

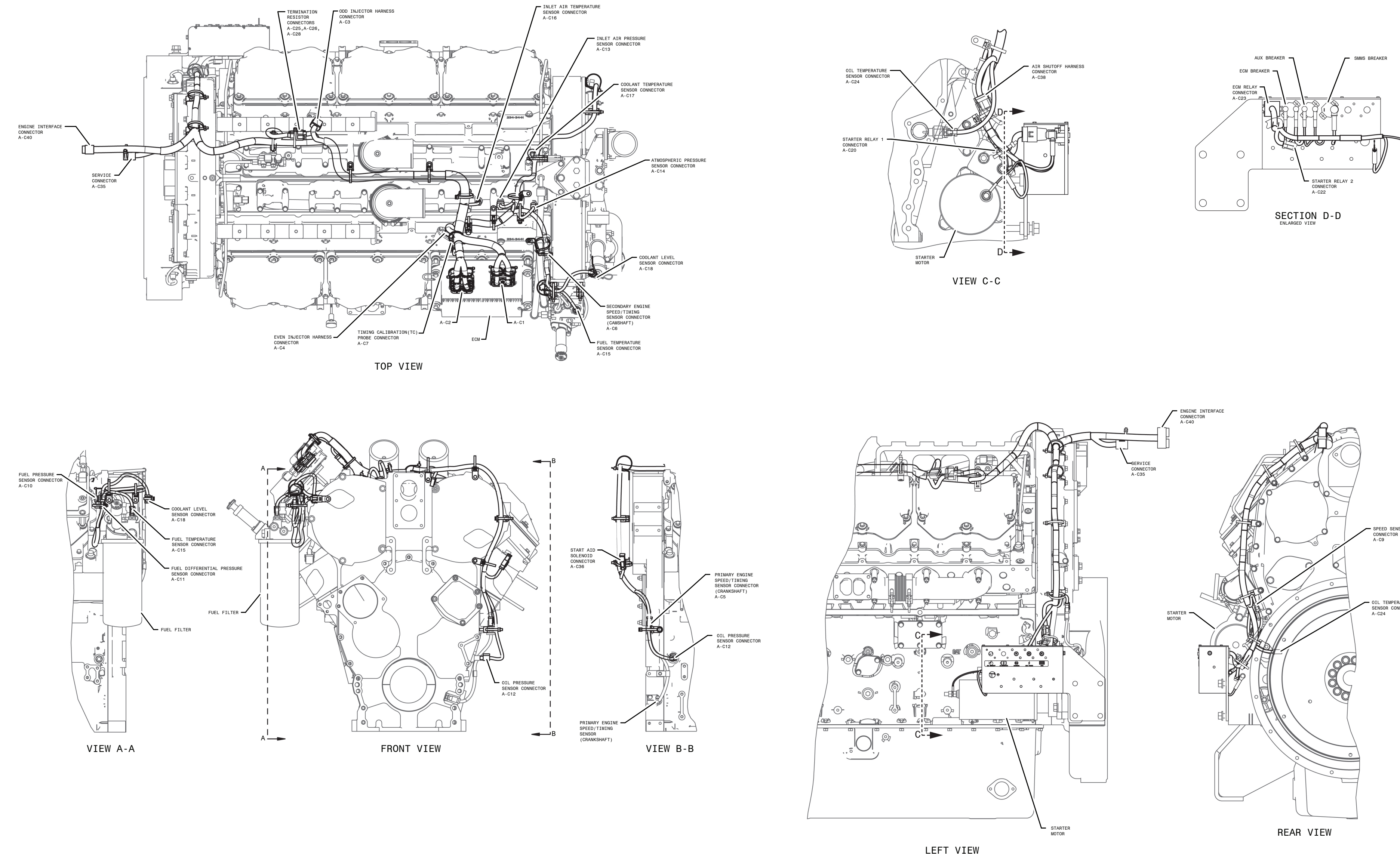
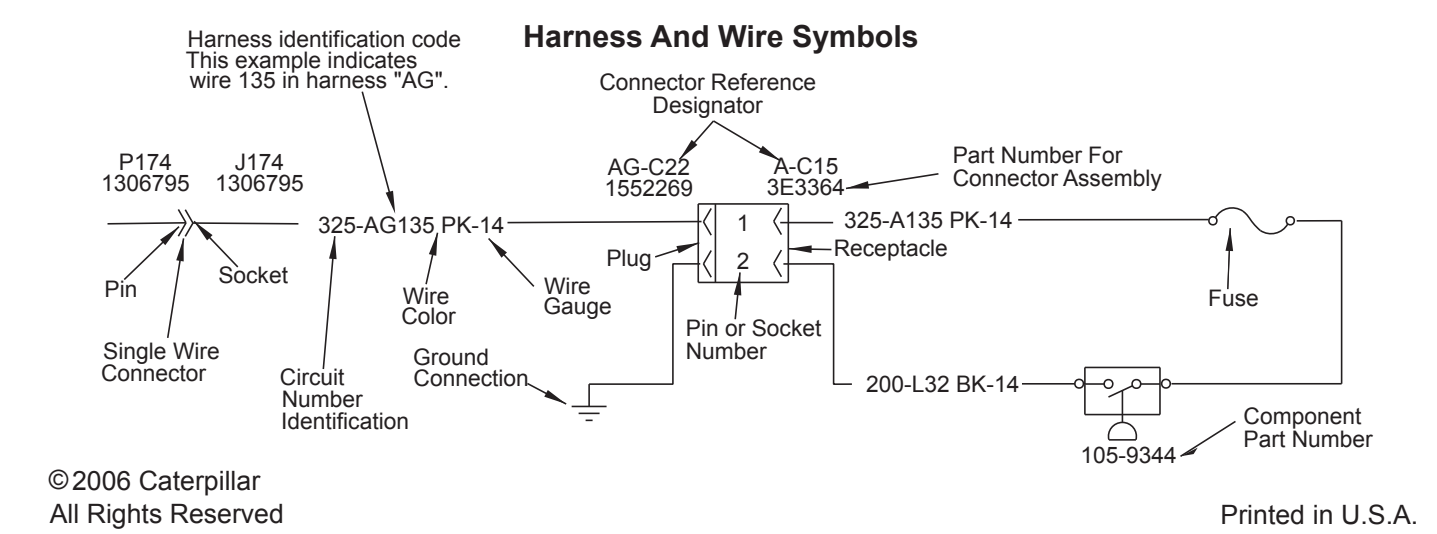
Related Electrical Service Manuals	
Title	Form Number
Troubleshooting	REN7952
Systems Operation / Testing and Adjusting	REN7958

NOTE A: SEE REN7902 TO PROGRAM EMCP INPUTS AND OUTPUTS.
DIGITAL INPUT DI 1 IS DEDICATED TO EMERGENCY STOP.
DIGITAL INPUT DI 2 IS DEDICATED TO START/STOP.
NOTE B: SEE REN7941 FOR COOL INPUTS, OUTPUTS AND SETTINGS.
NOTE C: REMOVE THE EXISTING JUMPER "229-5J5" FROM BATT. TO WIRE UP THE REMOTE STOP.
NOTE D: EMCP3.3/3.2 ONLY.
NOTE E: EMCP3.3 ONLY.
NOTE F: ENGINE 40 PIN CONNECTOR INTERFACE.
NOTE G: SEE LEBE255 FOR MOODS APPLICATIONS.
NOTE H: FOR USE WITH OPTIONAL ELECTRICALLY OPERATED BREAKER INSTALLED.
NOTE I: SIGNAL TO OPEN THE BREAKER NORMALLY. FAULT TRIP IS ISSUED BY EMCP3.
NOTE K: OPTIONAL CIRCUIT BREAKER WITH JACKET WATER HEATER.
NOTE L: STANDARD CIRCUIT BREAKER FOR GENERATOR HEATER.
NOTE M: RESISTIVE SENDER - USE 1916587 TEMPERATURE SENSOR OTHERWISE CONSULT FACTORY.
NOTE N: SEE SHEET "CUSTOMER INTERCONNECT-OPT DEVICES" FOR CONNECTION TO REMOTE DEVICES.
NOTE P: DEDICATED OUTPUTS:
RELAY OUTPUT #1 - RO1: DEDICATED TO MOTOR STARTER THROUGH ENGINE INTERFACE HARNESS.
RELAY OUTPUT #2 - RO2: DEDICATED TO ENGINE START/STOP THROUGH ENGINE INTERFACE HARNESS (RO2 IS AVAILABLE TO THE CUSTOMER THROUGH A NON PROGRAMMABLE RELAY OUTPUT).
RELAY OUTPUT #3 - RO3: DEDICATED TO ENGINE PRELUBE THROUGH ENGINE INTERFACE HARNESS.
RELAY OUTPUT #6 - RO6: DEDICATED TO AUX RELAY "AC-CR2" (CEI ENGINE, EMCP 3.1 ONLY).
DIGITAL OUTPUT #1 - DO 1: DEDICATED TO AUX RELAY "AC-CR2".
NOTE R: ALL THE "DI RTN" ARE JUMPED TOGETHER AND THEN TIED BACK TO THE BATT.
NOTE S: SEE REN7902 TO PROGRAM DISCRETE I/O MODULE INPUTS & OUTPUTS.
NOTE T: REMOVE THE 120 OHM RESISTOR CONNECTED TO TERMINALS C-26 & C-27 BEFORE ADDING CABLE.
NOTE U: 236-1158 (WITHOUT FILM) REQUIRES FILM KIT 2606898.
236-1159 (INCLUDING STD FILM).
NOTE V: 252-7004 (FLUSH MOUNT BOX ASSEMBLY INCLUDES 2561159).
NOTE W: ADD 120 OHM RESISTOR TO THE END-OF-THE-LINE DEVICE AFTER REMOVING FROM THE OTHER END.
NOTE X: THE REAR, LEFT AND RIGHT SIDES ARE BASED ON CUSTOMER PREFERENCE FOR LOCATION OF CONTROLS.
NOTE Y: PFS ARE USED IN HV (MEDIUM VOLTAGE), BUT IN CASE OF LV (LOW VOLTAGE) IT IS DIRECT SENSING. SEE SHEET P FOR WIRING.
NOTE Z: 9-PIN CONNECTOR OF 08-9 TYPE FOR MOODS RS485 COMMUNICATION TO EMCP3.
NOTE AA: COMBINATION PORT. REQUIRES MOUNTING HOOD FOR COMMUNICATIONS.
NOTE AB: ETHERNET PORT FOR CONFIGURATION & MONITORING.
NOTE AC: COMBINATION PORT NOT USED, AVAILABLE TO BE USED.
NOTE AD: CUSTOMER WIRED AND/OR OPTIONAL COMPONENTS SHOWN FOR REFERENCE ONLY.
NOTE AE: SOCKETS FOR WIRES 0971 AND 200 ON HARNESS 2824355 CONNECT TO HARNESS 2809516 A-C39 AS FOLLOWS:
0971-07 RD-16 SOCKET 7 ON A-C39
200-04 BK-16 SOCKET 8 ON A-C39

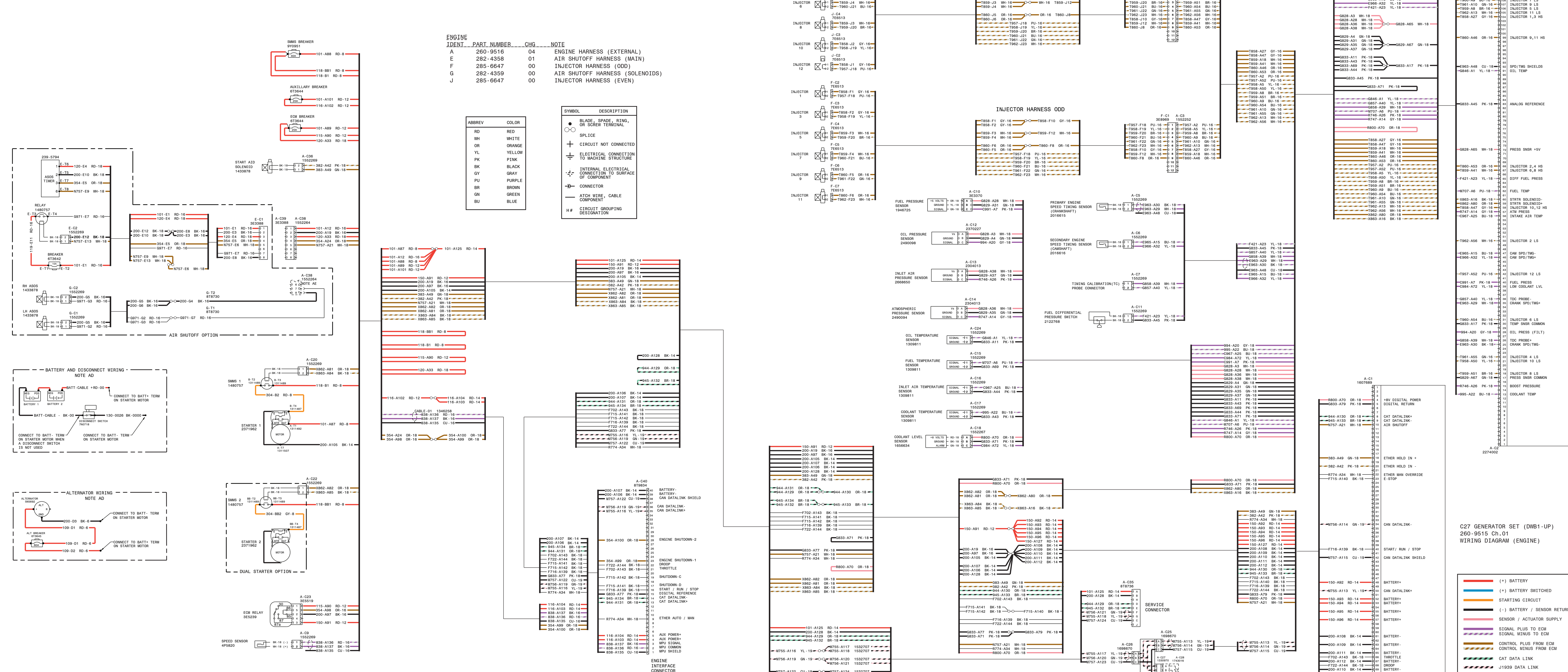
Schematic

C27 Generator Set Electrical System

DWB1-UP



SPN/FMI	EID	CID	CONDITION
16-17	E390-1		Fuel Filter Restriction Warning
16-19	E390-2		Fuel Filter Restriction Derate
16-01	E390-3		Fuel Filter Restriction Shutdown
91-08	91-08		Throttle Position signal abnormal
94-03	94-03		Fuel Pressure open/short to batt.
94-04	94-04		Fuel Pressure short to ground
94-15	E096-1		High Fuel Pressure Warning
94-16	E096-2		High Fuel Pressure Derate
94-00	E096-3		High Fuel Pressure Shutdown
94-17	E198-1		Low Fuel Pressure Warning
94-18	E198-2		Low Fuel Pressure Derate
94-01	E198-3		Low Fuel Pressure Shutdown
100-04	100-03		Engine Oil Pressure open/short to +batt
100-04	100-04		Engine Oil Pressure short to ground
100-10	100-10		Engine Oil Pressure Sensor abnormal rate of change
100-17	E360-1		Low Engine Oil Pressure Warning
100-01	E360-3		Low Engine Oil Pressure Shutdown
108-03	274-03		Atmospheric Pressure open/short to +batt
108-04	274-04		Atmospheric Pressure short to ground
110-03	110-03		Engine Coolant Temperature open/short to +batt
110-15	E361-1		High Engine Coolant Temperature Warning
110-16	E361-2		High Engine Coolant Temperature Derate
110-00	E361-3		High Engine Coolant Temperature Shutdown
111-17	E091-1		Low Engine Coolant Level Warning
111-18	E091-2		Low Engine Coolant Level Derate
168-00	168-00		System Voltage High
168-01	168-01		System Voltage Low
168-02	168-02		System Voltage Intermittent
172-03	172-03		Intake Manifold Air Temperature open/short to +batt
172-04	172-04		Intake Manifold Air Temperature short to ground
174-03	174-03		Fuel Temperature open/short to +batt
174-04	174-04		Fuel Temperature short to ground
174-15	E363-1		High Fuel Temperature Warning
174-16	E363-2		High Fuel Temperature Derate
174-00	E363-3		High Fuel Temperature Shutdown
175-03	175-03		Engine Oil Temperature open/short to +batt
175-04	175-04		Engine Oil Temperature short to ground
175-0	E197-3		High Engine Oil Temperature Shutdown
175-18	E197-2		High Engine Oil Temperature Warning
190-08	190-08		Engine Speed abnormal
190-15	E362-1		Engine Overspeed Warning
190-00	E362-3		Engine Overspeed Shutdown
228-11	261-11		Engine Timing Calibration Invalid
228-13	261-13		Engine Timing Calibration required
234-02	234-02		Personality Switch Mismatch
444-05	444-05		Start Relay open circuit
444-06	444-06		Start Relay short to ground
446-05	446-05		Air Shutoff Relay open
446-06	446-06		Air Shutoff Relay short
620-03	620-03		3 Volt Sensor DC Supply short to +batt
620-04	620-04		3 Volt Sensor DC Power Supply short to ground
651-05	1-05		Cylinder #1 Injector open circuit
651-06	1-06		Cylinder #1 short
652-05	2-05		Cylinder #2 Injector open circuit
652-06	2-06		Cylinder #2 short
653-05	3-05		Cylinder #3 Injector open circuit
653-06	3-06		Cylinder #3 short
654-05	4-05		Cylinder #4 Injector open circuit
654-06	4-06		Cylinder #4 short
655-05	5-05		Cylinder #5 Injector open circuit
655-06	5-06		Cylinder #5 short
656-05	6-05		Cylinder #6 Injector open circuit
656-06	6-06		Cylinder #6 short
657-05	7-05		Cylinder #7 Injector open circuit
657-06	7-06		Cylinder #7 short
658-05	8-05		Cylinder #8 Injector open circuit
658-06	8-06		Cylinder #8 short
659-05	9-05		Cylinder #9 Injector open circuit
659-06	9-06		Cylinder #9 short



REN7952
30 Page, (Dimensions: 39 inches x 28 inches)

