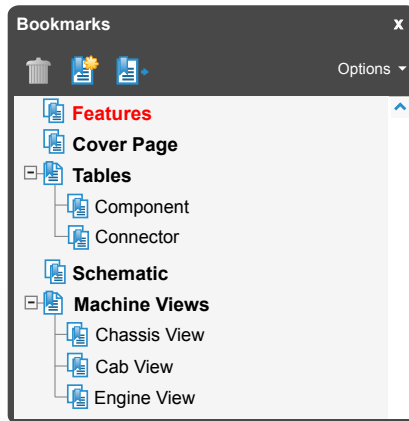


INTERACTIVE SCHEMATIC



The Bookmarks panel will allow you to quickly navigate to points of interest.

****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**.

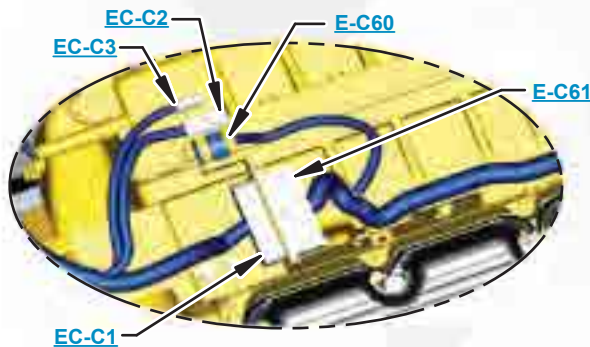
Select **PROPERTIES**.

CLICK the **SETTINGS TAB**.

MOVE THE SLIDER under **SCREEN RESOLUTION** until it shows **1024 X 768**.

CLICK OK to apply the resolution.

**Due to different monitor sizes and PDF reader preferences there may be some variance in linked schematic locations*



Click on any text that is **BLUE** and underlined. These are hyperlinks that can be used to navigate the schematic and machine views.



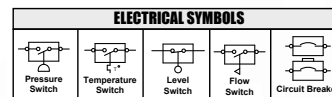
[Click here to save a copy of this interactive schematic to your desktop](#)

VIEW ALL CALLOUTS

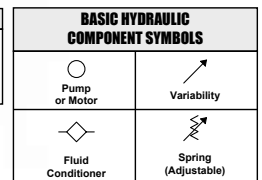
When only one callout is showing on a machine view, clicking on this button will make all of the callouts visible. This button is located in the top right corner of every machine view page.

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"
	Search	"CTRL" / "SHIFT" / "F"



[Click here to view the Schematic Symbols and Definitions page](#)





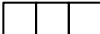
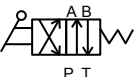
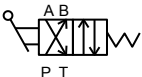
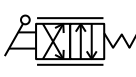
Schematic

C7 On-highway Engine Electrical System

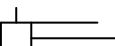
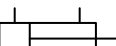
KAL1-UP
SAP1-3955

SCHEMATIC SYMBOLS AND DEFINITIONS



VALVES			
ENVELOPES			
			
One Position	Two Position	Three Position	
PORTS			
			
Two-way	Three-Way	Four-Way	
CONTROL			
			
Normal Position	Shifted Position	Infinite Position	
CHECK			
			
Basic Symbol	Spring Loaded	Shuttle	Pilot Controlled

INTERNAL PASSAGEWAYS			
 Infinite Positioning	 Two Position	 Three Position	 CROSS FLOW

CYLINDERS	
 Single Acting	 Double Acting

ACCUMULATORS	
 Spring Loaded	 Gas Charged

PUMPS	
FIXED DISPLACEMENT	
 Unidirectional	 Bidirectional
VARIABLE DISPLACEMENT NON- COMPENSATED	
 Unidirectional	 Bidirectional

MOTORS	
FIXED DISPLACEMENT	
 Unidirectional	 Bidirectional
VARIABLE DISPLACEMENT NON- COMPENSATED	
 Unidirectional	 Bidirectional

ROTATING SHAFTS	
 Unidirectional	 Bidirectional

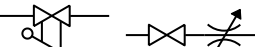
BASIC HYDRAULIC COMPONENT SYMBOLS	
 Pump or Motor	 Variability
 Fluid Conditioner	 Spring (Adjustable)
 Spring	 Pressure Compensation
 Control Valves	 Line Restriction (Variable)
 Restriction	 Line Restriction (Fixed)
 Line Restriction Variable and Pressure Compensated	 MAIN AUX. 2-Section Pump
 Attachment	 Pump: Variable and Pressure Compensated
 Hydraulic	 Pneumatic

PILOT CONTROL		
RELEASED PRESSURE		
		
External Return	Internal Return	
REMOTE SUPPLY PRESSURE		
		
Simplified	Complete	Internal Supply Pressure

COMBINATION CONTROLS						
 Solenoid	 Solenoid or Manual	 Solenoid and Pilot	 Solenoid and Pilot or Manual	 Servo	 Thermal	 Detent

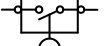
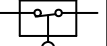
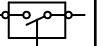
LINES	
 Crossing	 Joining

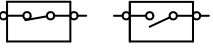
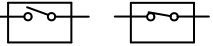
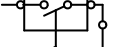
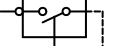
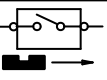
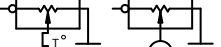
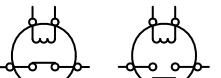
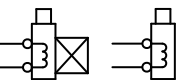
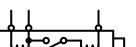
MEASUREMENT		
 Pressure	 Temperature	 Flow

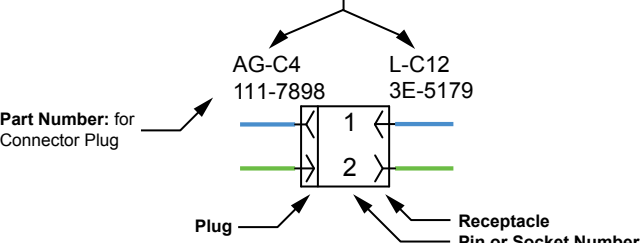
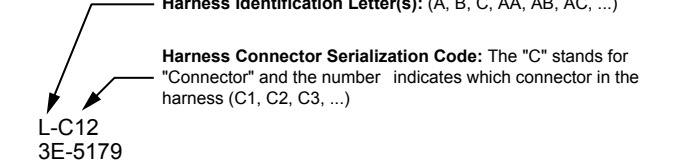
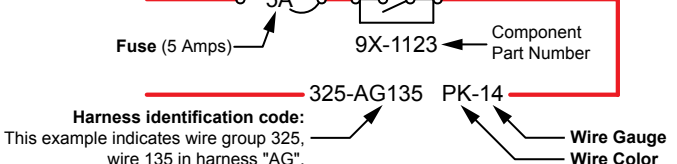
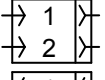
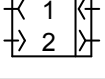
MANUAL CONTROL					
 Push-pull Lever	 Manual Shutoff	 General Manual	 Push Button	 Pedal	 Spring

FLUID STORAGE RESERVOIRS			
 Vented	 Pressurized	 Return Above Fluid Level	 Return Below Fluid Level

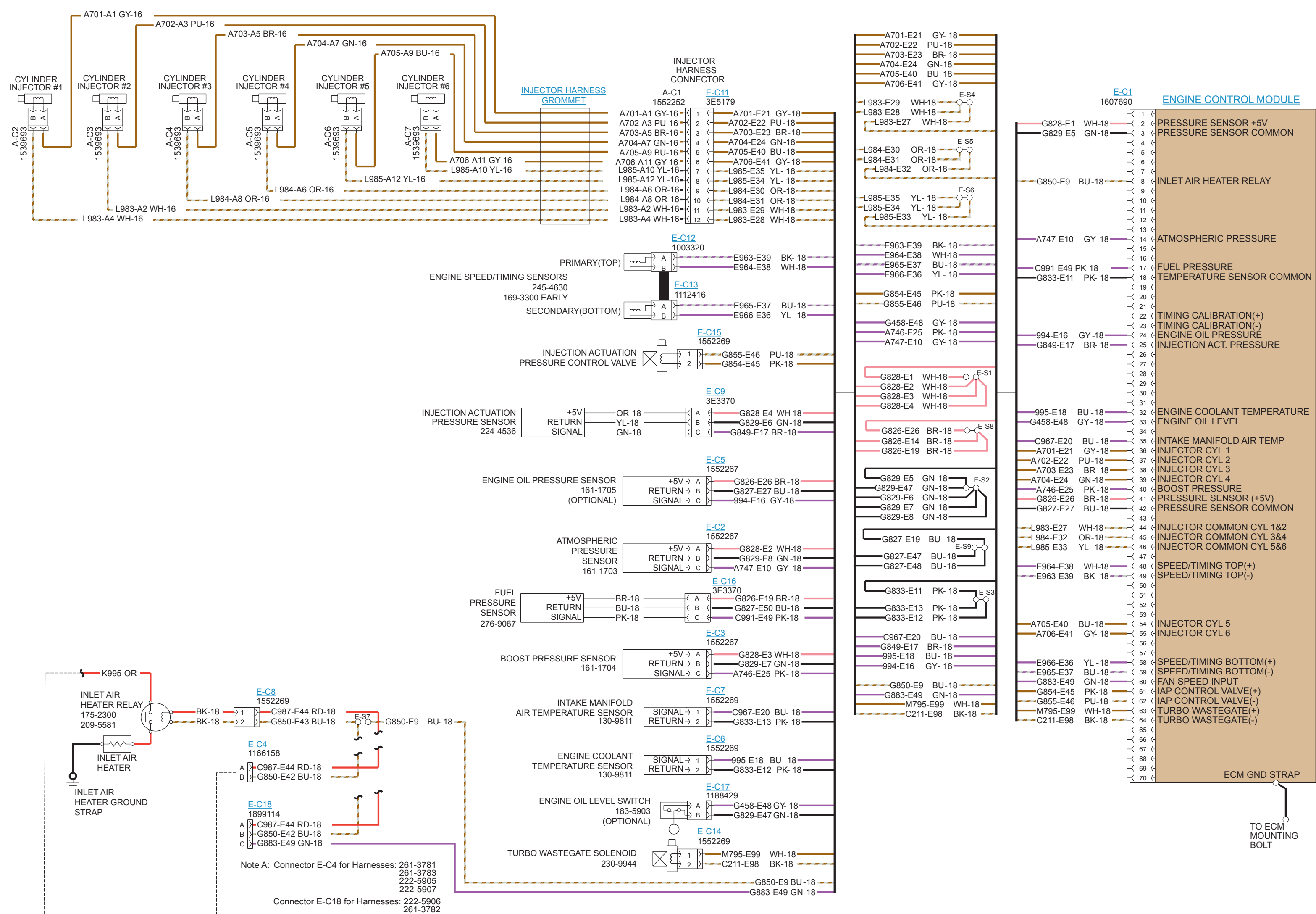
HYDRAULIC SYMBOLS - ELECTRICAL							
							
Transducer (Fluid)	Transducer (Gas / Air)	Generator	Electric Motor	Pressure Switch	Pressure Switch (Adjustable)	Temperature Switch	Electrical Wire

ELECTRICAL SYMBOLS				
 Pressure Switch	 Temperature Switch	 Level Switch	 Flow Switch	 Circuit Breaker

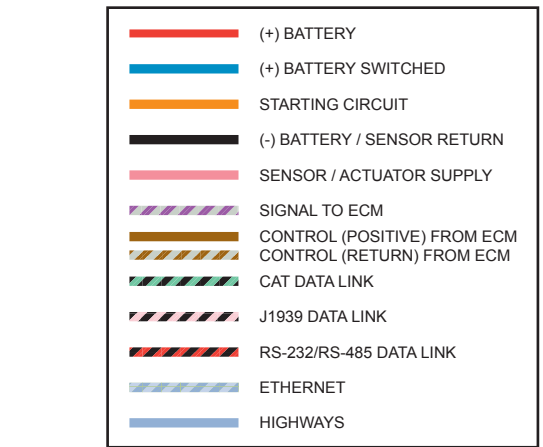
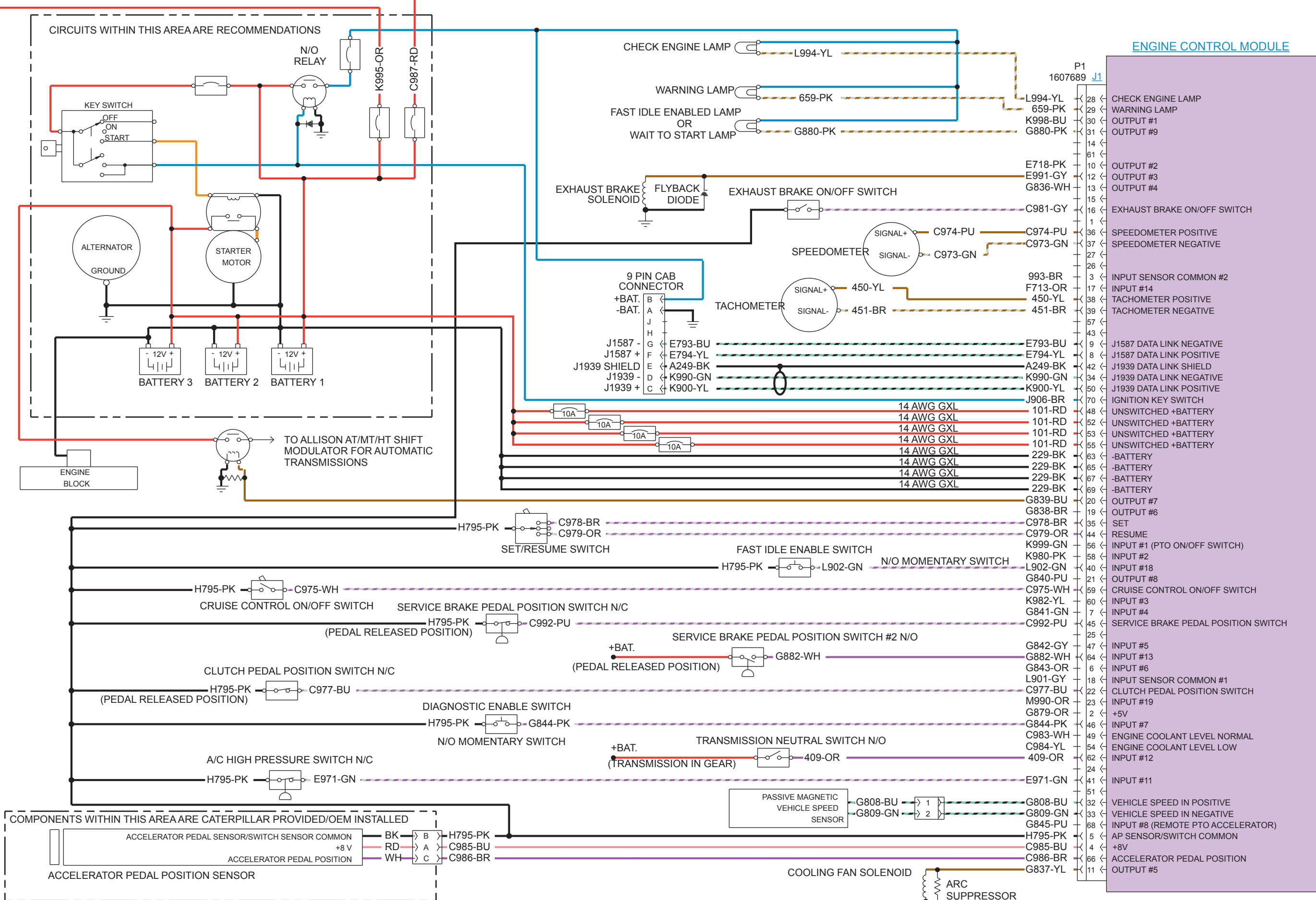
BASIC ELECTRICAL COMPONENT SYMBOLS	
	Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.
	Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and 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: 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). 	
Harness Identification Letter(s): (A, B, C, AA, AB, AC, ...) Harness Connector Serialization Code: The "C" stands for "Connector" and the number indicates which connector in the harness (C1, C2, C3, ...) 	
Harness identification code: This example indicates wire group 325, wire 135 in harness "AG". 	
 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.	

ENGINE HARNESS WIRING DIAGRAM



TYPICAL VEHICLE HARNESS WIRING DIAGRAM



SYMBOL	DESCRIPTION	ABBREV	COLOR
+	CIRCUIT CONNECTED	RD	RED
-	CIRCUIT NOT CONNECTED	WH	WHITE
+	ELECTRICAL CONNECTION TO MACHINE STRUCTURE	OR	ORANGE
+	INTERNAL ELECTRICAL CONNECTION TO SURFACE OF COMPONENT	YL	YELLOW
+	CONNECTION	PK	PINK
+	CONNECTION	BR	BROWN
+	CONNECTION	GY	GRAY
+	CONNECTION	PU	PURPLE
+	CONNECTION	BLK	BLACK
+	CONNECTION	GN	GREEN
+	CONNECTION	BU	BLUE

WARNING

Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.

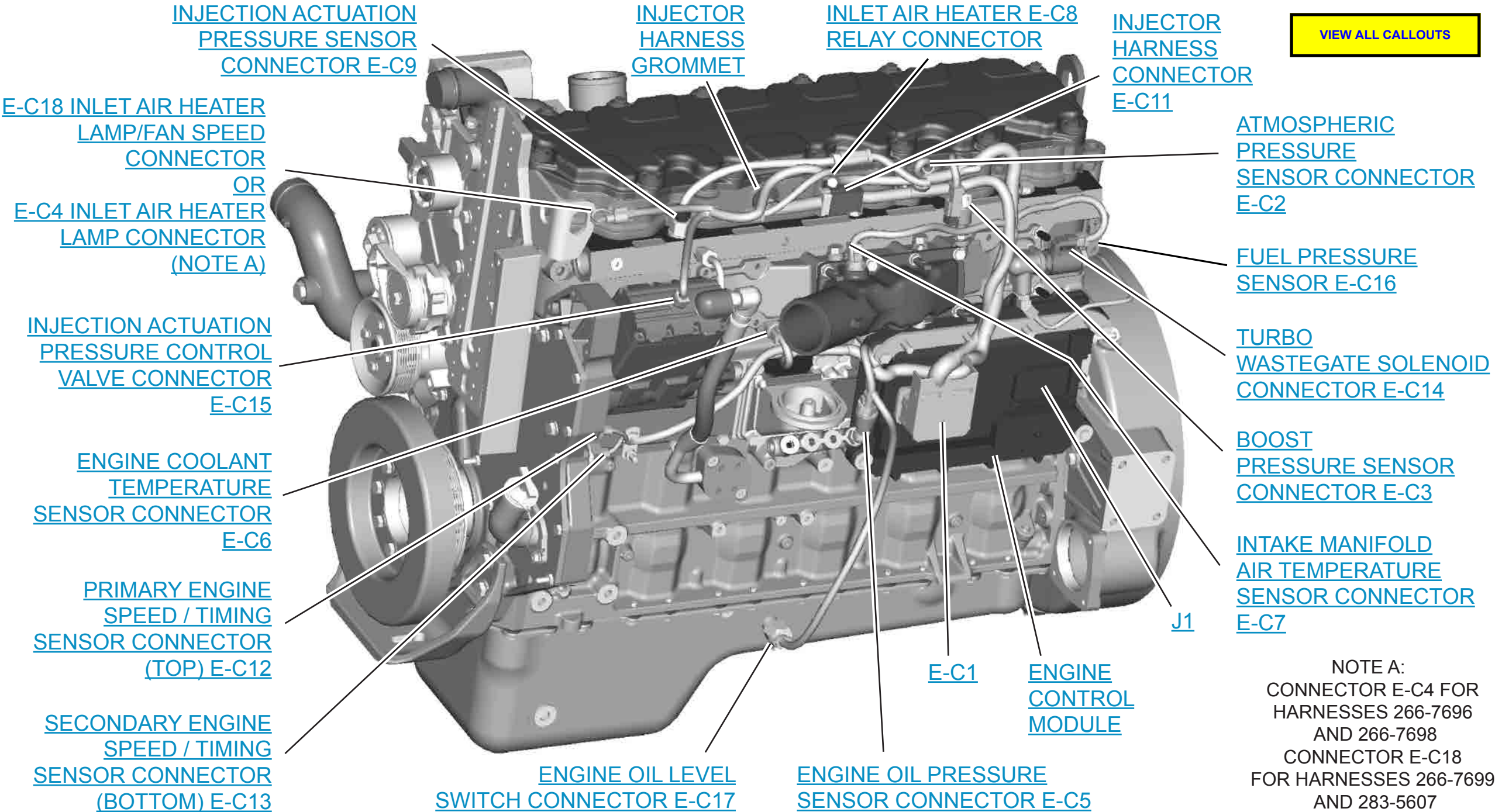
THIS SCHEMATIC IS FOR THE C7 ON-HIGHWAY ENGINE ELECTRICAL SYSTEM
MEDIA NUMBER: RENR7691-04

Components are shown installed on a fully operable engine in a non powered state.
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.

LEFT SIDE VIEW



[VIEW ALL CALLOUTS](#)



NOTE A:
CONNECTOR E-C4 FOR
HARNESSES 266-7696
AND 266-7698
CONNECTOR E-C18
FOR HARNESSES 266-7699
AND 283-5607

CYLINDER INJECTOR HARNESS 222-5917-05 CONNECTOR AND SPLICE LOCATIONS



A-C2			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16	A701-A1	A	154-2389
WH-16	L983-A2	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769

A-C3			
CLR-GA	WIRE NAME	POS	TERM/PLUG
PU-16	A702-A3	A	154-2389
WH-16	L983-A4	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769

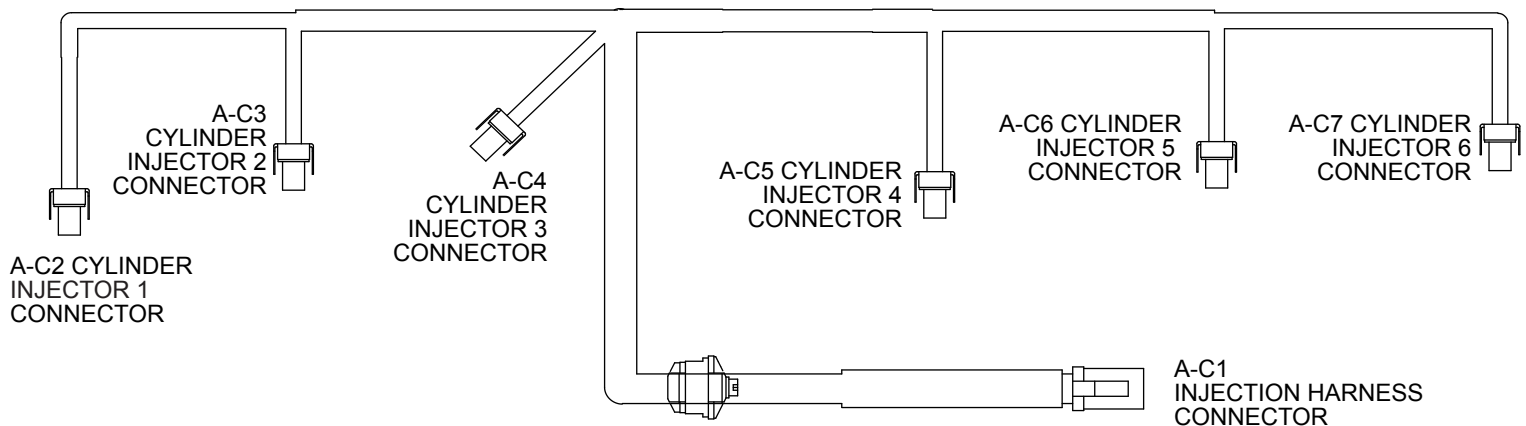
A-C1			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16	A701-A1	1	180-9340
PU-16	A702-A3	2	180-9340
BR-16	A703-A5	3	180-9340
GN-16	A704-A7	4	180-9340
BU-16	A705-A9	5	180-9340
GY-16	A706-A11	6	180-9340
YL-16	L985-A12	7	180-9340
YL-16	L985-A10	8	180-9340
OR-16	L984-A8	9	180-9340
OR-16	L984-A6	10	180-9340
WH-16	L983-A4	11	180-9340
WH-16	L983-A2	12	180-9340
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	RECEPTACLE_AS.		155-2252
1	WEDGE		155-2258

A-C5			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GN-16	A704-A7	A	154-2389
OR-16	L984-A8	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769

A-C6			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-16	A705-A9	A	154-2389
YL-16	L985-A10	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769

A-C4			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16	A703-A5	A	154-2389
OR-16	L984-A6	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769

A-C7			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16	A706-A11	A	154-2389
YL-16	L985-A12	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME		P/N
1	PLUG		153-9693
1	SEAL		154-0877
1	CLIP		154-3769



ENGINE HARNESS 222-5905 AND 222-5907 CONNECTOR AND SPLICE LOCATIONS



E-C1			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E1	2	180-9340
GN-18	G829-E5	3	180-9340
		4	8T-8737
		5	8T-8737
		6	8T-8737
		7	8T-8737
BU-18	G850-E9	8	180-9340
		9	8T-8737
		10	8T-8737
		11	8T-8737
		12	8T-8737
		13	8T-8737
GY-18	A747-E10	14	180-9340
		15	8T-8737
		16	8T-8737
		17	8T-8737
PK-18	G833-E11	18	180-9340
		19	8T-8737
		20	8T-8737
		21	8T-8737
		22	8T-8737
		23	8T-8737
GY-18	994-E16	24	180-9340
BR-18	G849-E17	25	180-9340
		26	8T-8737
		27	8T-8737
		28	8T-8737
		29	8T-8737
		30	8T-8737
		31	8T-8737
BU-18	995-E18	32	180-9340
		33	8T-8737
		34	8T-8737
BU-18	C967-E20	35	180-9340
GY-18	A701-E21	36	180-9340
PU-18	A702-E22	37	180-9340
BR-18	A703-E23	38	180-9340
GN-18	A704-E24	39	180-9340
PK-18	A746-E25	40	180-9340
BR-18	G826-E26	41	180-9340
BU-18	G827-E27	42	180-9340
		43	8T-8737
WH-18	L983-E27	44	180-9340
OR-18	L984-E32	45	180-9340
YL-18	L985-E33	46	180-9340
		47	8T-8737
WH-18	E964-E38	48	180-9340
BK-18	E963-E39	49	180-9340
		50	8T-8737
		51	8T-8737
		52	8T-8737
		53	8T-8737
BU-18	A705-E40	54	180-9340
GY-18	A706-E41	55	180-9340
		56	8T-8737
		57	8T-8737
YL-18	E966-E36	58	180-9340
BU-18	E965-E37	59	180-9340
		60	8T-8737
PK-18	G854-E45	61	180-9340
PU-18	G855-E46	62	180-9340
WH-18	M795-E99	63	180-9340
BK-18	C211-E98	64	180-9340
		65	8T-8737
		66	8T-8737
		67	8T-8737
		68	8T-8737
		69	8T-8737
		70	8T-8737
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	160-7690	
2	STRAP	3S-2093	
1	ENDBELL	126-1774	

E-C2			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E2	A	180-9340
GN-18	G829-E8	B	180-9340
GY-18	A747-E10	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2267	
1	WEDGE	155-2276	

E-C11			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-18	A701-E21	1	180-9339
PU-18	A702-E22	2	180-9339
BR-18	A703-E23	3	180-9339
GN-18	A704-E24	4	180-9339
BU-18	A705-E40	5	180-9339
GY-18	A706-E41	6	180-9339
YL-18	L985-E35	7	180-9339
YL-18	L985-E34	8	180-9339
OR-18	L984-E30	9	180-9339
OR-18	L984-E31	10	180-9339
WH-18	L983-E29	11	180-9339
WH-18	L983-E28	12	180-9339
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	3E-5179	
1	WEDGE	3E-5180	

E-C3			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E3	A	180-9340
GN-18	G829-E7	B	180-9340
PK-18	A746-E25	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2267	
1	WEDGE	155-2276	

E-C9			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E4	A	180-9339
GN-18	G829-E6	B	180-9339
BR-18	G849-E17	C	180-9339
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	3E-3370	
1	WEDGE	3E-3371	

E-C4			
CLR-GA	WIRE NAME	POS	TERM/PLUG
RD-18	C987-E44	A	116-6159
BU-18	G850-E42	B	116-6159
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	116-6158	
2	SEAL	100-6674	
1	RETAINER	111-2422	
1	CAP	116-6161	

E-C12			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BK-18	E963-E39	A	111-1567
WH-18	E964-E38	B	111-1567
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	100-3320	

E-C5			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-18	G826-E26	A	180-9340
BU-18	G827-E27	B	180-9340
GY-18	994-E16	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2267	
1	WEDGE	155-2276	

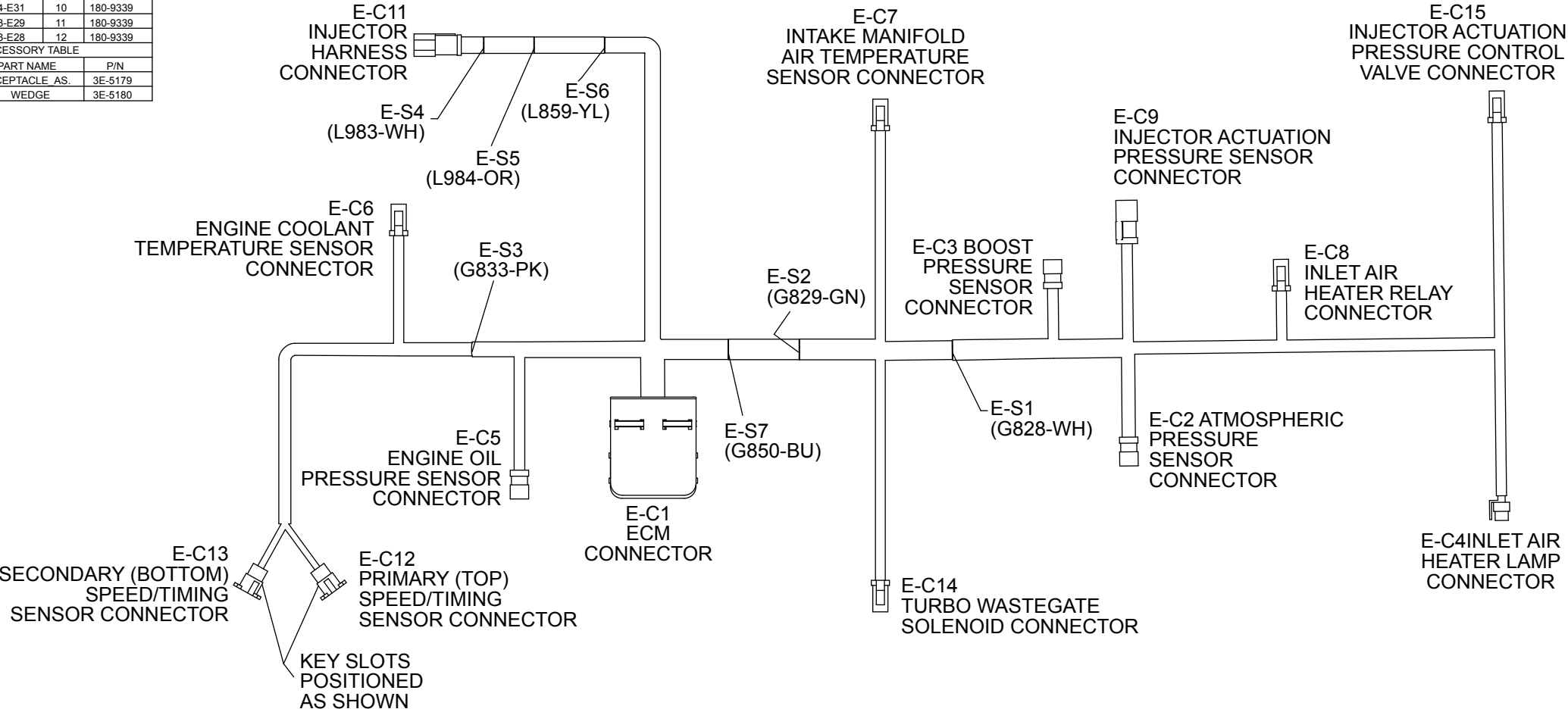
E-C13			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	E965-E37	A	111-1567
YL-18	E966-E36	B	111-1567
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	111-2416	

E-C7			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	C967-E20	1	180-9340
PK-18	G833-E13	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C14			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	M795-E99	1	180-9340
BK-18	C211-E98	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C8			
CLR-GA	WIRE NAME	POS	TERM/PLUG
RD-18	C987-E44	1	180-9340
BU-18	G850-E43	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C6			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	995-E18	1	180-9340
PK-18	G833-E12	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	



ENGINE HARNESS 222-5906 CONNECTOR AND SPLICE LOCATIONS



E-C1			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E1	1	8T-8737
GN-18	G829-E5	2	180-9340
		3	180-9340
		4	8T-8737
		5	8T-8737
		6	8T-8737
		7	8T-8737
BU-18	G850-E9	8	180-9340
		9	8T-8737
		10	8T-8737
		11	8T-8737
		12	8T-8737
		13	8T-8737
GY-18	A747-E10	14	180-9340
		15	8T-8737
		16	8T-8737
		17	8T-8737
PK-18	G833-E11	18	180-9340
		19	8T-8737
		20	8T-8737
		21	8T-8737
		22	8T-8737
		23	8T-8737
GY-18	994-E16	24	180-9340
BR-18	G849-E17	25	180-9340
		26	8T-8737
		27	8T-8737
		28	8T-8737
		29	8T-8737
		30	8T-8737
		31	8T-8737
BU-18	995-E18	32	180-9340
GY-18	G458-E48	33	180-9340
		34	8T-8737
BU-18	C967-E20	35	180-9340
GY-18	A701-E21	36	180-9340
PU-18	A702-E22	37	180-9340
BR-18	A703-E23	38	180-9340
GN-18	A704-E24	39	180-9340
PK-18	A746-E25	40	180-9340
BR-18	G826-E26	41	180-9340
BU-18	G827-E27	42	180-9340
		43	8T-8737
WH-18	L983-E27	44	180-9340
OR-18	L984-E32	45	180-9340
YL-18	L985-E33	46	180-9340
		47	8T-8737
WH-18	E964-E38	48	180-9340
BK-18	E963-E39	49	180-9340
		50	8T-8737
		51	8T-8737
		52	8T-8737
		53	8T-8737
BU-18	A705-E40	54	180-9340
GY-18	A706-E41	55	180-9340
		56	8T-8737
		57	8T-8737
YL-18	E966-E36	58	180-9340
BU-18	E965-E37	59	180-9340
GN-18	G883-E49	60	180-9340
PK-18	G854-E45	61	180-9340
PU-18	G855-E46	62	180-9340
WH-18	M795-E99	63	180-9340
BK-18	C211-E98	64	180-9340
		65	8T-8737
		66	8T-8737
		67	8T-8737
		68	8T-8737
		69	8T-8737
		70	8T-8737
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	160-7690	
2	STRAP	3S-2093	
1	ENDBELL	126-1774	

E-C2			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E2	A	180-9340
GN-18	G829-E8	B	180-9340
GY-18	A747-E10	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2267	
1	WEDGE	155-2276	

E-C11			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-18	A701-E21	1	180-9339
PU-18	A702-E22	2	180-9339
BR-18	A703-E23	3	180-9339
GN-18	A704-E24	4	180-9339
BU-18	A705-E40	5	180-9339
GY-18	A706-E41	6	180-9339
YL-18	L985-E35	7	180-9339
YL-18	L985-E34	8	180-9339
OR-18	L984-E30	9	180-9339
OR-18	L984-E31	10	180-9339
WH-18	L983-E29	11	180-9339
WH-18	L983-E28	12	180-9339
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	3E-5179	
1	WEDGE	3E-5180	

E-C3			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	G828-E3	A	180-9340
GN-18	G829-E7	B	180-9340
PK-18	A746-E25	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2267	
1	WEDGE	155-2276	

E-C12			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BK-18	E963-E39	A	111-1567
WH-18	E964-E38	B	111-1567
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	100-3320	

E-C5			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-18	G826-E26	A	180-9340
BU-18	G827-E27	B	180-9340
GY-18	994-E16	C	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C13			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	E965-E37	A	111-1567
YL-18	E966-E36	B	111-1567
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	111-2416	

E-C6			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	995-E18	1	180-9340
PK-18	G833-E12	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C14			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-18	M795-E99	1	180-9340
BK-18	C211-E98	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C7			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BU-18	C967-E20	1	180-9340
PK-18	G833-E13	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

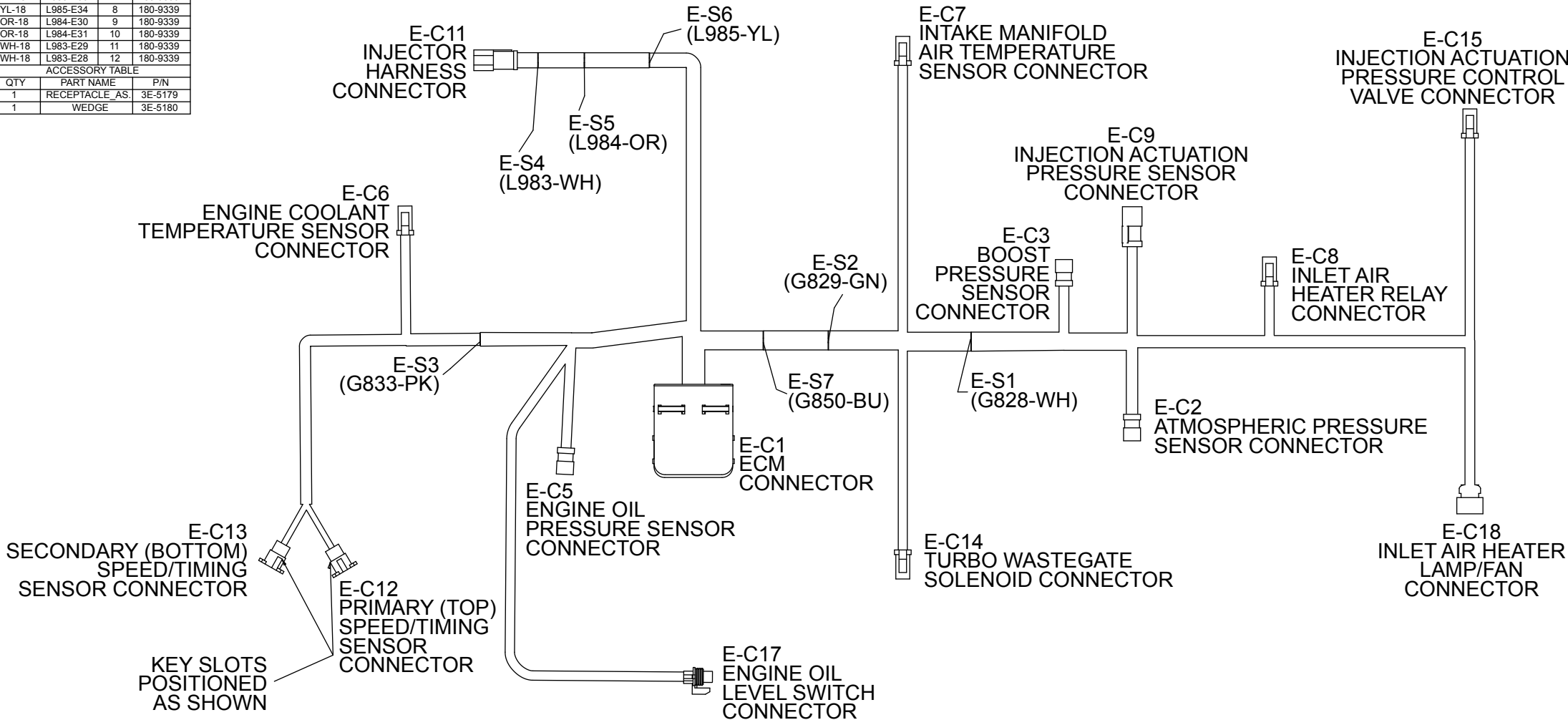
E-C18			
CLR-GA	WIRE NAME	POS	TERM/PLUG
RD-18	C987-E44	A	189-9115
BU-18	G850-E42	B	189-9115
GN-18	G883-E49	C	189-9115
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	189-9114	
3	SEAL	189-9116	

E-C8			
CLR-GA	WIRE NAME	POS	TERM/PLUG
RD-18	C987-E44	1	180-9340
BU-18	G850-E43	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

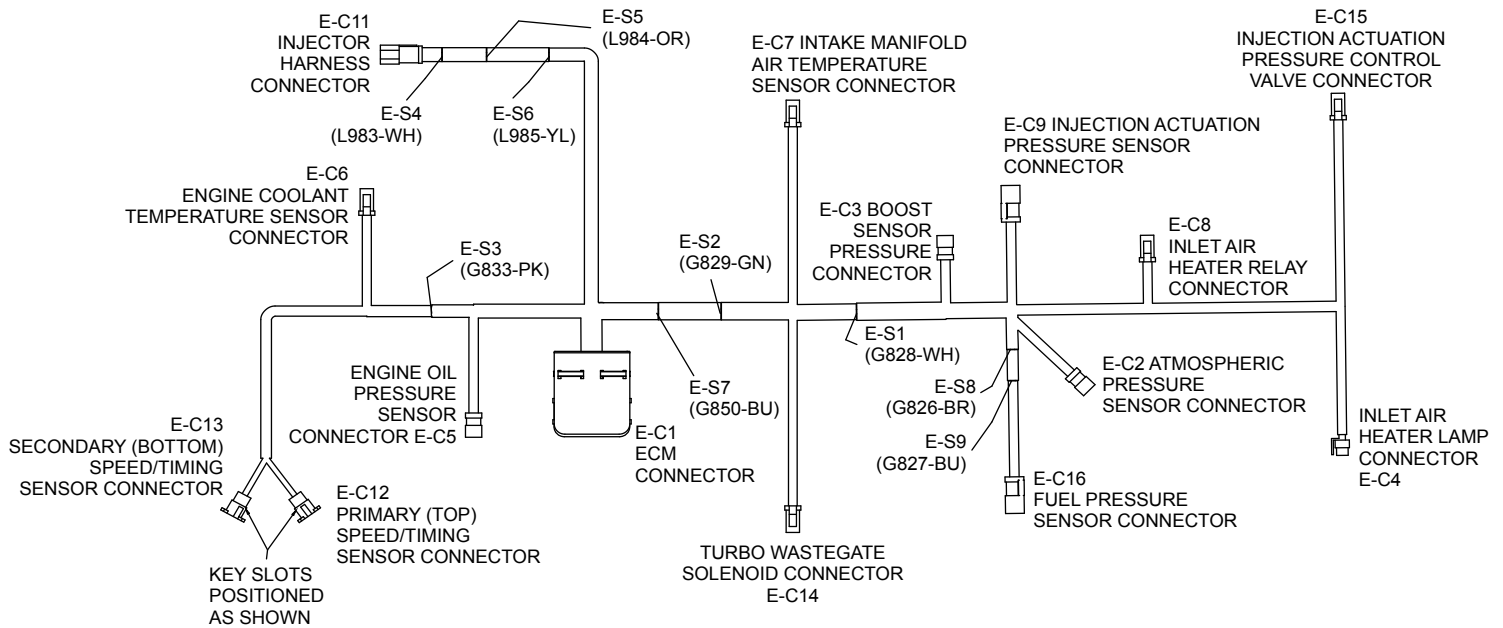
E-C19			
CLR-GA	WIRE NAME	POS	TERM/PLUG
		A	189-9117
		B	189-9117
		C	189-9117
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	RECEPTACLE AS.	189-9113	

E-C15			
CLR-GA	WIRE NAME	POS	TERM/PLUG
PK-18	G854-E45	1	180-9340
PU-18	G855-E46	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2269	
1	WEDGE	155-2261	

E-C17			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-18	G458-E48	A	123-1198
GN-18	G829-E47	B	123-1198
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	118-8429	



ENGINE HARNESSES 261-3781 AND 261-3783 CONNECTOR AND SPLICE LOCATIONS



E-C5				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BR-18	G826-E14	A	180-9340	
BU-18	G827-E47	B	180-9340	
GY-18	994-E16	C	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2267		
1	WEDGE	155-2276		

E-C9				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18	G828-E4	A	180-9339	
GN-18	G829-E6	B	180-9339	
BR-18	G849-E17	C	180-9339	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	RECEPTACLE_AS.	3E-3370		
1	WEDGE	3E-3371		

E-C13				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18	E965-E37	A	111-1567	
YL-18	E966-E36	B	111-1567	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	RECEPTACLE_AS.	111-2416		

E-C15				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
PU-18	G855-E46	1	180-9340	
PK-18	G854-E45	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2269		
1	WEDGE	155-2261		

E-C4				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
RD-18	C987-E44	A	116-6159	
BU-18	G850-E42	B	116-6159	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	116-6158		
2	SEAL	100-6674		
1	RETAINER	111-2422		
1	CAP	116-6161		

E-C8				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
RD-18	C987-E44	1	180-9340	
BU-18	G850-E43	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2269		
1	WEDGE	155-2261		

E-C12				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BK-18	E963-E39	A	111-1567	
WH-18	E964-E38	B	111-1567	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	RECEPTACLE_AS.	100-3320		

E-C14				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BK-18	C211-E98	1	180-9340	
WH-18	M795-E99	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2269		
1	WEDGE	155-2261		

E-C3				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18	G828-E3	A	180-9340	
GN-18	G829-E7	B	180-9340	
PK-18	A746-E25	C	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2267		
1	WEDGE	155-2276		

E-C7				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18	C967-E20	1	180-9340	
PK-18	G833-E13	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2269		
1	WEDGE	155-2261		

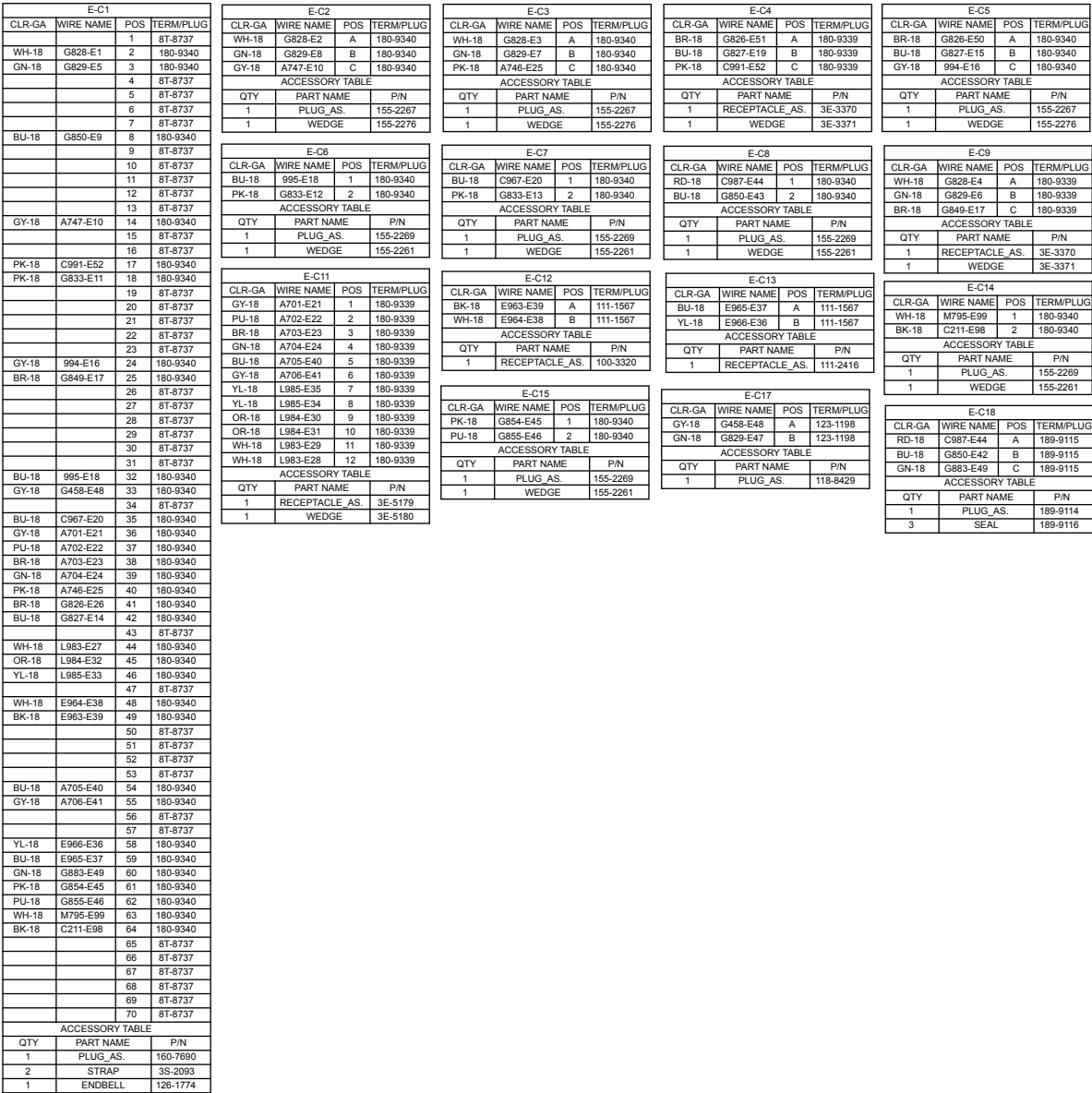
E-C11				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
GY-18	A701-E21	1	180-9339	
PU-18	A702-E22	2	180-9339	
BR-18	A703-E23	3	180-9339	
GN-18	A704-E24	4	180-9339	
BU-18	A705-E40	5	180-9339	
GY-18	A706-E41	6	180-9339	
YL-18	L985-E35	7	180-9339	
OR-18	L984-E30	9	180-9339	
OR-18	L984-E31	10	180-9339	
WH-18	L983-E29	11	180-9339	
WH-18	L983-E28	12	180-9339	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	RECEPTACLE_AS.	3E-5179		
1	WEDGE	3E-5180		

E-C2				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18	G828-E2	A	180-9340	
GN-18	G828-E8	B	180-9340	
GY-18	A747-E10	C	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2267		
1	WEDGE	155-2276		

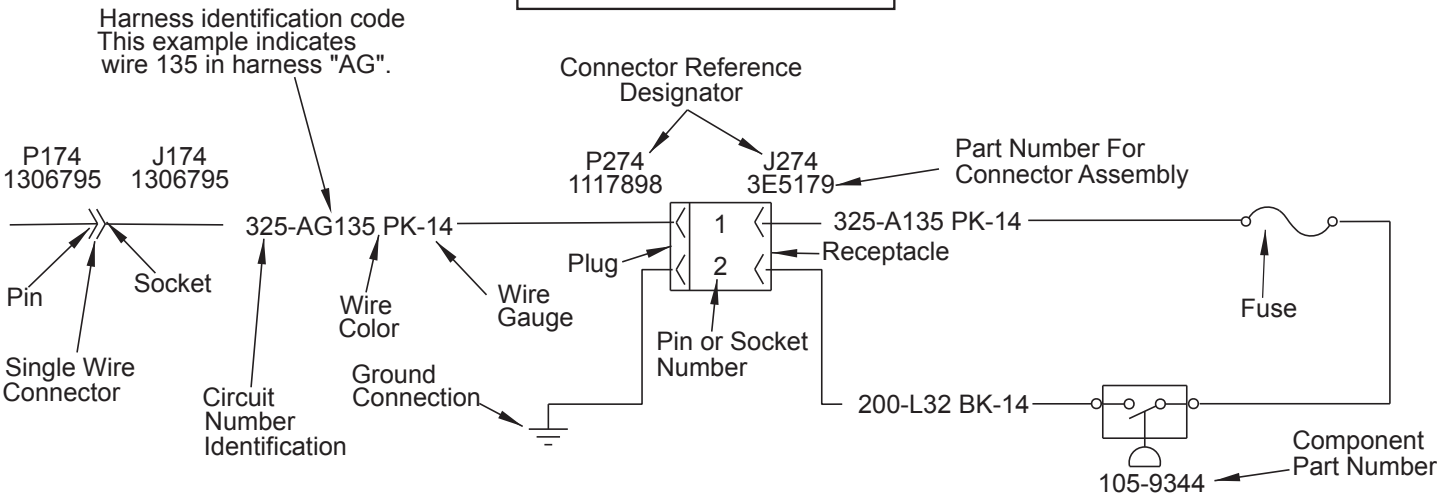
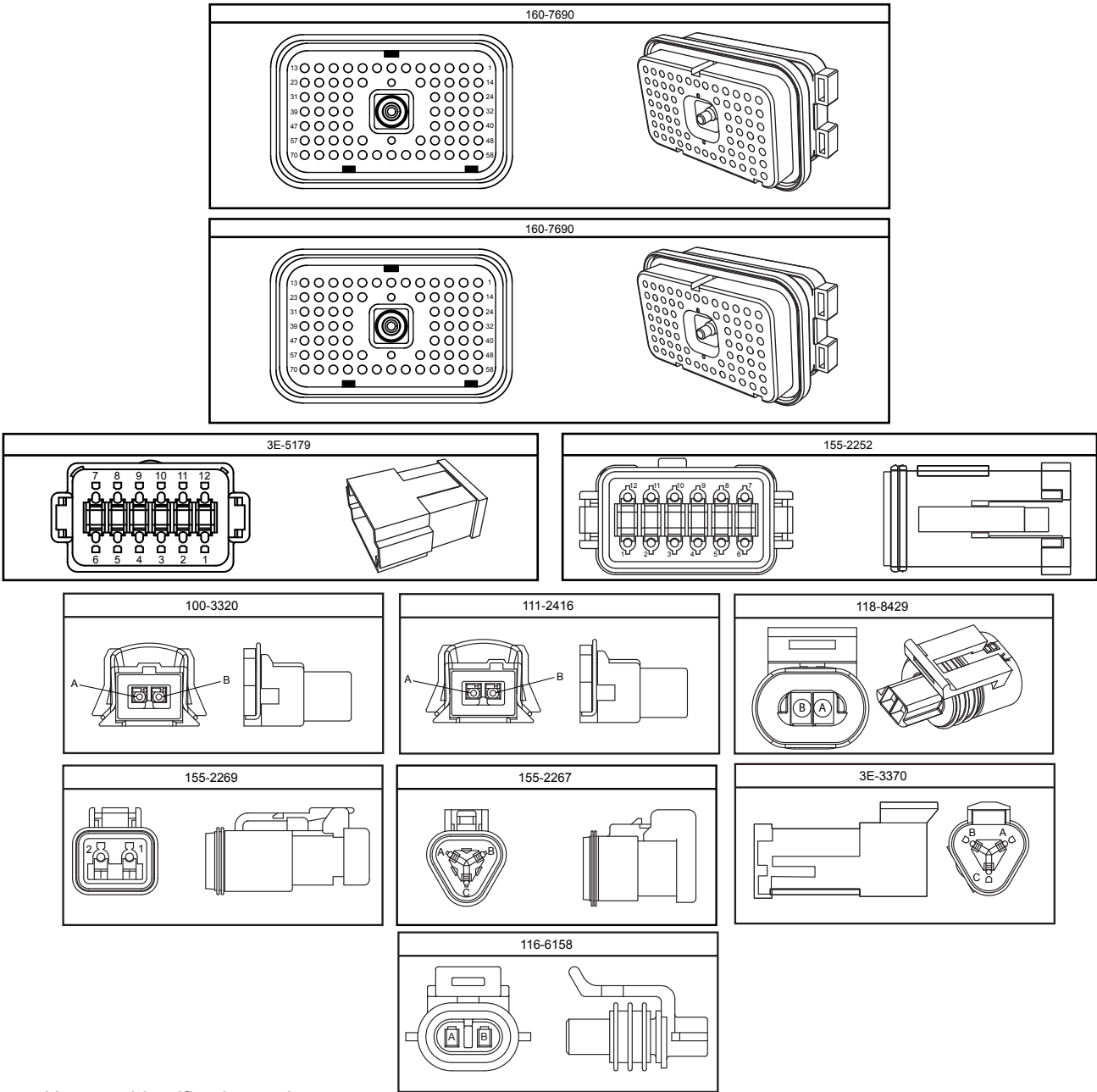
E-C8				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18	995-E18	1	180-9340	
PK-18	G833-E12	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	155-2269		
1	WEDGE	155-2261		

E-C10				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BR-18	G828-E15	A	180-9339	
BU-18	G827-E48	B	180-9339	
PK-18	C991-E49	C	180-9339	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	RECEPTACLE_AS.	3E-3370		
1	WEDGE	3E-3371		

E-C1				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18	G828-E1	1	180-9340	
GN-18	G828-E5	3	180-9340	
		4	8T-8737	
		5	8T-8737	
		6	8T-8737	
		7	8T-8737	
BU-18	G850-E9	8	180-9340	
		9	8T-8737	
		10	8T-8737	
		11	8T-8737	
		12	8T-8737	
		13	8T-8737	
GY-18	A747-E10	14	180-9340	
		15	8T-8737	
		16	8T-8737	
PK-18	C991-E49	17	180-9340	
PK-18	G833-E11	18	180-9340	
		19	8T-8737	
		20	8T-8737	
		21	8T-8737	
		22	8T-8737	
		23	8T-8737	
GY-18	994-E16	24	180-9340	
BR-18	G849-E17	25	180-9340	
		26	8T-8737	
		27	8T-8737	
		28	8T-8737	
		29	8T-8737	
		30	8T-8737	
		31	8T-8737	
BU-18	995-E18	32	180-9340	
		33	8T-8737	
		34	8T-8737	
BU-18	C967-E20	35	180-9340	
GY-18	A701-E21	36	180-9340	
PU-18	A702-E22	37	180-9340	
BR-18	A703-E23	38	180-9340	
GN-18	A704-E24	39	180-9340	
PK-18	A746-E25	40	180-9340	
BR-18	G826-E26	41	180-9340	
BU-18	G827-E19	42	180-9340	
		43	8T-8737	
WH-18	L983-E27	44	180-9340	
OR-18	L984-E32	45	180-9340	
YL-18	L985-E33	46	180-9340	
		47	8T-8737	
WH-18	E964-E38	48	180-9340	
BK-18	E963-E39	49	180-9340	
		50	8T-8737	
		51	8T-8737	
		52	8T-8737	
		53	8T-8737	
BU-18	A705-E40	54	180-9340	
GY-18	A706-E41	55	180-9340	
		56	8T-8737	
		57	8T-8737	
YL-18	E966-E36	58	180-9340	
BU-18	E965-E37	59	180-9340	
		60	8T-8737	
PK-18	G854-E45	61	180-9340	
PU-18	G855-E46	62	180-9340	
WH-18	M795-E99	63	180-9340	
BK-18	C211-E98	64	180-9340	
		65	8T-8737	
		66	8T-8737	
		67	8T-8737	
		68	8T-8737	
		69	8T-8737	
		70	8T-8737	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG_AS.	160-7690		
2	STRAP	3S-2093		
1	ENDBELL	126-1774		



CONNECTORS AND HARNESS AND WIRE SYMBOLS



DIAGNOSTIC CODE LISTING AND RELATED ELECTRICAL SERVICE MANUALS



Diagnostic Code Listing					
PID-FMI	Flash Code	Description	PID-FMI	Flash Code	Description
001-11	72	Cylinder #1 Injector current fault	105-00	64	High Intake Manifold Air Temperature Warning
002-11	72	Cylinder #2 Injector current fault	105-03	38	Intake Manifold Air Temperature voltage high
003-11	73	Cylinder #3 Injector current fault	105-04	38	Intake Manifold Air Temperature voltage low
004-11	73	Cylinder #4 Injector current fault	105-11	64	Very High Intake Manifold Air Temperature
005-11	74	Cylinder #5 Injector current fault	108-03	26	Barometric Pressure voltage high
006-11	74	Cylinder #6 Injector current fault	108-04	26	Barometric Pressure voltage low
022-11	42	Primary to Secondary Engine Speed Signal Calibration	110-00	61	High Coolant Temperature Warning
022-13	42	Engine Speed Signal Calibration Not Performed	110-03	27	Coolant Temperature voltage high
030-08	29	PTO Throttle signal invalid	110-04	27	Coolant Temperature voltage low
030-13	29	PTO Throttle out of calibration	110-11	61	Very High Coolant Temperature
032-05	33	Turbo Wastegate Solenoid current low	111-01	62	Low Coolant Level Warning
032-06	33	Turbo Wastegate Solenoid current high	111-02	12	Coolant Level signal invalid
032-11	33	Turbo Wastegate Solenoid current mismatch	111-03	12	Coolant Level voltage high
041-03	21	8 Volt Supply voltage high	111-04	12	Coolant Level voltage low
041-04	21	8 Volt Supply voltage low	111-11	62	Very Low Coolant Level
042-11	18	Injection Actuation Pressure output fault	128-03	44	Secondary Fuel Level voltage high
043-02	71	Key Switch Fault	128-04	44	Secondary Fuel Level voltage low
064-02	34	Secondary Engine Speed loss of signal	164-00	17	Excessive Injection Actuation Pressure
064-11	34	Secondary Engine Speed no pattern	164-02	15	Injection Actuation Pressure Signal Erratic
070-05	49	Inlet Air Heater current low	164-03	15	Injection Actuation Pressure Voltage High
070-06	49	Inlet Air Heater current high	164-04	15	Injection Actuation Pressure Voltage Low
071-00	01	Idle Shutdown Override	164-11	39	Injection Actuation Pressure system fault
071-01	47	Idle Shutdown	168-00	51	Excessive ECM Battery Power
071-14	47	PTO Shutdown	168-01	51	Low ECM Battery Power
084-00	41	Vehicle Overspeed Warning	168-02	51	ECM Battery Power Intermittent
084-01	31	Vehicle Speed loss of signal	173-00	16	High Exhaust Gas Temperature Derate
084-02	36	Vehicle Speed signal invalid	173-11	16	Very High Exhaust Gas Temperature Derate
084-08	36	Vehicle Speed signal out of range	186-04	00	PTO Engine Shutdown Switch Voltage Low
084-10	36	Vehicle Speed signal rate of change	186-14	47	PTO Engine Shutdown Switch Occurrence
084-14	00	Quick Stop Occurrence	190-00	35	Engine Overspeed Warning
091-08	32	Throttle Position Invalid	190-02	34	Primary Engine Speed loss of signal
091-13	28	Throttle Position out of Calibration	190-11	34	Primary Engine Speed no pattern
094-01	63	Low Fuel Pressure Warning	224-11	00	Theft Deterrent Active
094-03	37	Fuel Pressure Voltage High	224-14	00	Theft Deterrent Active with Engine Cranking
094-04	37	Fuel Pressure Voltage Low	231-02	58	J1939 Data Incorrect
094-11	63	Low Cranking Fuel Pressure	231-11	58	J1939 Data Link Fault
096-03	00	Fuel Level Voltage High	231-12		J1939 Device Not Responding
096-04	00	Fuel Level Voltage Low	231-14	57	Transmission Data Link Derate
100-01	46	Low Oil Pressure Warning	232-03	21	5 Volt Supply voltage high
100-03	24	Oil Pressure voltage high	232-04	21	5 Volt Supply voltage low
100-04	24	Oil Pressure voltage low	246-11	00	Brake Pedal Switch #1 Fault
100-11	46	Very Low Oil Pressure	247-11	00	Brake Pedal Switch #2 Fault
102-01	25	Low Boost Pressure	252-11	59	Engine Software Incorrect
102-02	25	Boost Pressure signal erratic	253-02	56	Check Customer or System Parameters
102-03	25	Boost Pressure voltage high	253-14	56	Truck Manufacturer Parameter Not Programmed
102-04	25	Boost Pressure voltage low	N/A	55	No Diagnostic Code Detected
102-07	25	Boost Pressure not responding			

Related Electrical Service Manuals

Title	Form Number
Troubleshooting	SENR9517
Systems Operation / Testing and Adjusting	REN7572