

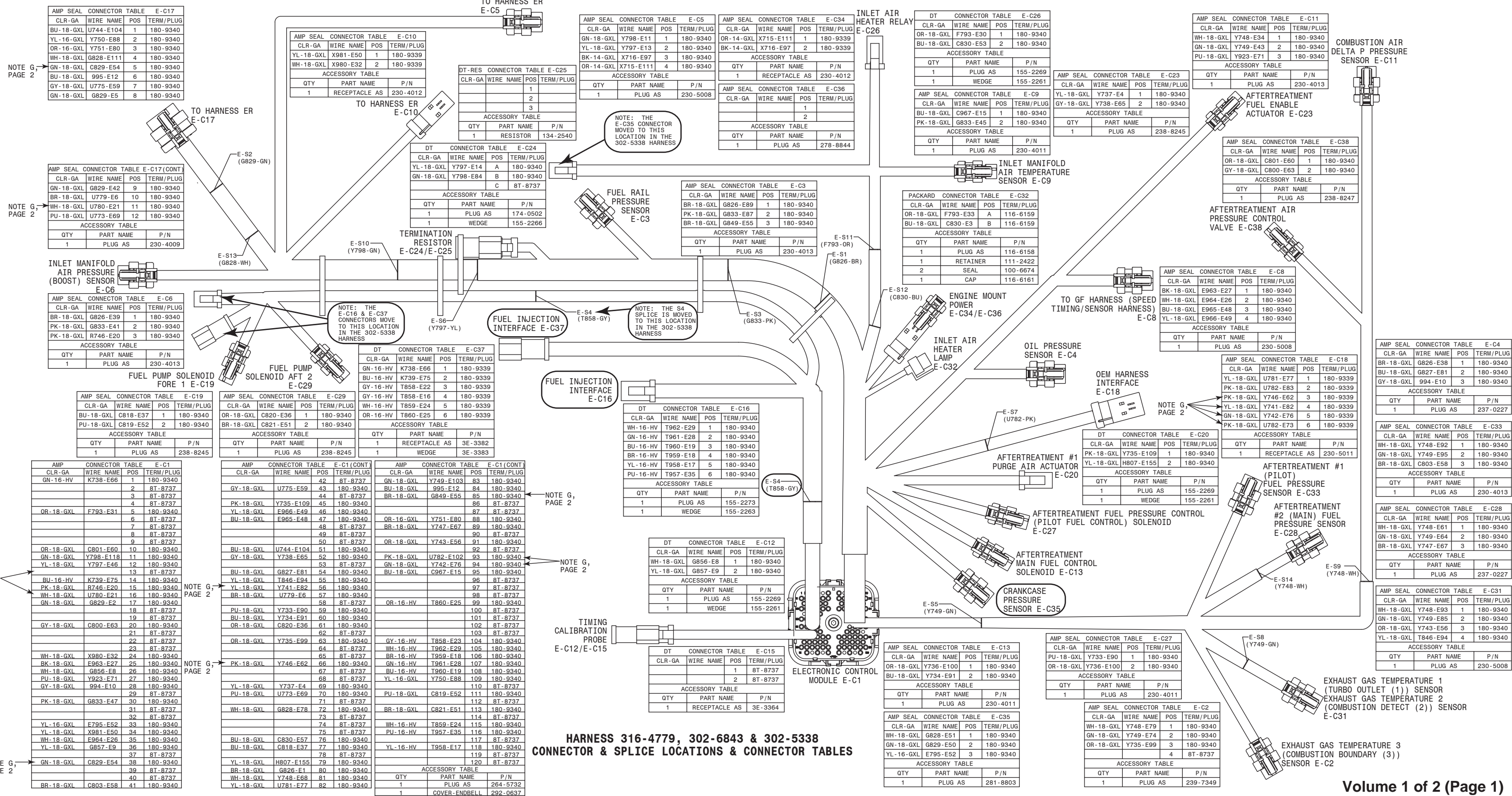
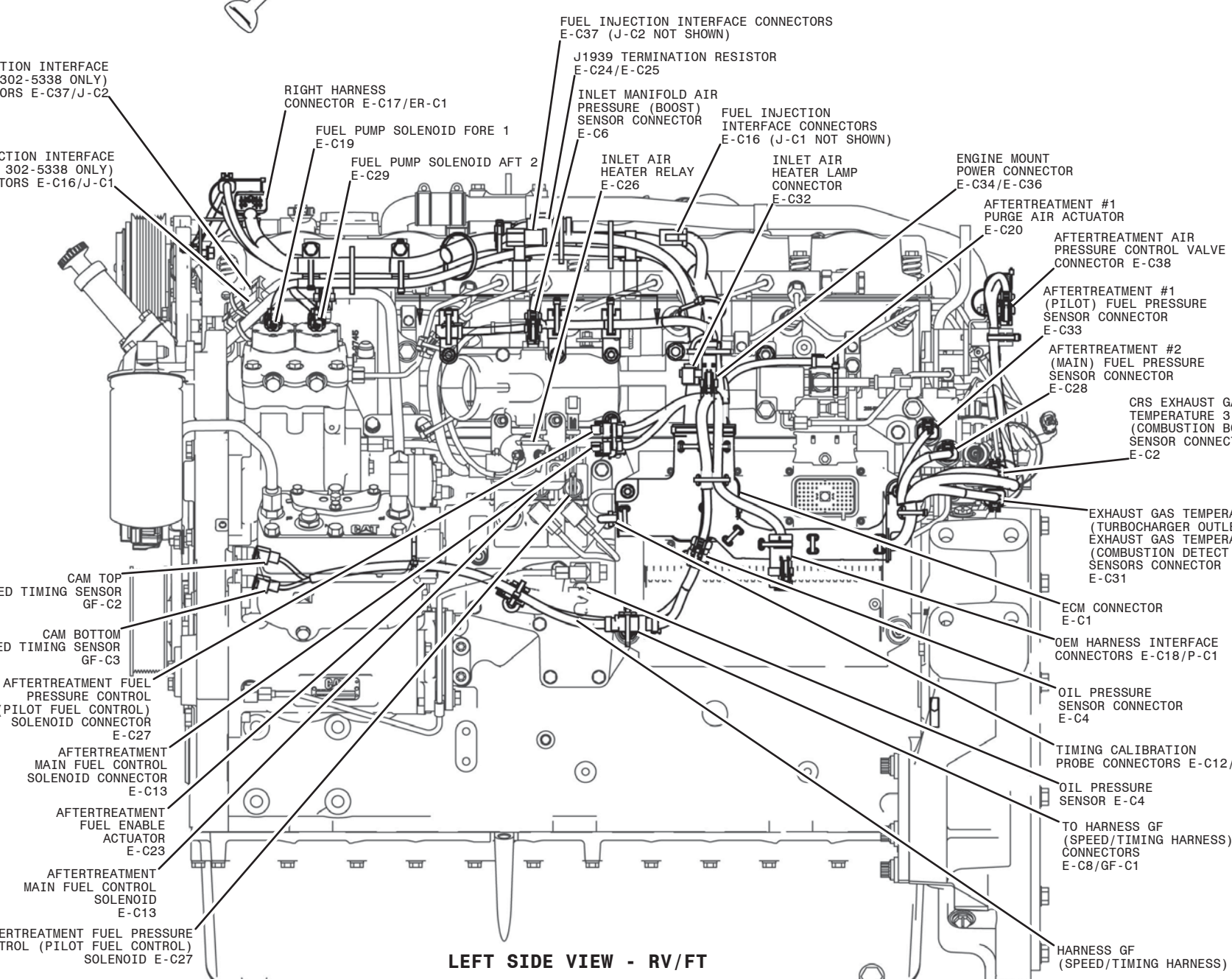
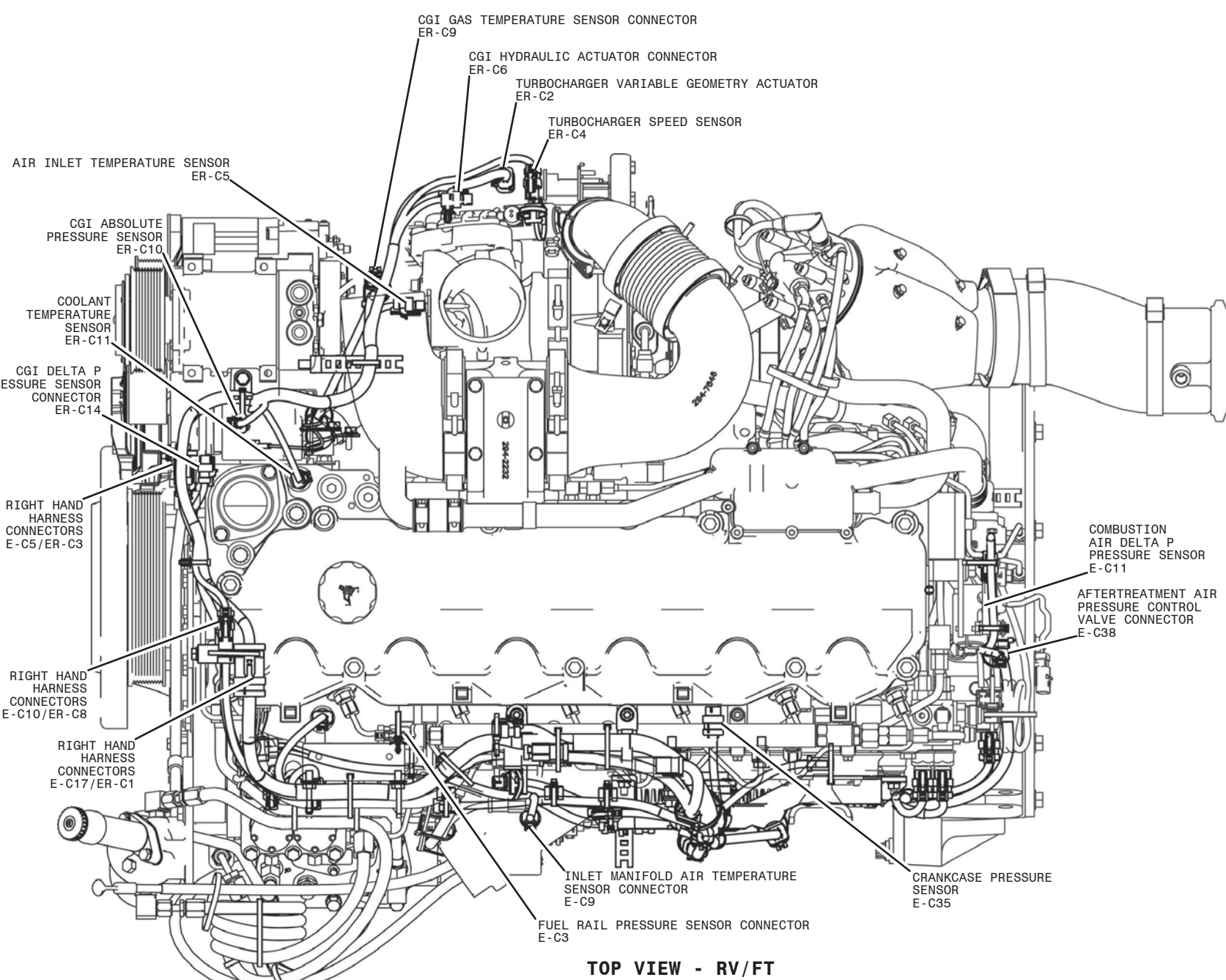
WHERE TO FIND INFORMATION IN THIS 2 VOLUME SCHEMATIC		
VOLUME NUMBER	PAGE NUMBER	DESCRIPTION OF THE INFORMATION TO BE FOUND ON EACH PAGE
1 outside	1	Component Location for RV/FT Engines, Harness E Information for RV/FT Engines, Related Service Manual Table
1 inside	2	Schematic for RV/FT Engines, Harness ER Information for RV/FT Engines, Vehicle Harness Schematic for Both RV/FT & PACCAR Engines, Harness J Information for both RV/FT & PACCAR Engines
2 outside	3	Component Locations for PACCAR Engines, Harness A Information for PACCAR Engines
2 inside	4	Schematic for PACCAR Engines, Harness AR Information for PACCAR Engines, Connector Descriptions for both RV/FT & PACCAR Engines

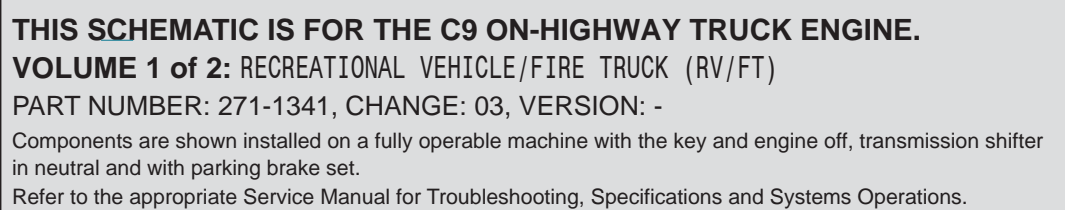
Related Electrical Service Manuals	
Title	Form Number
Troubleshooting	REN9342
Systems Operation / Testing and Adjusting	SEN9823
Operation and Maintenance Manual	SEBU8083

# Schematic

## C9 On-highway Truck Engine Electrical System

C9S228-UP





# Schematic

## C9 On-highway Engine Electrical System

C9S228-UP

Volume 2 of 2: PACCAR Engines

### Harness And Wire Electrical Schematic Symbols

**Pressure Symbol**

**Temperature Symbol**

**Level Symbol**

**Flow Symbol**

**Circuit Breaker Symbol**

#### 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 a valve or move a piece of metal that can do work.

**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

**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 Letter(s)**: (A, B, C, ... AS, AB, AC, ...)

**Harness Connector Serialization Code**: The "C" stands for "Connector" and the number indicates which connector in the harness (C1, C2, C3, ...)

**Part Number for Connector Plug**

**Part Number for Connector Receptacle**

**Pin or Socket Number**

**Pin or Socket Number**

**Wire Gauge**

**Wire Color**

**Ground Connection**

**Circuit Identification Number**

**Pin**

**Socket**

**Single Wire Connector**

**Receptacle**

**Plug**

**Ground Connection**

**Circuit Identification Number**

**Wire Color**

**Wire Gauge**

**Pin or Socket Number**

**Pin or Socket Number**

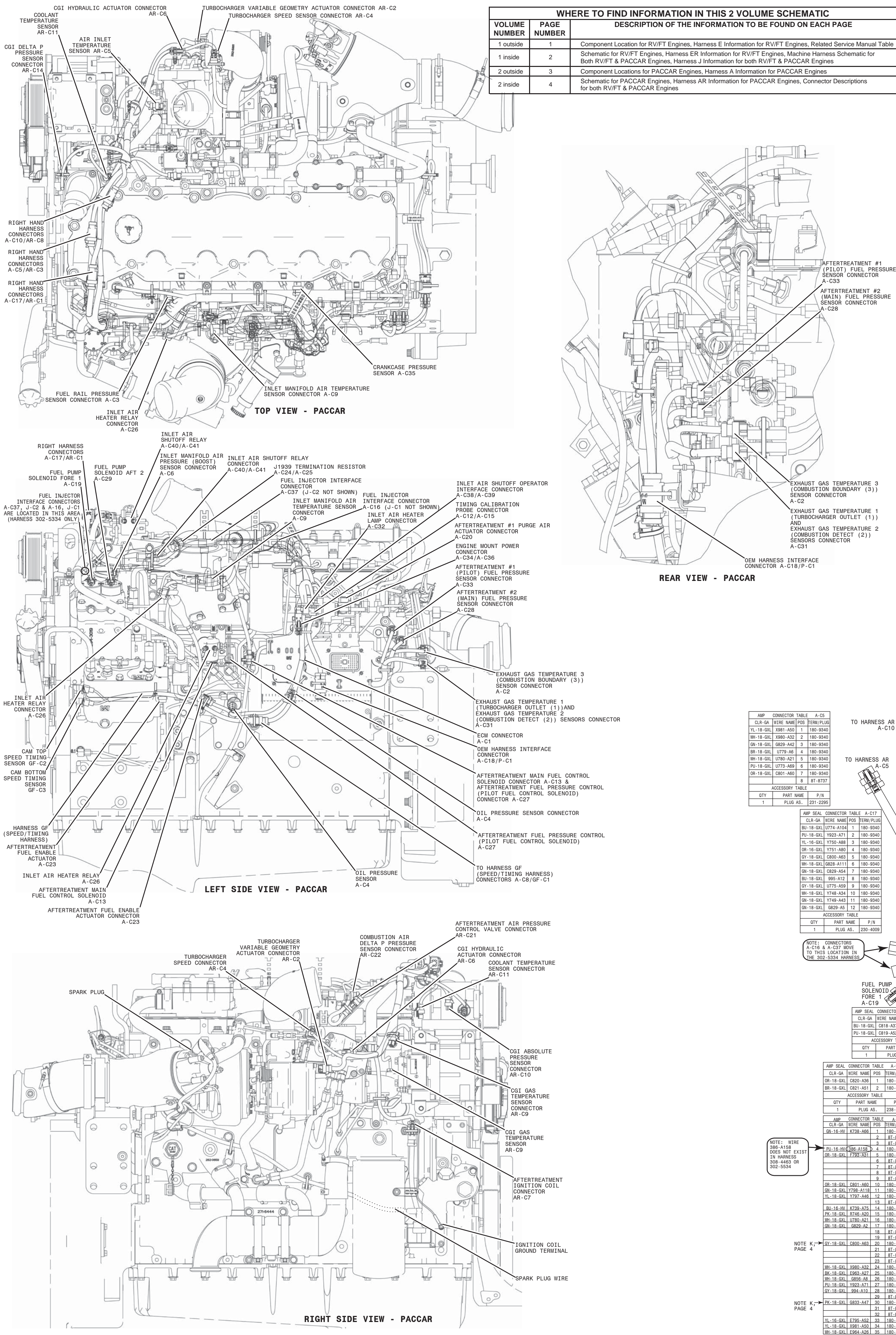
**Part Number for Connector Plug**

**Part Number for Connector Receptacle**

**Harness Identification code**: This example indicates wire 135 in harness "AG".

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**AMP CONNEXION TABLE A-C3**

CL-GR	WIRE NAME	POS	TERMINAL	PLUG	AS	230-0000
1	PLUG AS	230-0000				
2	PLUG AS	230-0000				
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	(+) BATTERY
	(+) BATTERY SWITCHED
	STARTING CIRCUIT
	(-) BATTERY / SENSOR RETURN
	SENSOR / ACTUATOR SUPPLY
	SIGNAL MINUS TO ECM
	CONTROL PLUS FROM ECM
	CONTROL MINUS FROM ECM
	J1939 DATA LINK
	J1587 DATA LINK
	HIGHWAYS

Refer to the appropriate Service Manual for Troubleshooting, Specifications and Systems Operation.