

* VSOUT & A/C Blunt Lead 'Hank-Taped' to C47 take out.
 ** A/C Coil Low Splice (see Splice Diagram)
 *** Inline fuse to be taped so only the fuse cap is above conduit, and cap can be opened. All wires should be completely encased in conduit.

Layout Overview

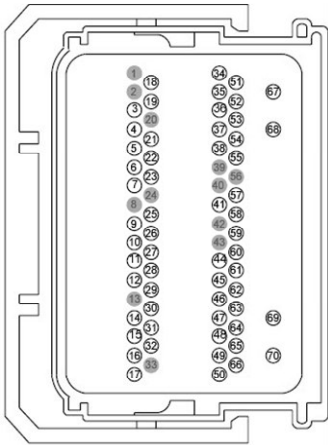
CM-14A006-A5LB
 2011 5.0L/5.4L 4V Controls Pack Harness
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PCM - 70 Way
(Female Terminals)

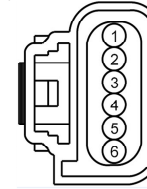


PCM70way CONNECTOR					
PIN	WIRE	GA.	CIRCUIT #	FUNCTION	TO
PCM70-02	LB/RD	20		MAF RTN	MAF-4
PCM70-05	PK	20		VSOUT	Blunt Lead*
PCM70-07	LG/YE	20		SMC	PDB-06
PCM70-10	TN/YE	20	3000	CTO	C47-07
PCM70-12	GY/WH	20	321B	ACCR	PDB-08
PCM70-13	VT	20	181C	BOO	C47-11
PCM70-14	PK/GY	20		GENLI	ALT-1
PCM70-16	WH/PK	20		SMR / 12V START	PDB-11
PCM70-18	TN/RD	20		Fan Relay Control	BEC-A12
PCM70-19	YE/OG	20	225	Fuel Pump Com. (FPC)	C47-15
PCM70-21	DB	20	608	5.4L Injector PWRM	S608
PCM70-28	TN/YE	20		APP 1	APPS-02
PCM70-29	LB/WH	20		APP 2	APPS-05
PCM70-32	BN/WH	20	518	Fuel Pump Mon. (FPM)	C47-16
PCM70-36	BN/VT	18		IAT#2	AUX-13
PCM70-38	BN/PK	20		PCM Relay Control	PDB-10
PCM70-40	TN/LB	20		MAF (Freq)	MAF-5
PCM70-42	RD/LG	20	20TD	ISP-R	C47-03
PCM70-44	GY/RD	20		APPRTN (1)	APPS-03
PCM70-45	BN/WH	20		APPVREF (1)	APPS-01
PCM70-47	GY	20		IAT	MAF-2
PCM70-48	DB/YE	20	3100	SCCS RTN	C47-09
PCM70-50	BK	18		Case Ground	S570
PCM70-51	DB/YE	20		SCICP PCM signal	PDB-14
PCM70-53	YE/LB	20		GENRC	ALT-2
PCM70-57	DB/WH	20		ACCS	PDB-7&BL
PCM70-58	PK/LG	20	152G	HS CAN (-)	S-800
PCM70-59	WH/LG	20	151G	HS CAN (+)	S-700
PCM70-60	GY	20		APPRTN (2)	APPS-04
PCM70-61	BN	20		APPVREF (2)	APPS-06
PCM70-62	YE	20		KAPWR / 12VHAAT	S-70
PCM70-64	WH	20	3110	SCCS	C47-10
PCM70-67	GY/OG	20		VPWR	PDB-9
PCM70-68	GY/OG	20		VPWR	PDB-9
PCM70-69	BK/WH	20		PWR Ground	S-570
PCM70-70	BK/WH	20		PWR Ground	S-570

*VSOUT Blunt lead "Hank-taped" at C47 take-out

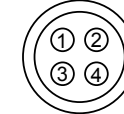
All open cavities to use sealing method proposed by supplier and approved by Ford Racing (options include custom Tyco gasket, weedwacker line in matt seal, RTV)

MAF
(Female Terminals)



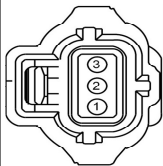
MAF CONNECTOR				
PIN	COLOR	GA.	FUNCTION	TO
MAF-2	GY	20	IAT	PCM70-47
MAF-3	LG	20	VPWR	S-900
MAF-4	LB/RD	20	MAF RTN	PCM70-02
MAF-5	TN/LB	20	MAF (Freq)	PCM70-40

In-Line to EPAS (or AIM for Race Car)
(Female Terminals)



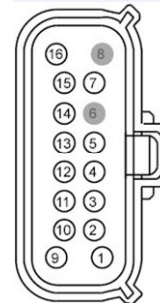
AIM CONNECTOR				
PIN	COLOR	GA.	FUNCTION	TO
AIM-1	WH/LG	20	HS CAN (+)	S-700
AIM-2	BK	20	GND	S-570
AIM-3	LG/RD	20	KAPWR	S-70
AIM-4	PK/LG	20	HS CAN (-)	S-800

ALT
(Female Terminals)



ALT CONNECTOR				
PIN	COLOR	GA.	FUNCTION	TO
ALT-1	PK/GY	20	GENLI	PCM70-14
ALT-2	YE/LB	20	GENRC	PCM70-53
ALT-3	YE	20	VBAT Monitor	BEC-C9

AUX/ILC to 14C508 Engine Harness
(Female Terminals)

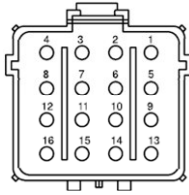


AUX/ILC CONNECTOR					
PIN	COLOR	GA.	CIRCUIT #	FUNCTION	TO
AUX-1	VT	14		VPWR3 - Coils	S-350
AUX-2	VT	18		VPWR3 (Non-MIL Loads)	S-350
AUX-9	DB	14		VPWRF - Fuel Injectors	S-608
AUX-12	BK/WH	18		PWR Ground	S-570
AUX-13	BN/VT	18		IAT #2	PCM70-36
AUX-16	LG	16		VPWR2, Engine Sensors	S-900

All open cavities to use sealing method proposed by supplier and approved by Ford Racing (options include gasket, weedwacker line in matt seal, RTV)

C47

(Female Terminals)
 Inline to Blunt Leads Pigtail or
 Vehicle Body Harness



C47 CONNECTOR

PIN	COLOR	GA.	CIRCUIT #	FUNCTION	TO
C47-01	LG/BK	20	4033	Fuel Pump Relay (Hi)	PDB-13
C47-02	RD/LB	20	202	SMR 12V START	PDB-11
C47-03	RD/LG	20	201D	ISP-R	PCM70-42
C47-05	PK/LG	20	152C	HS CAN (-)	S-800
C47-06	WH/LG	20	151C	HS CAN (+)	S-700
C47-07	TN/YE	20	3000	CTO	PCM70-10
C47-08	LB/YE	20	1000	CPP-BT (T-19)	PCM50-19
C47-09	DG/BN	20	3100	SCCS RTN	PCM70-48
C47-10	WH	20	3110	SCCS	PCM70-64
C47-11	VT	20	181C	BOO	PCM70-13
C47-12	LG/VT	20	1010	CPP-TT (T-21)	PCM50-21
C47-13	DG	14	938A	Fuel Pump Feed 1 of 2	PDB-12
C47-14	DG	14	938B	Fuel Pump Feed 2 of 2	PDB-15
C47-15	YE/OG	20	225	Fuel Pump Com. (FPC)	PCM70-19
C47-16	BN/WH	20	518	Fuel Pump Mon. (FPM)	PCM70-32

**TWISTED
PAIR**

**** Blunt Leads are 'Hank-Taped' into this Take-out

Data Link Connector (DLC)

(Female Terminals)



DLC CONNECTOR

PIN	COLOR	GA.	FUNCTION	TO
DLC-04	BK	20	PWR Ground	S-570
DLC-05	BK/WH	20	PWR Ground	S-570
DLC-06	WH/LG	20	HS CAN (+)	S-700
DLC-14	PK/LG	20	HS CAN (-)	S-800
DLC-16	LG/RD	20	KAPWR	S-70

**TWISTED
PAIR**

Supercharger Inter-cooler Pump (SCICP) (5.4L Only) C1217

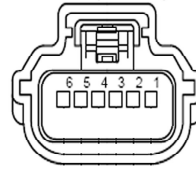
SCICP CONNECTOR

PIN	COLOR	GA.	FUNCTION	TO
SCICP-1	WH/RD	14	SCICP 12V Feed	PDB-5
SCICP-2	BK	20	GND	S-570



APPS

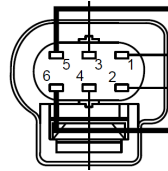
(Female Terminals)



APPS CONNECTOR

PIN	COLOR	GA.	FUNCTION	TO
APPS-01	BN/WH	20	APPVREF (1)	PCM70-45
APPS-02	TN/YE	20	APP 1	PCM70-28
APPS-03	GY/RD	20	APPRTN (1)	PCM70-44
APPS-04	GY	20	APPRTN (2)	PCM70-60
APPS-05	LB/WH	20	APP 2	PCM70-29
APPS-06	BN	20	APPVREF (2)	PCM70-61

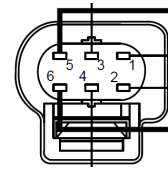
UEGO #1 Right Side



UEGO #1 CONNECTOR

PIN	COLOR	GA.	FUNCTION	To
UEGO1-1	TN/YE	20	UO2SIA Bank 1	PCM50-29
UEGO1-2	GY/DB	20	UREF Bank 1	PCM50-15
UEGO1-3	LG/TN	20	HTR Bank 1	PCM50-24
UEGO1-4	VT/GY	20	VREF2	S900
UEGO1-5	LG	20	UO2SIP Bank 1	PCM50-17
UEGO1-6	TN/VT	20	UO2SN Bank 1	PCM50-4

UEGO #2 Left Side



UEGO #2 CONNECTOR

PIN	COLOR	GA.	FUNCTION	To
UEGO2-1	WH	20	UO2SIA Bank 2	PCM50-28
UEGO2-2	BN	20	UREF Bank 2	PCM50-40
UEGO2-3	GY/VT	20	HTR Bank 2	PCM50-35
UEGO2-4	VT/GY	20	VREF2	S900
UEGO2-5	TN/LB	20	UO2SIP Bank 2	PCM50-16
UEGO2-6	WH/LG	20	UO2SN Bank 2	PCM50-39

****Blunt Leads

BL1 PK (20) to PCM-05, VSOUT
 BL2 VT (20) to PDB-07, ACCR

Each Blunt Lead wire extends 160mm past C47 and shall be 'Hank-Taped' to harness take-out.

CM-14A006-A5LB

2011 5.0L/5.4L 4V Controls Pack Harness

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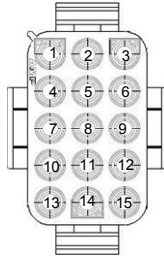
Connectors

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PDB 15pin

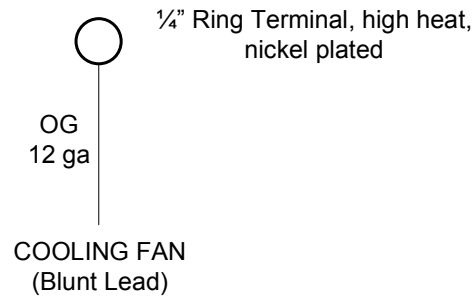
(Female Terminals)



PDB CONNECTOR					
PIN	COLOR	GA.	CIRCUIT #	FUNCTION	TO
PDB-01					
PDB-02					
PDB-03	BK/WH	18		PWR GND	S-570
PDB-04	LG/RD	20		KAPWR	S-70
PDB-05	WH/RD	14		SCICP 12V Feed	SCICP-1
PDB-06	LG/YE	20		SMC	PCM70-07
PDB-07	DB/WH	20		ACCS	PCM70-57
"	VT	20		ACCS	Blunt Lead**
PDB-08	GY/WH	20	321A	ACCR	PCM70-12
PDB-09	GY/OG	20		VPWR	PCM70-67
"	GY/OG	20		VPWR	PCM70-68
PDB-10	BN/PK	20		PCM Relay Control	PCM70-38
PDB-11	WH/PK	20		SMR	PCM70-16
"	RD/LB	20	202	SMR	C47-2
PDB-12	DG	14	938A	Fuel Pump Feed 1 of 2	C47-13
PDB-13	LG/BK	20	4033	Fuel Pump Relay (Hi)	C47-01
PDB-14	DB/YE	20		SCICP PCM signal	PCM70-50
PDB-15	DG	14	938B	Fuel Pump Feed 2 of 2	C47-14

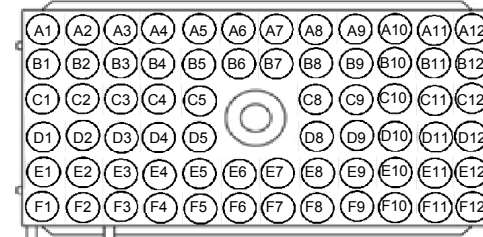
**ACCS Blunt lead "Hank-taped" at C47 take-out

Fan Ring Terminal Install on 1/4" Stud in PDB



PDB BEC

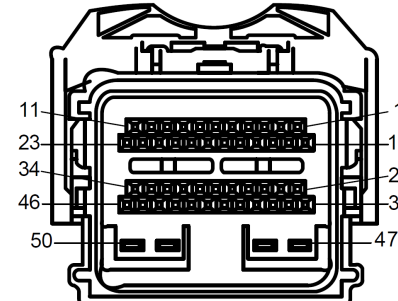
(Female Terminals)



BEC CONNECTOR					
PIN	COLOR	GA.	CIRCUIT #	FUNCTION	TO
BEC-A6	LG	16		VPWR2, Engine Sensors	S-900
BEC-A12	TN/RD	20		Fan Relay Control	PCM70-18
BEC-C9	YE	20		VBAT Monitor	ALT-3
BEC-D5	VT	14		VPWR3, Coils	S-350
BEC-E5	DB	14		VPWRF - Fuel Injectors	AUX-9
"	DB	20		Injector PWRM (5.4L)	PCM70-21
BEC-F8	BK/WH	18		PWR Ground	S-570
BEC-F10	TN/LG	12		Starter Solenoid, 12V Feed	BL-SS

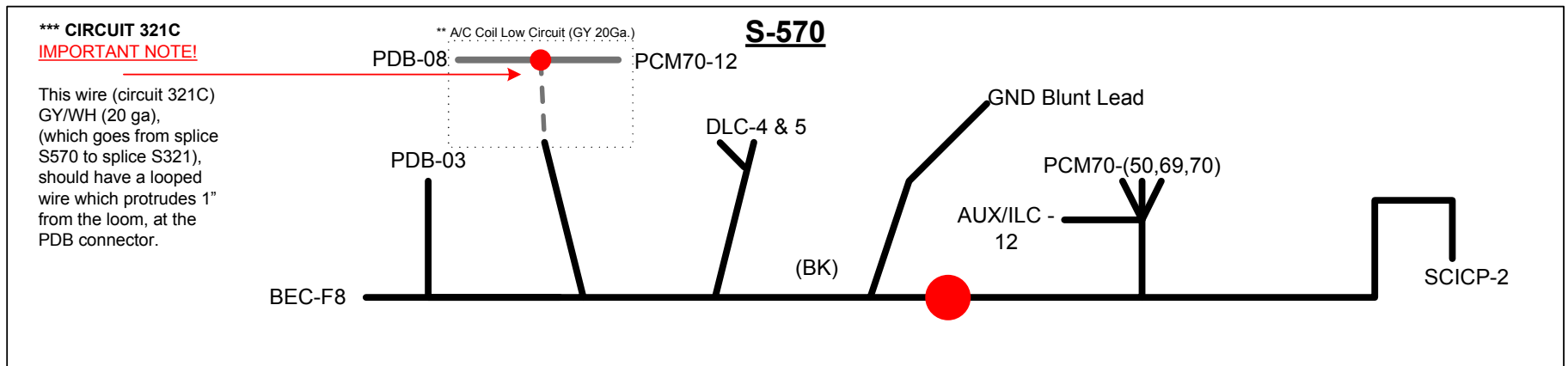
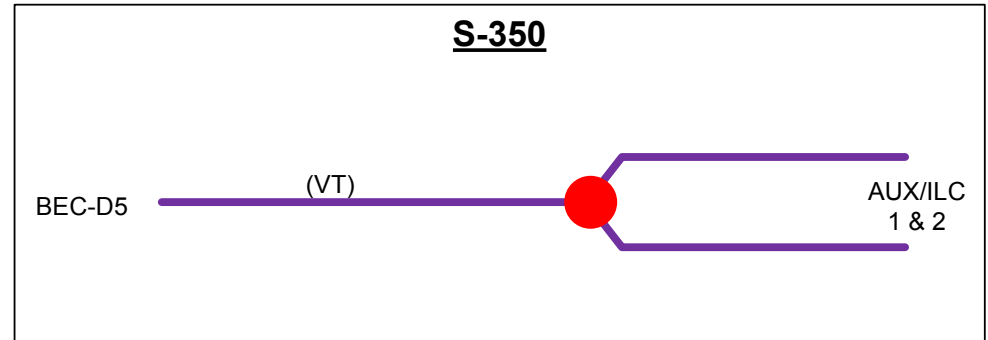
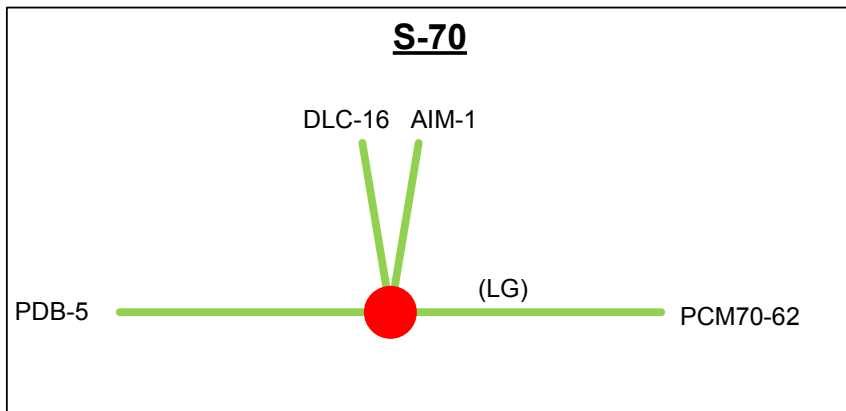
PCM50way

50 Way "Key C"



PCM50 Way CONNECTOR					
PIN	COLOR	GA.	FUNCTION	TO	
PCM50-4	TN/VT	20	UO2SN Bank 1	UEGO #1-6	
PCM50-15	GY/DB	20	UREF Bank 1	UEGO #1-2	
PCM50-16	TN/DB	20	UO2SIP Bank 2	UEGO #2-5	
PCM50-17	LG	20	UO2SIP Bank 1	UEGO #1-5	
PCM50-19	LB/YE	20	Bottom Throttle	C47-8	
PCM50-21	LG/VT	20	Top Throttle	C47-12	
PCM50-24	LB/VT	20	HTR Bank 1	UEGO #1-3	
PCM50-28	WH	20	UO2SIA Bank 2	UEGO #2-1	
PCM50-29	TN/YE	20	UO2SIA Bank 1	UEGO #1-1	
PCM50-35	GY/VT	20	HTR Bank 2	UEGO #2-3	
PCM50-39	WH/LG	20	UO2SN Bank 2	UEGO #2-6	
PCM50-40	BN	20	UREF Bank 2	UEGO #2-2	

All open cavities to use sealing method proposed by supplier and approved by Ford Racing (options include custom Tyco gasket, weedwacker line in matt seal, RTV)



*****A/C Coil Low to GND**
This circuit is intended to override PCM control of the A/C coil low, which is normally provided via CAN from the SJB. This wire may be cut once the software has been updated in the PCM. However, at that point, the PCM will also need to 'know' when the A/C request has been received.

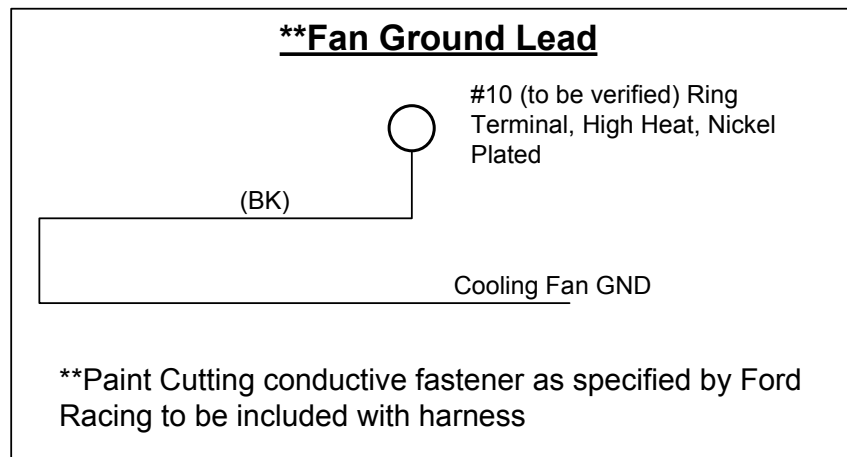
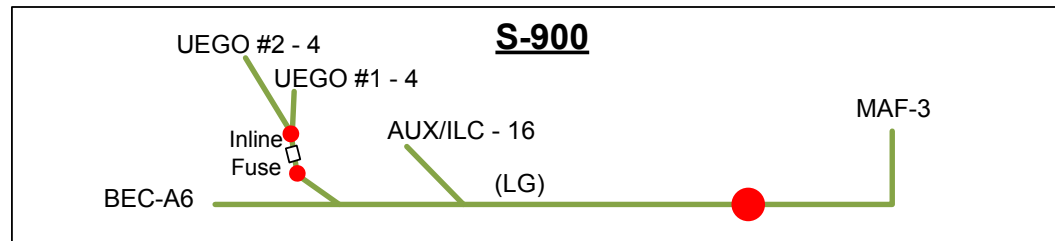
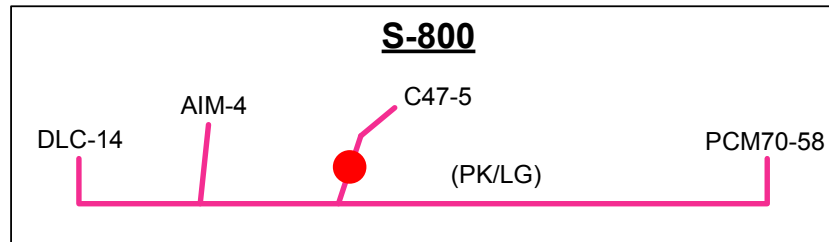
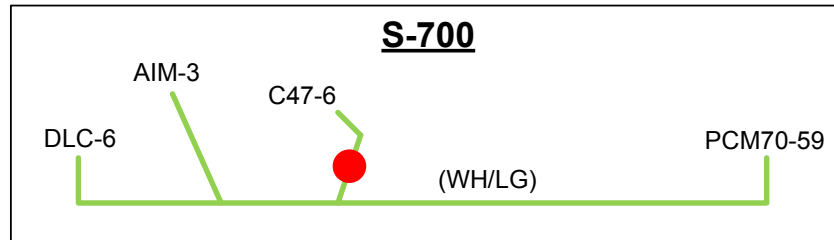
Remove DB/WH from Pin 4 @ ILC, and move to PDB for Double Crimp with Pin 8 @ PDB. PCM will then receive request simultaneously when A/C Coil High receives 12V. This will bypass the A/C Pressure switch. A/C Schematic is on last page.

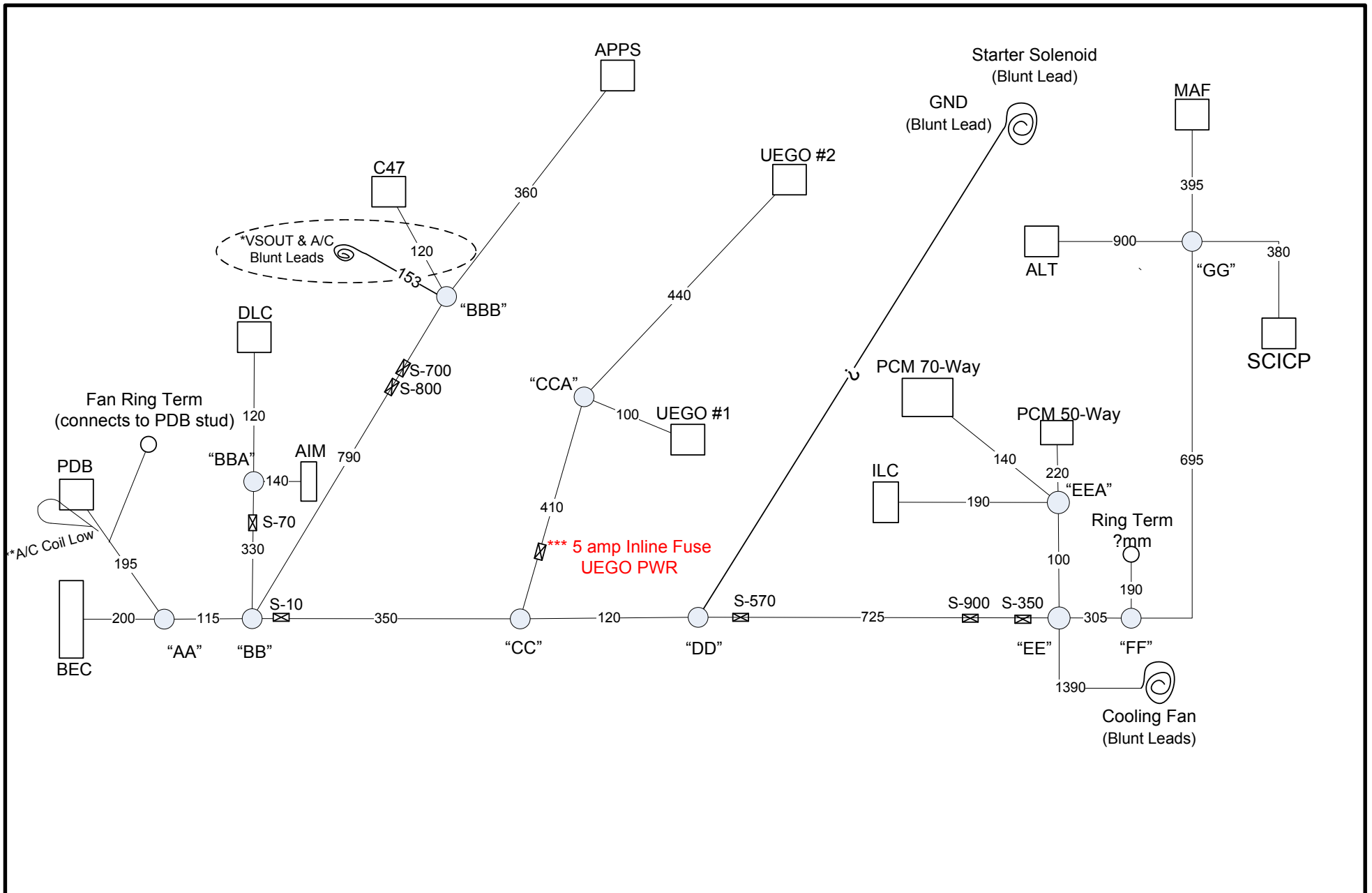
CM-14A006-A5LB
2011 5.0L/5.4L 4V Controls Pack Harness
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REV A

Splices
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* VSOUT & A/C Blunt Lead 'Hank-Taped' to C47 take out.
 ** A/C Coil Low Splice (see Splice Diagram)
 *** Inline fuse to be taped so only the fuse cap is above conduit, and cap can be opened. All wires should be completely encased in conduit.

Layout w/ Dimensions

8/23/2010: CM-14A006-A5LA Initial Release

1/5/2011: CM-14A006-A5LB:

- 1) Bumped part number suffix from -A5LA to -A5LB
- 2) Change population of PDB 15 pin connector: remove pins 1&2 from 15 way, remove splice 10, replace with terminal on 12 ga wire to ¼" terminal. Terminal attaches to stud on CM-14A068-B PDB;
- 3) Add reqmt to seal all open cavities in PCM and in-line connector to engine harness
- 4) Add reqmt to include chassis ground fasteners for chassis grounds
- 5) corrected documentation for EPAS/AIM connector - switch pins 1&3, no change to actual harness