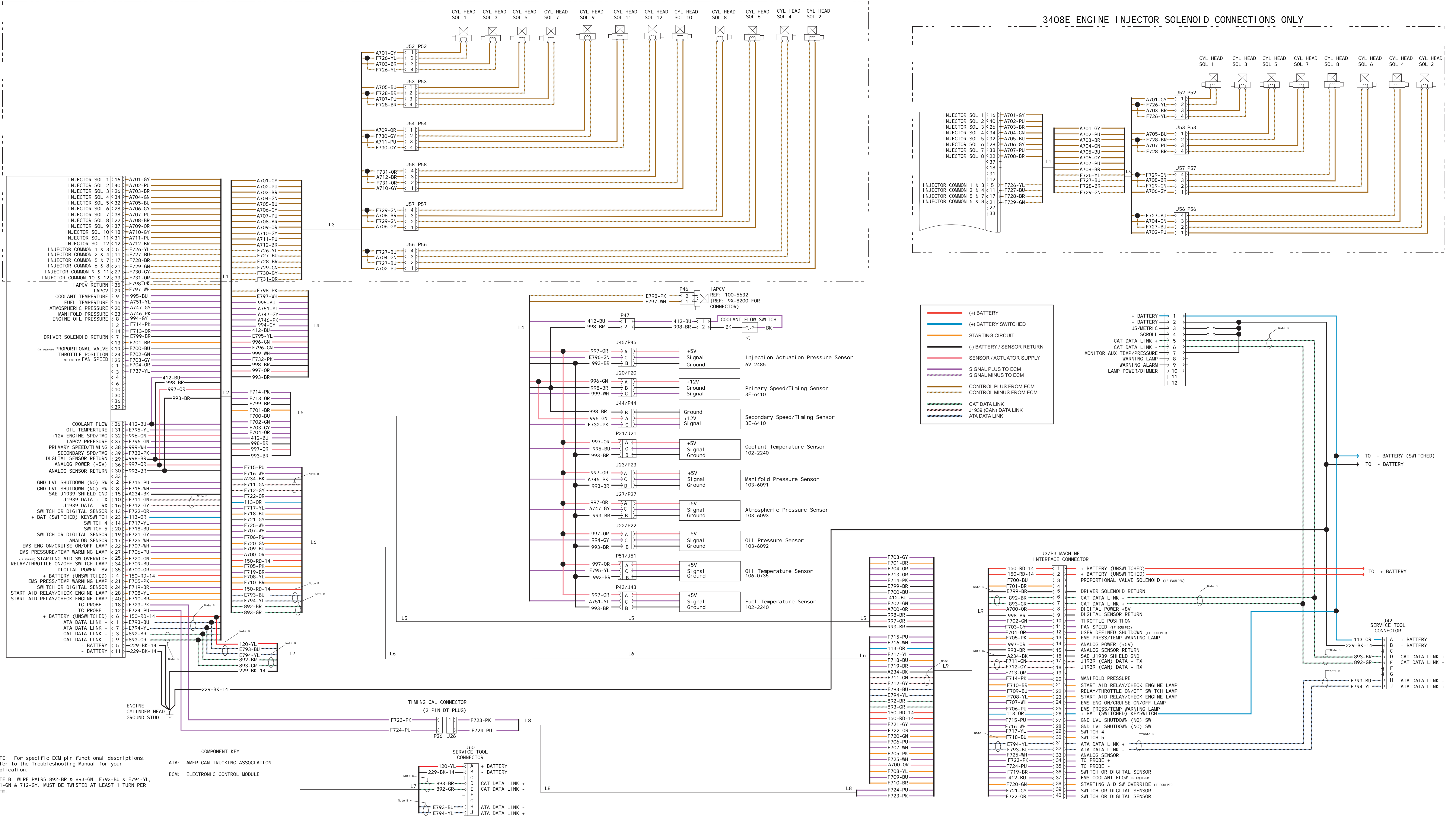
Event Codes Engine Control	
Event Code	Condition
E017	High Engine Coolant Temperature Warning
E025	High Inlet Air Temperature Dense
E027	High Inlet Air Temperature Warning
E100	Low Engine Oil Pressure Warning
E164	High Injector Actuation Pressure
E190	Engine Overspeed Warning
E265	User Defined Shutdown
E272	Inlet Air Restriction Warning

Related Electrical Service Manuals	
Title	Form Number
Engine Control	SENR2945-05



3412E ENGINE INJECTOR SOLENOID CONNECTIONS ONLY

3408E ENGINE INJECTOR SOLENOID CONNECTIONS ONLY



**SEN1026-01**  
 20 Page, Color 2

NOTE: For specific ECM pin function descriptions, refer to the Troubleshooting Manual for your application.  
 NOTE B: WIRE PAIRS 892-BR & 893-GN, E793-BU & E794-YL, 711-GN & 712-GY, MUST BE TWISTED AT LEAST 1 TURN PER 25mm.