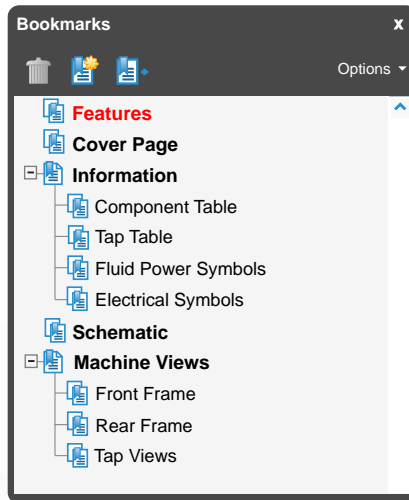


INTERACTIVE SCHEMATIC



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**.

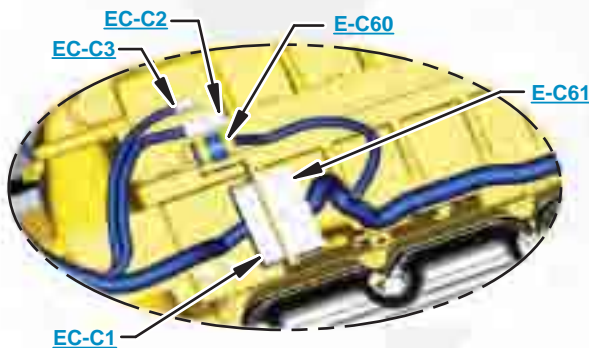
Select **PROPERTIES**.

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

C15 On-Highway Truck Engine Electrical System

SDP1-822

HARNESS CONNECTOR TABLES

Page 1 of 2



Harness 286-8224 & 290-8615 Connector Tables

A-C1				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
GN-16-HV	K738-A5	1	180-9340	
		2	8T-8737	
GY-18-GXL	T852-A32	3	180-9340	
		4	8T-8737	
GN-18-GXL	U776-A101	5	180-9340	
		6	8T-8737	
		7	8T-8737	
BR-16-HV	K737-A54	8	180-9340	
		9	8T-8737	
OR-18-GXL	C801-A98	10	180-9340	
		11	8T-8737	
		12	8T-8737	
GY-18-GXL	Y754-A72	13	180-9340	
BU-16-HV	K739-A56	14	180-9340	
PK-18-GXL	R746-A20	15	180-9340	
WH-18-GXL	U780-A62	16	180-9340	
GN-18-GXL	G829-A2	17	180-9340	
BR-16-HV	X984-A30	18	180-9340	
		19	8T-8737	
GY-18-GXL	C800-A97	20	180-9340	
WH-16-HV	T856-A31	21	180-9340	
OR-16-HV	X985-A14	22	180-9340	
		23	8T-8737	
		24	8T-8737	
BK-18-GXL	E963-A27	25	180-9340	
WH-18-GXL	G856-A8	26	180-9340	
PU-18-GXL	Y923-A74	27	180-9340	
GY-18-GXL	994-A10	28	180-9340	
		29	8T-8737	
PK-18-GXL	G833-A47	30	180-9340	
YL-16-HV	X986-A22	31	180-9340	
		32	8T-8737	
YL-18-GXL	E795-A80	33	180-9340	
		34	8T-8737	
WH-18-GXL	E964-A26	35	180-9340	
YL-18-GXL	G857-A9	36	180-9340	
		37	8T-8737	
GN-18-GXL	C829-A66	38	180-9340	
		39	8T-8737	
		40	8T-8737	
BR-18-GXL	C803-A99	41	180-9340	
GN-16-HV	T857-A36	42	180-9340	
GY-18-GXL	U775-A68	43	180-9340	
		44	8T-8737	
		45	8T-8737	
YL-18-GXL	E966-A49	46	180-9340	
BU-18-GXL	E965-A48	47	180-9340	
		48	8T-8737	
		49	8T-8737	
BU-16-HV	X983-A7	50	180-9340	
BU-18-GXL	U774-A58	51	180-9340	
GY-18-GXL	Y738-A106	52	180-9340	
YL-16-HV	T864-A71	53	180-9340	
BU-18-GXL	G827-A69	54	180-9340	
YL-18-GXL	T846-A100	55	180-9340	
YL-18-GXL	Y741-A61	56	180-9340	
BR-18-GXL	U779-A6	57	180-9340	
PU-16-HV	X988-A52	58	180-9340	
PU-18-GXL	Y733-A103	59	180-9340	
BU-18-GXL	Y734-A104	60	180-9340	
GN-16-HV	T863-A75	61	180-9340	
BR-18-GXL	Y776-A81	62	180-9340	
OR-18-GXL	Y753-A82	63	180-9340	
		64	8T-8737	
		65	8T-8737	
PK-18-GXL	Y746-A92	66	180-9340	
OR-16-HV	X989-A51	67	180-9340	
BR-16-HV	X987-A37	68	180-9340	
YL-18-GXL	Y737-A105	69	180-9340	
PK-18-GXL	U773-A57	70	180-9340	
		71	8T-8737	
WH-18-GXL	G828-A1	72	180-9340	
		73	8T-8737	
OR-18-GXL	T853-A11	74	180-9340	
		75	8T-8737	
YL-18-GXL	H807-A33	76	180-9340	
BU-16-HV	T862-A78	77	180-9340	
		78	8T-8737	
OR-18-GXL	U777-A102	79	8T-8737	
BR-18-GXL	G826-A70	80	180-9340	
WH-18-GXL	Y748-A109	81	180-9340	
YL-18-GXL	U781-A96	82	180-9340	
GN-18-GXL	Y749-A110	83	180-9340	
BU-18-GXL	995-A12	84	180-9340	
OR-18-GXL	Y777-A95	85	180-9340	
		86	8T-8737	
		87	8T-8737	
OR-16-GXL	Y751-A88	88	180-9340	
BR-18-GXL	Y747-A108	89	180-9340	
		90	8T-8737	
OR-18-GXL	Y743-A107	91	180-9340	
		92	8T-8737	
PK-18-GXL	U782-A83	93	180-9340	
GN-18-GXL	Y742-A76	94	180-9340	
BU-18-GXL	C967-A15	95	180-9340	
YL-18-GXL	F421-A13	96	180-9340	
		97	8T-8737	
		98	8T-8737	
OR-16-HV	T860-A25	99	180-9340	
BR-16-HV	T990-A84	100	180-9340	

A-C1(continued)				
GY-16-HV	T987-A85	101	180-9340	
BU-16-HV	T989-A86	102	180-9340	
PU-16-HV	T988-A87	103	180-9340	
GY-16-HV	T958-A23	104	180-9340	
WH-16-HV	T962-A29	105	180-9340	
BR-16-HV	T959-A18	106	180-9340	
GN-16-HV	T961-A28	107	180-9340	
BU-16-HV	T960-A19	108	180-9340	
YL-16-GXL	Y750-A111	109	180-9340	
		110	8T-8737	
WH-16-HV	T985-A89	111	180-9340	
		112	8T-8737	
GN-16-HV	T986-A90	113	180-9340	
		114	8T-8737	
WH-16-HV	T859-A24	115	180-9340	
PU-16-HV	T957-A16	116	180-9340	
		117	8T-8737	
YL-16-HV	T958-A17	118	180-9340	
		119	8T-8737	
		120	8T-8737	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	264-5732		
1	ENDBELL	211-6807		

A-C2				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18-GXL	G828-A34	1	180-9340	
PK-18-GXL	G833-A21	2	180-9340	
PK-18-GXL	U773-A57	3	180-9340	
		4	8T-8737	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-5008		
120mm	PAINT/PRO	289-5150		

A-C3				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
PU-18-GXL	Y733-A103	1	180-9340	
OR-18-GXL	Y736-A50	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
145mm	PAINT/PRO	289-5150		

A-C4				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18-GXL	G828-A38	1	180-9340	
GN-18-GXL	G829-A43	2	180-9340	
GY-18-GXL	994-A10	3	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	237-0227		
120mm	PAINT/PRO	289-5150		

A-C5				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18-GXL	G828-A40	1	180-9340	
GN-18-GXL	G829-A42	2	180-9340	
BR-18-GXL	U779-A6	3	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4013		
120mm	PAINT/PRO	289-5150		

A-C6				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18-GXL	G828-A39	1	180-9340	
GN-18-GXL	G829-A41	2	180-9340	
PK-18-GXL	R746-A20	3	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	237-0227		
120mm	PAINT/PRO	289-5150		

A-C7				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18-GXL	E965-A48	1	180-9340	
YL-18-GXL	E966-A49	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
120mm	PAINT/PRO	289-5150		

A-C8				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BK-18-GXL	E963-A27	1	180-9340	
WH-18-GXL	E964-A26	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
120mm	PAINT/PRO	289-5150		

A-C9				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18-GXL	C967-A15	1	180-9340	
PK-18-GXL	G833-A45	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
120mm	PAINT/PRO	289-5150		

A-C10				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
YL-18-GXL	F421-A13	1	180-9340	
PK-18-GXL	G833-A46	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
120mm	PAINT/PRO	289-5150		

A-C11				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BU-18-GXL	995-A12	1	180-9340	
PK-18-GXL	G833-A44	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4011		
120mm	PAINT/PRO	289-5150		

A-C12				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
WH-18-GXL	G856-A8	1	180-9340	
YL-18-GXL	G857-A9	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	155-2269		
150mm	PAINT/PRO	289-5150		
1	WEDGE	155-2261		

A-C13				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
BR-18-GXL	G826-A70	1	180-9340	
BU-18-GXL	G827-A69	2	180-9340	
OR-18-GXL	T853-A11	3	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4013		
120mm	PAINT/PRO	289-5150		

A-C14				
CLR-GA	WIRE NAME	POS	TERM/PLUG	
OR-18-GXL	Y736-A50	1	180-9340	
BU-18-GXL	Y734-A104	2	180-9340	
ACCESSORY TABLE				
QTY	PART NAME	P/N		
1	PLUG AS.	230-4013		
165mm	PAINT/PRO	289-5150		

A-C15			
CLR- GA	WIRE NAME	POS	TERM/PLUG/US
GY-18-GXL	T852-A32	1	180-9340
YL-18-GXL	H807-A33	2	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	230-4011	
150mm	PAINT/PRO	289-5150	

HARNESS CONNECTOR TABLES

Page 2 of 2



Harness 292-0645 Connector Tables

E-C302			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16-NW	K737-E23	1	180-9340
GN-16-NW	K738-E2	2	180-9340
BU-16-NW	K739-E4	3	180-9340
BU-16-NW	X983-E5	4	180-9340
OR-16-NW	X985-E6	5	180-9340
YL-16-NW	X986-E7	6	180-9340
BR-16-NW	X984-E8	7	180-9340
WH-16-NW	T856-E9	8	180-9340
GN-16-NW	T857-E10	9	180-9340
BR-16-NW	X987-E11	10	180-9340
OR-16-NW	X989-E12	11	180-9340
PU-16-NW	X988-E13	12	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2252	
200mm	PAINT/PRO	110-3202	
1	WEDGE	155-2258	

E-C4			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16-NW	X987-E14	A	154-2389
BU-16-NW	X983-E5	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C5			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16-NW	X987-E15	A	154-2389
OR-16-NW	X985-E6	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C6			
CLR-GA	WIRE NAME	POS	TERM/PLUG
OR-16-NW	X989-E17	A	154-2389
YL-16-NW	X986-E7	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C7			
CLR-GA	WIRE NAME	POS	TERM/PLUG
OR-16-NW	X989-E16	A	154-2389
BR-16-NW	X984-E8	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C8			
CLR-GA	WIRE NAME	POS	TERM/PLUG
PU-16-NW	X988-E19	A	154-2389
WH-16-NW	T856-E9	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C9			
CLR-GA	WIRE NAME	POS	TERM/PLUG
PU-16-NW	X988-E18	A	154-2389
GN-16-NW	T857-E10	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C10			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16-NW	K737-E1	A	154-2389
BU-16-NW	K739-E22	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C11			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GN-16-NW	K738-E2	A	154-2389
BU-16-NW	K739-E20	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

E-C12			
CLR-GA	WIRE NAME	POS	TERM/PLUG
BR-16-NW	K737-E3	A	154-2389
BU-16-NW	K739-E21	B	154-2389
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG	153-9693	
1	SEAL	154-0877	
1	CLIP	154-3769	

J-C38			
CLR-GA	WIRE NAME	POS	TERM/PLUG
PU-16-NW	T957-J1	1	180-9340
YL-16-NW	T958-J2	2	180-9340
BR-16-NW	T959-J3	3	180-9340
BU-16-NW	T960-J4	4	180-9340
GN-16-NW	T961-J5	5	180-9340
WH-16-NW	T962-J6	6	180-9340
WH-16-NW	T985-J7	7	180-9340
GN-16-NW	T986-J8	8	180-9340
GY-16-NW	T987-J9	9	180-9340
PU-16-NW	T988-J10	10	180-9340
BU-16-NW	T989-J11	11	180-9340
BR-16-NW	T990-J12	12	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2252	
120mm	PAINT/PRO	289-5151	
1	WEDGE	155-2258	

J-C39			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16-NW	T858-J13	1	180-9340
WH-16-NW	T859-J14	2	180-9340
OR-16-NW	T860-J15	3	180-9340
BU-16-NW	T862-J16	4	180-9340
GN-16-NW	T863-J17	5	180-9340
YL-16-NW	T864-J18	6	180-9340
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	155-2273	
120mm	PAINT/PRO	289-5151	
1	WEDGE	155-2263	

Harness 292-0644 Connector Tables

J-C4			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16-HF	T858-J20	1	291-9856
BU-16-HF	T862-J22	2	291-9856
PU-16-HF	T957-J31	3	291-9856
WH-16-HF	T985-J37	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

J-C5			
CLR-GA	WIRE NAME	POS	TERM/PLUG
GY-16-HF	T858-J19	1	291-9856
BU-16-HF	T862-J21	2	291-9856
YL-16-HF	T958-J32	3	291-9856
GN-16-HF	T986-J38	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

J-C6			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-16-HF	T859-J26	1	291-9856
GN-16-HF	T863-J24	2	291-9856
BR-16-HF	T959-J33	3	291-9856
GY-16-HF	T987-J39	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

J-C7			
CLR-GA	WIRE NAME	POS	TERM/PLUG
WH-16-HF	T859-J25	1	291-9856
GN-16-HF	T863-J23	2	291-9856
BU-16-HF	T960-J34	3	291-9856
PU-16-HF	T988-J40	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

J-C8			
CLR-GA	WIRE NAME	POS	TERM/PLUG
OR-16-HF	T860-J28	1	291-9856
YL-16-HF	T864-J30	2	291-9856
GN-16-HF	T961-J35	3	291-9856
BU-16-HF	T989-J41	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

J-C9			
CLR-GA	WIRE NAME	POS	TERM/PLUG
OR-16-HF	T860-J27	1	291-9856
YL-16-HF	T864-J29	2	291-9856
WH-16-HF	T962-J36	3	291-9856
BR-16-HF	T990-J42	4	291-9856
ACCESSORY TABLE			
QTY	PART NAME	P/N	
1	PLUG AS.	264-2407	
4	SEAL	291-9857	

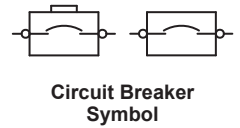
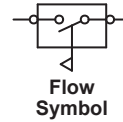
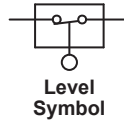
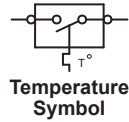
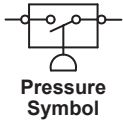
Related Electrical Service Manuals	
Title	Form Number
Troubleshooting	REN9343
Systems Operation / Testing and Adjusting	REN9813

HARNESS and WIRE

Electrical Schematic Symbols



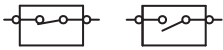
Symbols



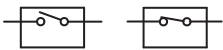
Symbols and Definitions



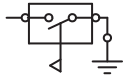
Fuse: A component in an electrical circuit that will open the circuit if too much current flows through it.



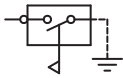
Switch (Normally Open): A switch that will close at a specified point (temp, press, etc.). The circle indicates that the component has screw terminals and a wire can be disconnected from it.



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.



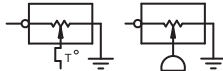
Ground (Wired): This indicates that the component is connected to a grounded wire. The grounded wire is fastened to the machine.



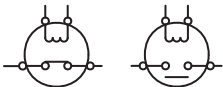
Ground (Case): This indicates that the component does not have a wire connected to ground. It is grounded by being fastened to the machine.



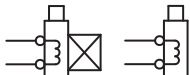
Reed Switch: A switch whose contacts are controlled by a magnet. A magnet closes the contacts of a normally open reed switch; it opens the contacts of a normally closed reed switch.



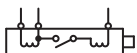
Sender: A component that is used with a temperature or pressure gauge. The sender measures the temperature or pressure. Its resistance changes to give an indication to the gauge of the temperature or pressure.



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.



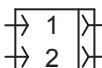
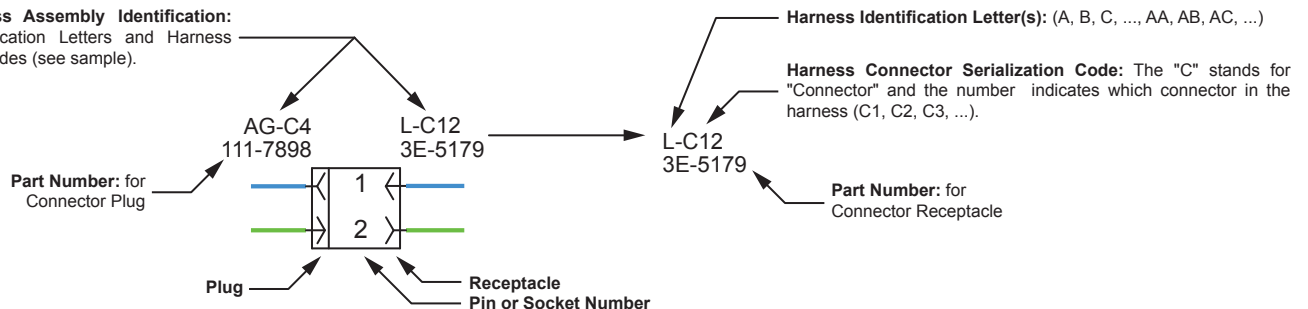
Solenoid: A solenoid is an electrical component that is activated by electricity. It has a coil that makes an electromagnet when current flows through it. The electromagnet can open or close a valve or move a piece of metal that can do work.



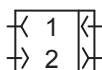
Magnetic Latch Solenoid: A magnetic latch solenoid is an electrical component that is activated by electricity and held latched by a permanent magnet. It has two coils (latch and unlatch) that make electromagnet when current flows through them. It also has an internal switch that places the latch coil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

Harness and Wire Symbols

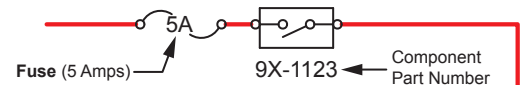
Wire, Cable, or Harness Assembly Identification:
Includes Harness Identification Letters and Harness Connector Serialization Codes (see sample).



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



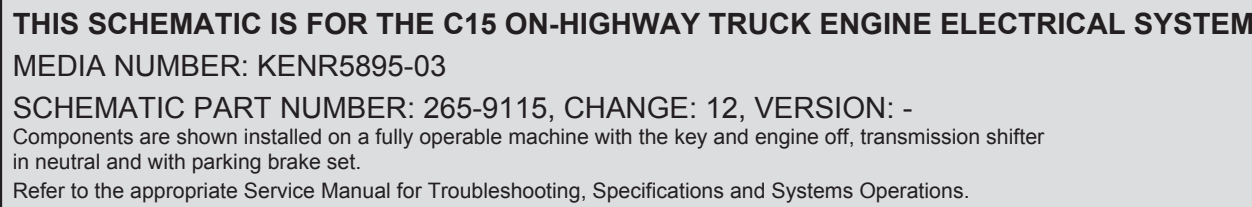
Sure-Seal connector: Typical representation of a Sure-Seal connector. The plug and receptacle contain both pins and sockets.



Harness identification code:
This example indicates wire group 325, wire 135 in harness "AG".

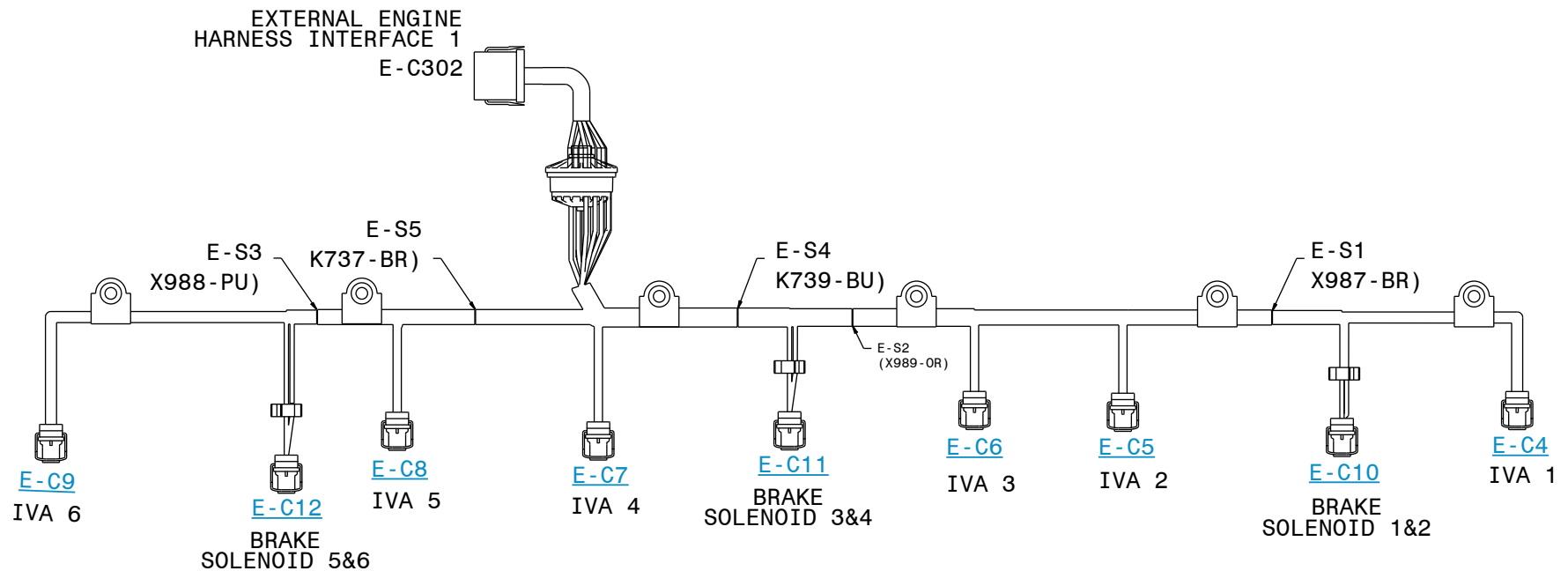
Wire Gauge

Wire Color

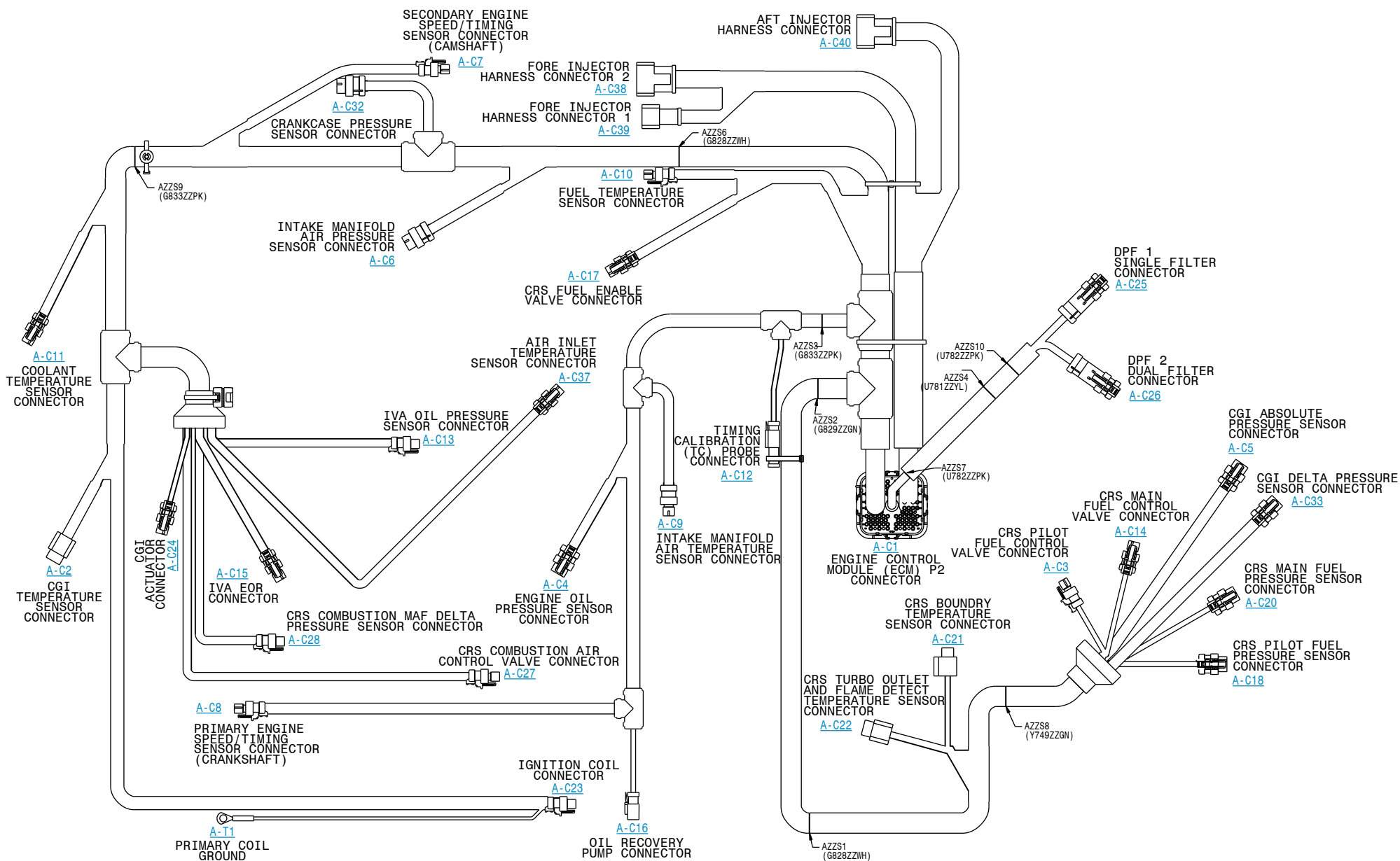


HARNESS 292-0645

CONNECTOR AND SPLICE LOCATIONS

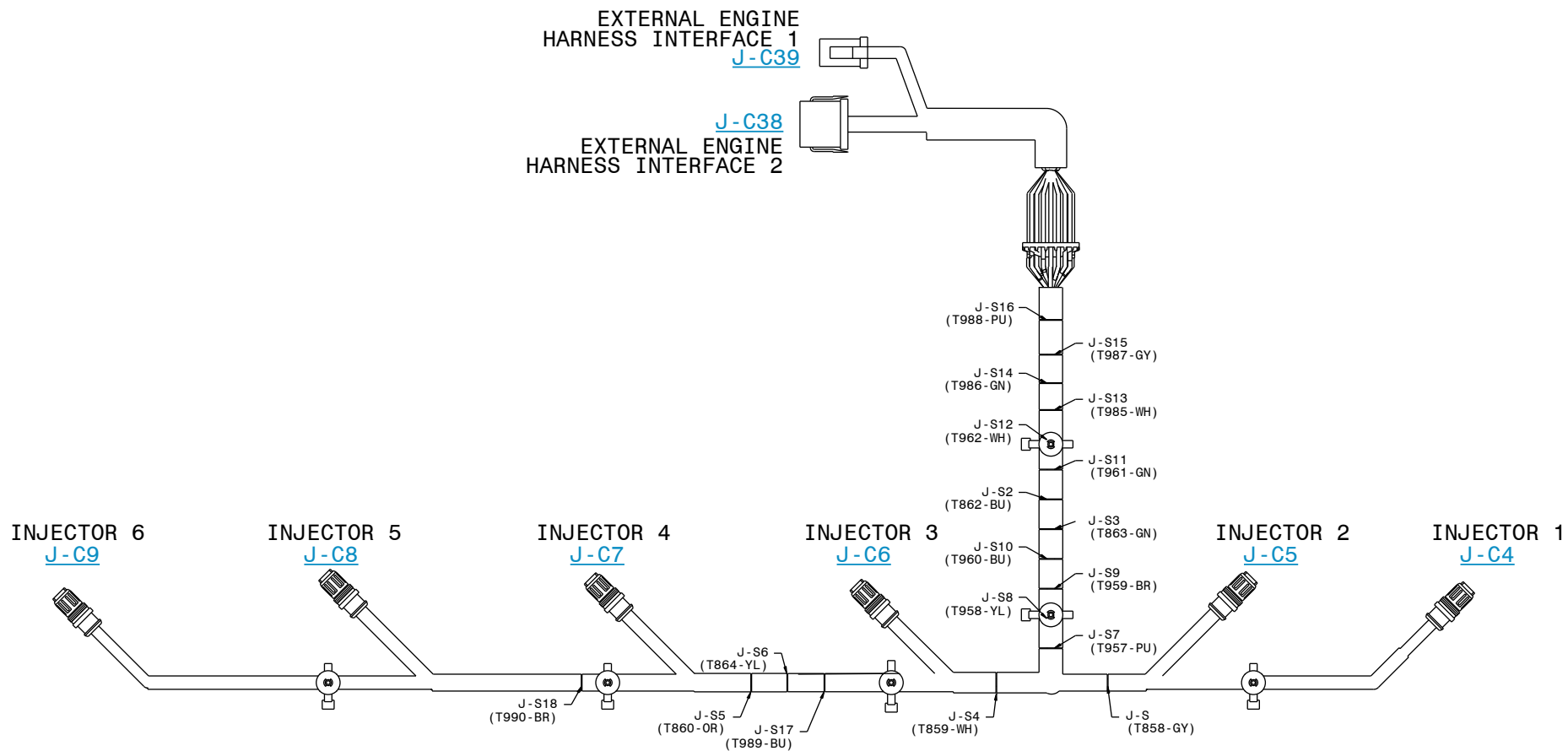


HARNESS 286-8224 AND 290-8615 CONNECTOR AND SPLICE LOCATIONS

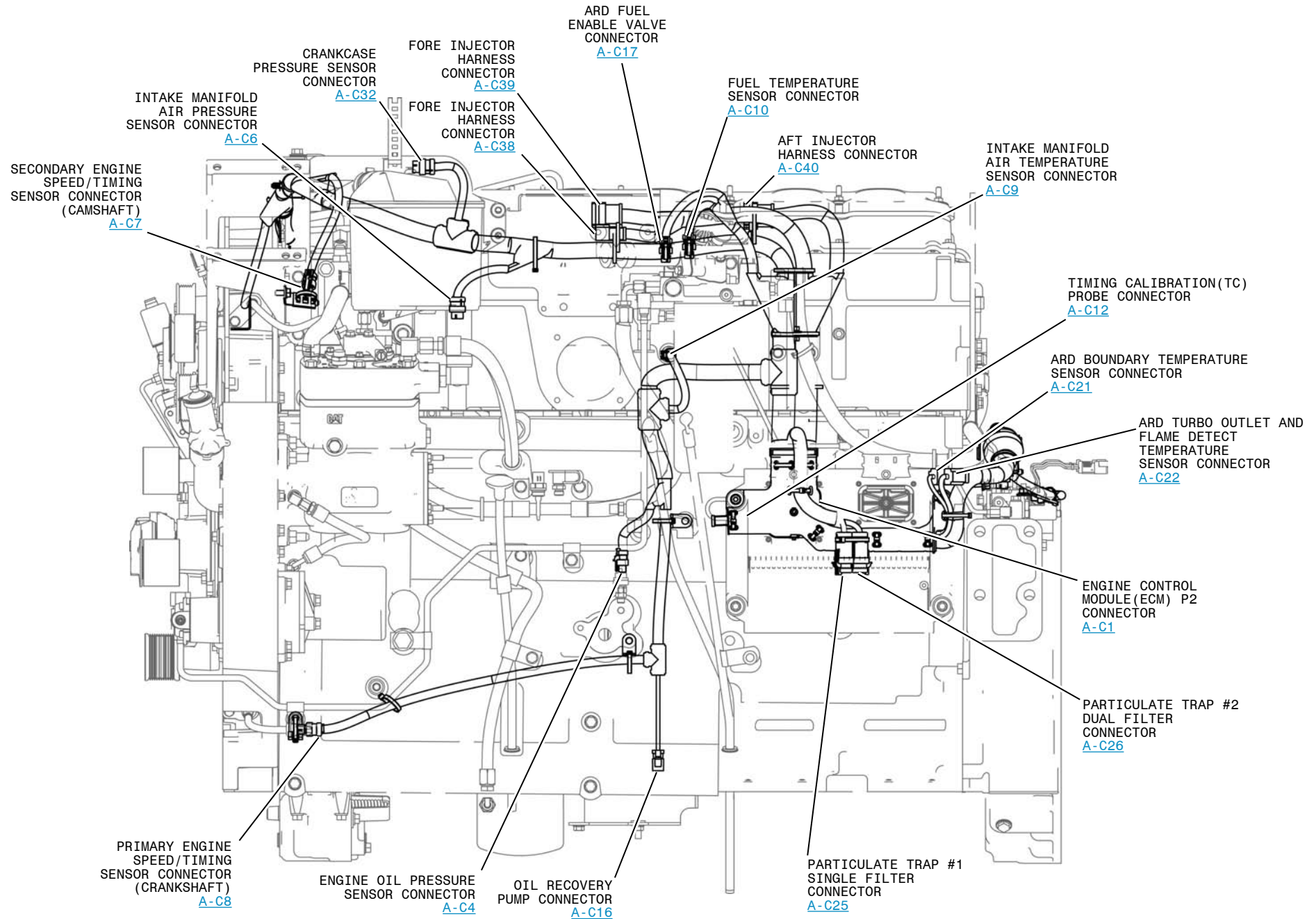


HARNESS 292-0644

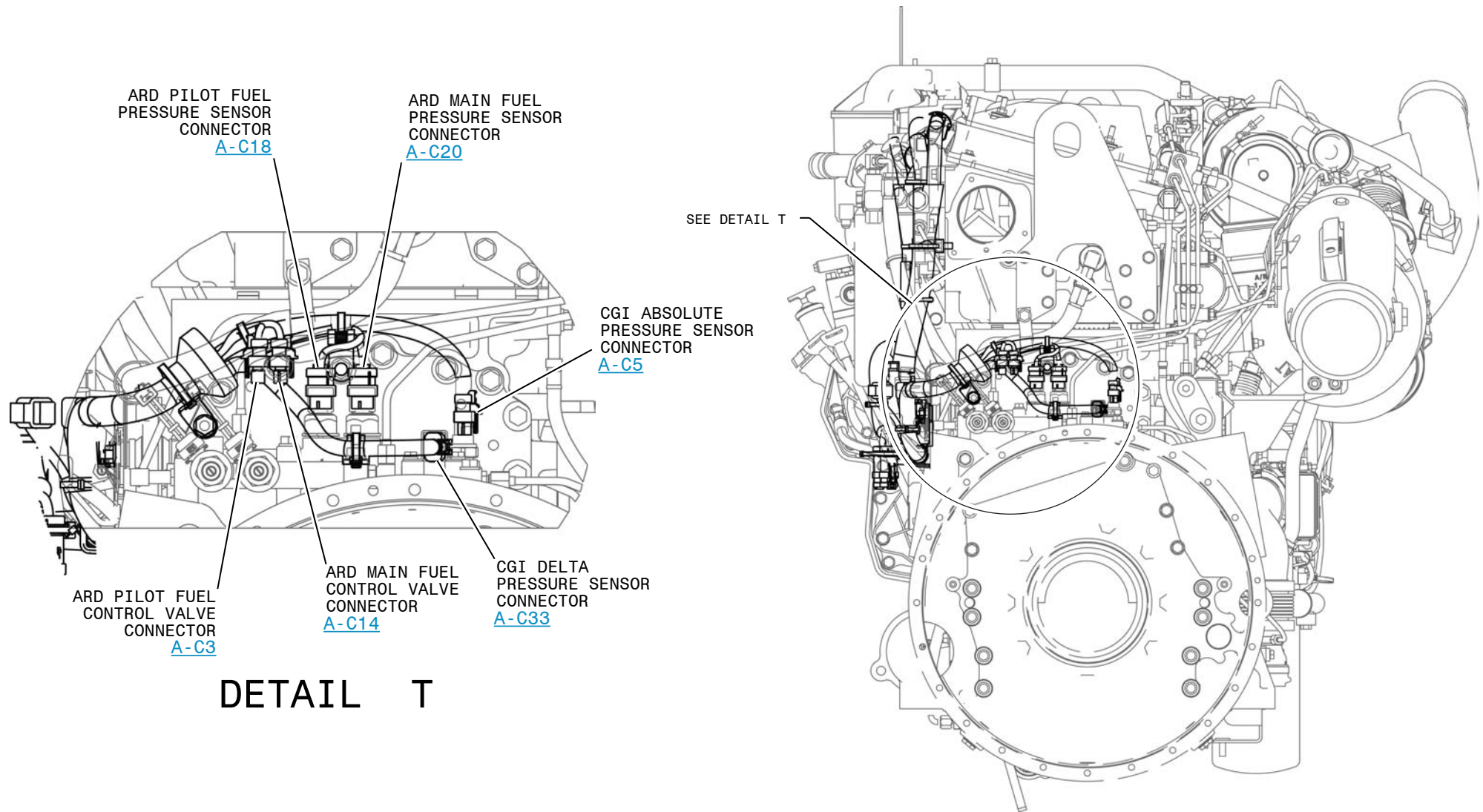
CONNECTOR AND SPLICE LOCATIONS



LEFT SIDE VIEW OF ENGINE



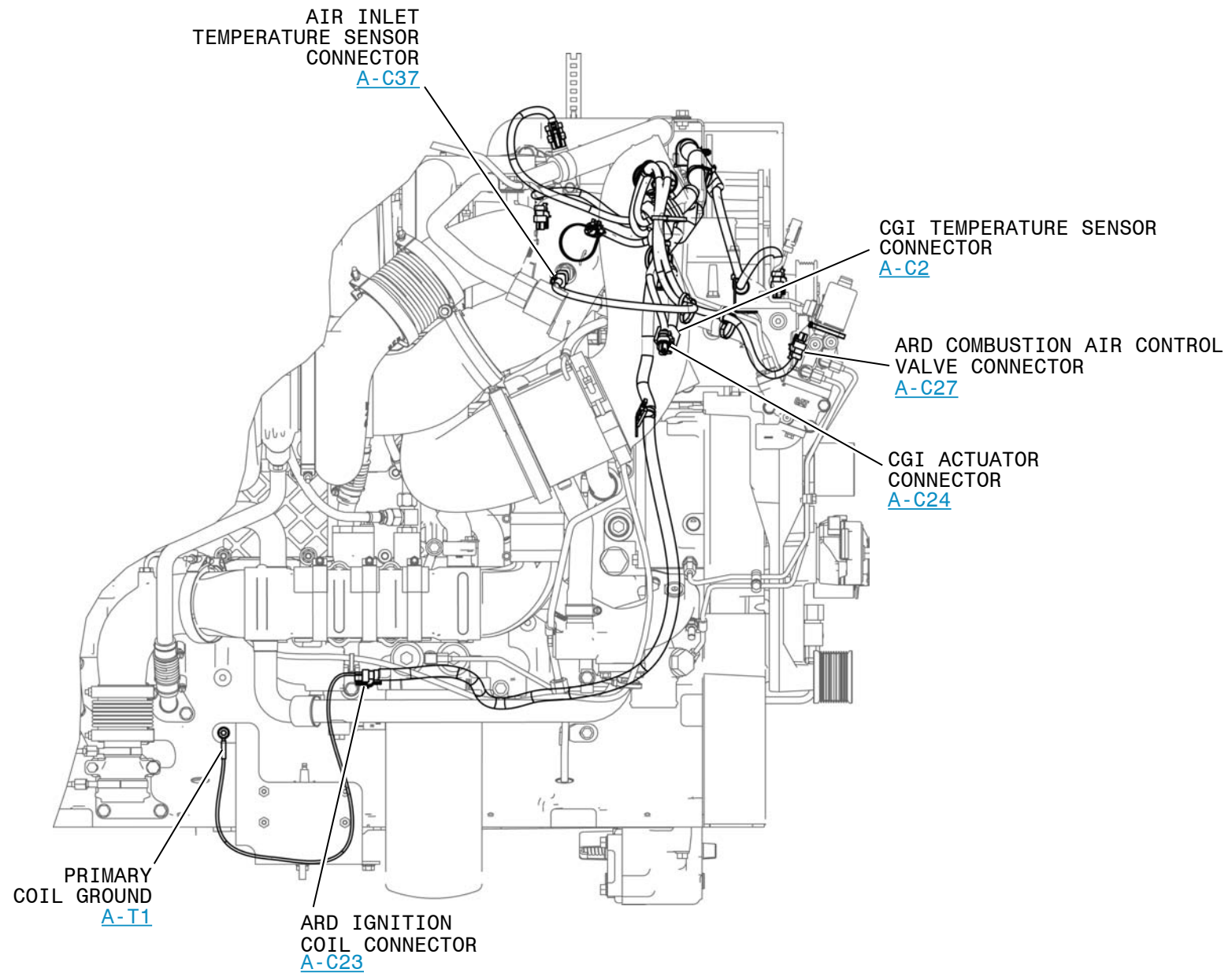
REAR VIEW OF ENGINE - DETAIL T



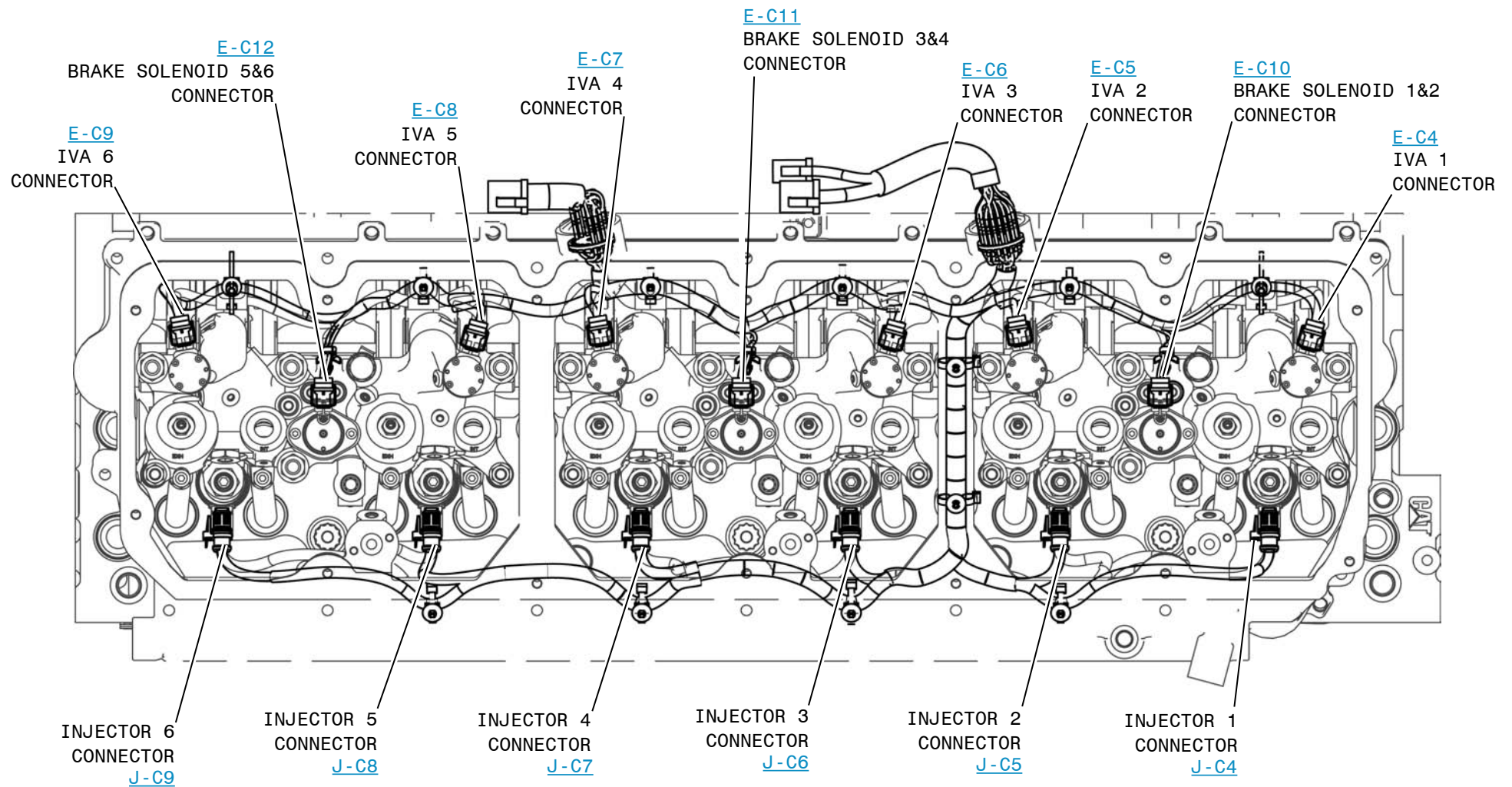
DETAIL T

REAR VIEW OF ENGINE

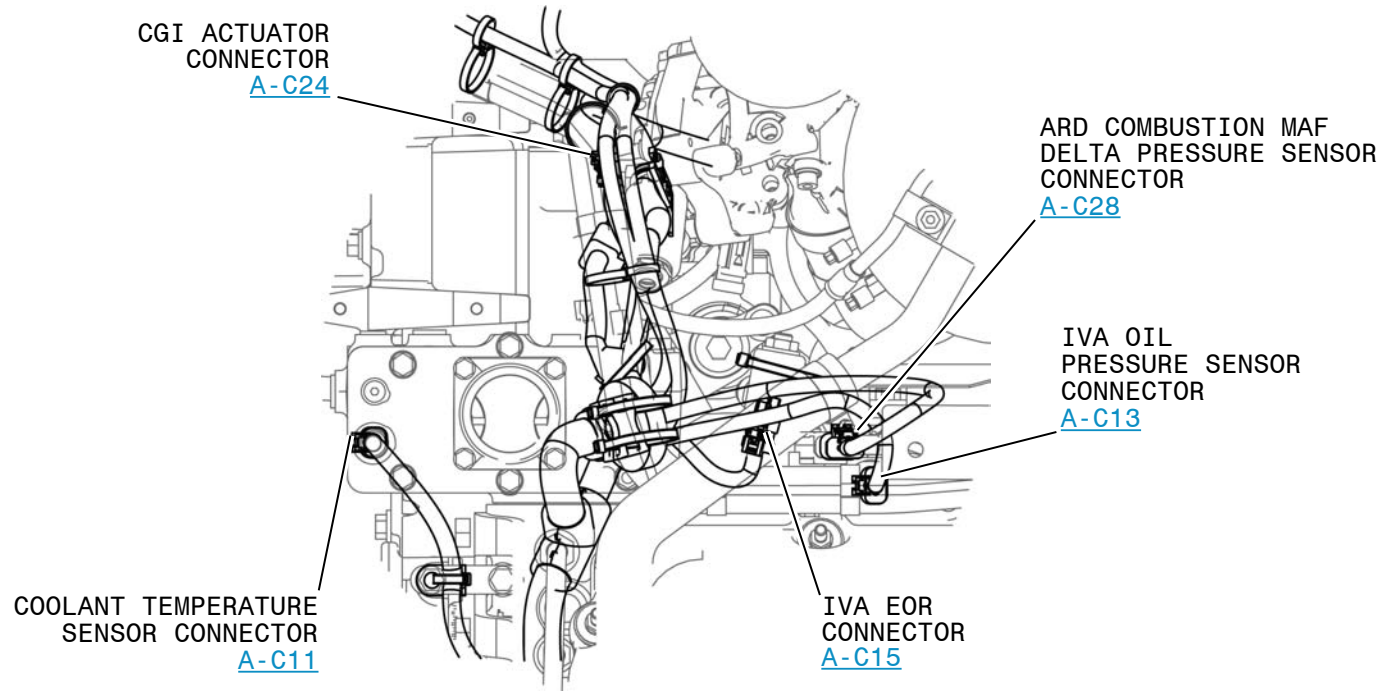
RIGHT SIDE VIEW OF ENGINE



TOP VIEW OF ENGINE



TOP VIEW OF ENGINE - DETAIL C



DETAIL C

