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WHILE DRAWING MAY NOT REFLECT CURRENT ENGINEERING INTENT, SUPPLIER WILL BUILD ALL PARTS TO ALL NOTED ENGINEERING DIRECTION. DRAWING WILL BE UPDATED AS REQUIRED.


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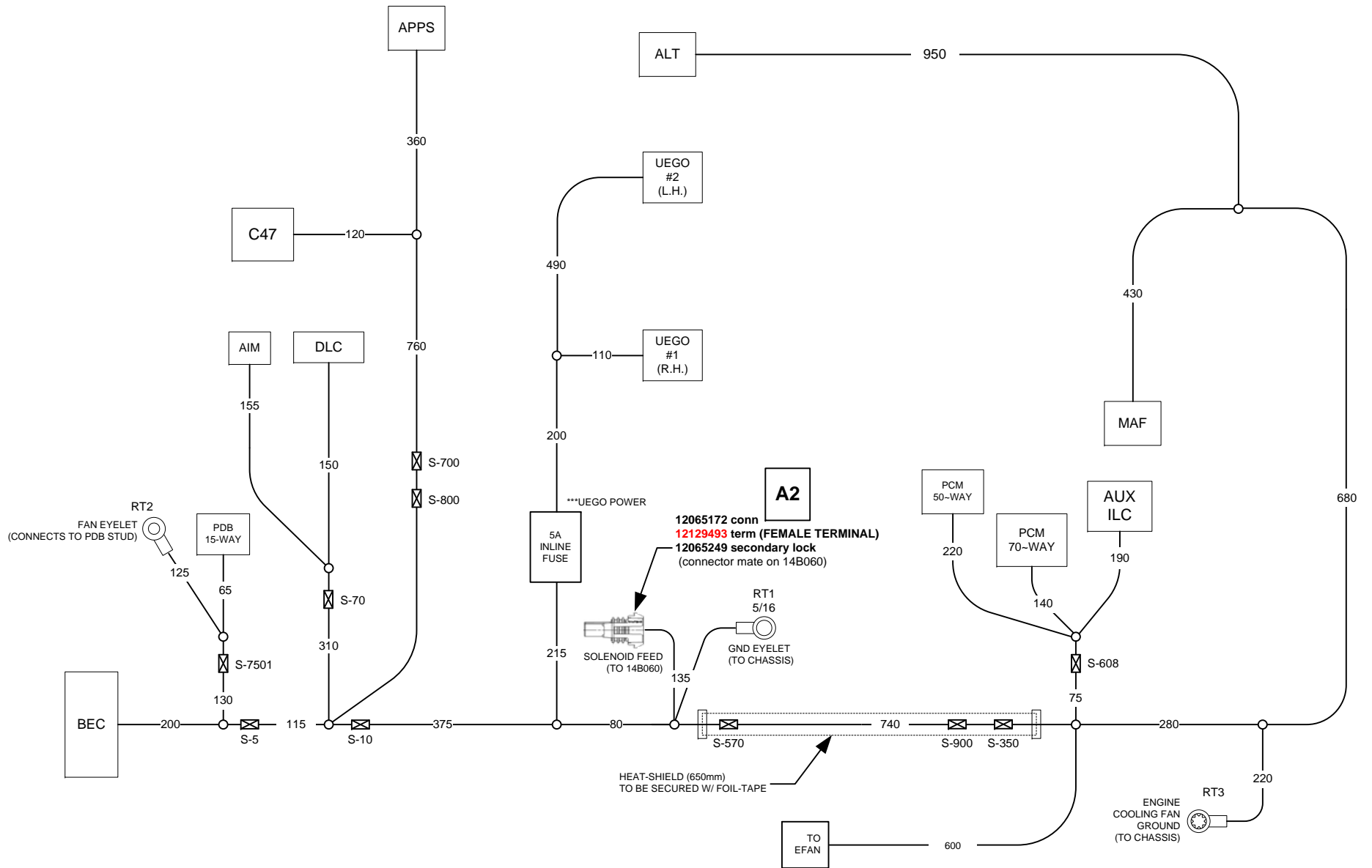
ALL SPLICES TO BE COVERED WITH DUAL-WALL, ADHESIVE-LINED, HEAT-SHRINK TUBING.

BASE WIRE COLOR AND STRIPE SHALL BE APPLIED AS SHOWN ON DRAWING. SUPPLIER RESERVES THE RIGHT TO SUBSTITUTE OR ELIMINATE WIRE STRIPE WHILE MAINTAINING WIRE BASE COLOR.

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NO.					<b>M-14A006-M302A</b>
<b>A</b>	M-14A006-M302A / Rev A INITIAL RELEASE				
	2010.08.23	S. ALTHERR	J. DUNNE		YES
<b>A1</b>	M-14A006-M302A / Rev A1 UPDATE CONNECTOR BLOCKS, SPLICE BLOCKS AND LAYOUT				
	2013.08.02	S. ALTHERR	J. DUNNE		YES
<b>A2</b>	M-14A006-M302A / Rev A2 STARTER SOLENOID CONNECTOR WAS FEMALE SPADE				
	2014.01.07	S. ALTHERR	J. DUNNE		YES

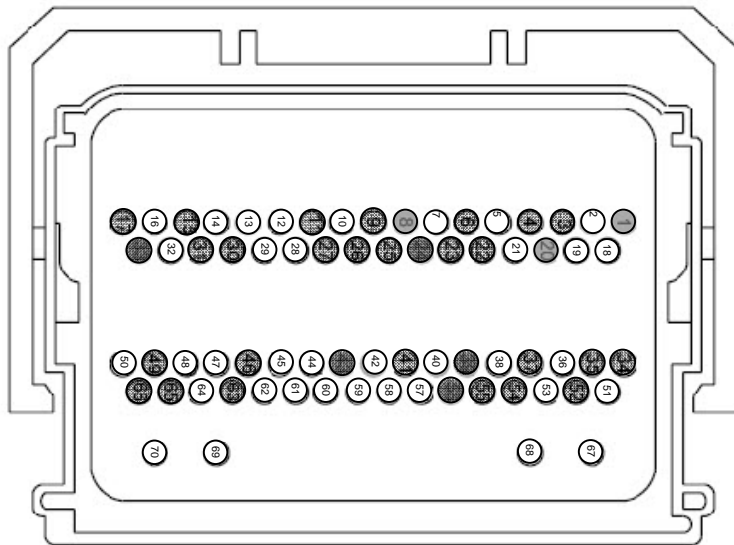
MODEL DESCRIPTION					<b>2011 5.0L 4V</b>
PART MUST COMPLY WITH MATERIAL SPECIFICATION WSS-M99P9999-A1 TO HELP SAFEGAURD HEALTH, SAFETY AND THE ENVIRONMENT.					
DRAFTED IN ACCORDANCE WITH FAO ENGINEERING DRAFTING STANDARD CURRENT AT INITIAL RELEASE			ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		
CAD TYPE MS - VISIO	CAD LOCATION DRP	REFERENCE DRAWING CM-14A006-A5LB	E COPY IS MASTER		
DRAWING					<b>M-14A006-M302A</b>
DESIGNER S. ALTHERR	APPROVAL S. BANDY	TITLE <b>5.0L 4V WIRING ASSEMBLY - CONTROLS PACK</b>			
CHECKED BY J. DUNNE	SAFETY N/A				
SCALE N/A	DATE 2010.08.23				
		DIVISION N/A			
		PLANT EWDMA			



\*\*\* 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.

### PCM70 – [C175B]

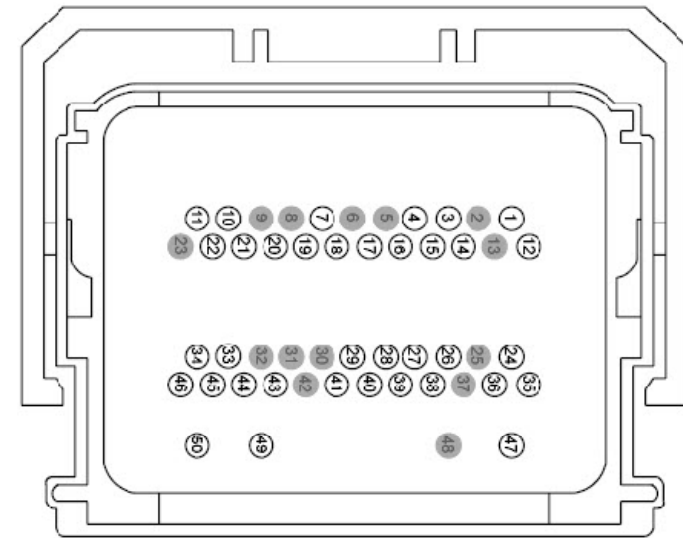
(Female Terminals)



Cavity	Wire	Circuit Function	Circuit	To Connector-Pin
2	LB/RD	20 MAF/IAT Signal Return	7002	MAF-04
7	LG/YE	20 Starter Motor Control (SMC)	7007	PDB-06
10	TN/YE	20 Clean Tach Output (CTO)	3000	C47-07
13	VT	20 Brake On/Off (BOO)	181C	C47-11
14	PK/GY	20 Generator Load Input (GENLI)	4315	ALT-1
16	RD/LB	20 Starter Motor Request (SMR)	4335	PDB-11
18	TN/RD	20 Fan Relay Control (FRC)	5301	BEC-A12
19	YE/OR	20 Fuel Pump Command (FPC)	225	C47-15
21	DB	20 Injector Power Monitor (PWRM)	608B	S-608
28	TN/YE	20 APP (1)	5701	APPS-02
29	LB/WH	20 APP (2)	5702	APPS-05
32	BN/WH	20 Fuel Pump Monitor (FPM)	518	C47-16
36	BN/VT	18 Intake Air Temp #2 (IAT2)	26A	AUX-13
38	BN/PK	20 PCM Relay Control	5302	PDB-10
40	TN/LB	20 MAF Signal (Freq)	5807	MAF-5
42	RD/LG	20 12V Run/Start (ISP-R)	201D	C47-03
44	GY/RD	20 APPRTN (1)	5136	APPS-03
45	BN/WH	20 APPVREF (1)	5137	APPS-01
47	GY	20 Intake Air Temp #1 (IAT-1)	740	MAF-2
48	DB/YE	20 SCCS RTN	3100	C47-09
50	BK	18 Case Ground	570D	S-570
51	DB/YE	20 SCICP PCM Signal	7051A	PDB-14
53	YE/LB	20 Generator Reg Ctrl (GENRC)	5423	ALT-2
58	PK/LG	20 HS CAN ( - )	800A	S-800
59	WH/LG	20 HS CAN ( + )	700A	S-700
60	GY	20 APPRTN (2)	5138	APPS-04
61	BN	20 APPVREF (2)	5139	APPS-06
62	YE	20 KAPWR / 12V HAAT	37B	S-70
63	VT	20 FEPS	7063	DLC-13
64	WH	20 SCCS	3110	C47-10
67	GY/OR	20 VPWR	4447	PDB-9
68	GY/OR	20 VPWR	4448	PDB-9
69	BK	16 PWR GND	570E	S-570
70	BK	16 PWR GND	570F	S-570

### PCM50 – [C175T]

(Female Terminals)



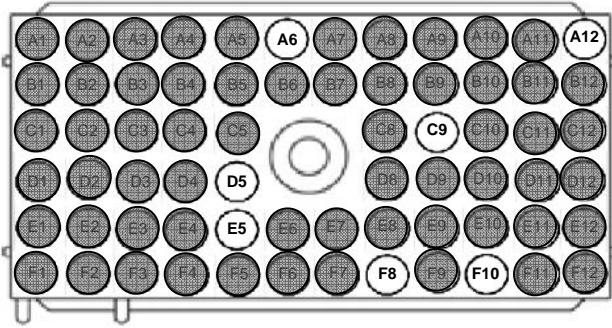
Cavity	Wire	Circuit Function	Circuit	To Connector-Pin
4	BN/VT	20 UEGO Bank 1	5004	UEGO1-6 TP 04+15
15	GY/WH	20 UEGO1 VREF	5015	UEGO1-2 TP 04+15
16	BN/LB	20 UO2SIP Bank 2	5016	UEGO2-5 TP 16+28
17	LG	20 UO2SIP Bank 1	5017	UEGO1-5 TP 17+29
19	LB/YE	20 CPP-BT	1000	C47-08
21	LG/VT	20 CPP-TT	1010	C47-12
24	RD/WH	20 UEGO1 Heater	5024	UEGO1-3
28	WH	20 UO2SIA Bank 2	5028	UEGO2-1 TP 16+28
29	BN/YE	20 UO2SIA Bank 1	5029	UEGO1-1 TP 17+29
35	RD/BK	20 UEGO2 Heater	5035	UEGO2-3
39	DG/WH	20 UEGO Bank 2	5039	UEGO2-6 TP 39+40
40	VT	20 UEGO2 VREF	5040	UEGO2-2 TP 39+40

Note: Twisted Pairs are highlighted in YELLOW

Note: Double-Crimps are highlighted in BLUE

## BEC

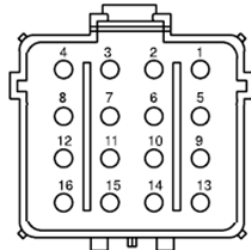
(Female Terminals)



CAVITY	WIRE	Circuit Function	Circuit	To Connector-Pin
A6	RD/LG	16	VPWR2, ENGINE SENSORS	900A S-900
A12	TN/RD	20	FAN RELAY CONTROL	5301 PCM70-18
C9	YE	20	VBAT MONITOR	999 ALT-3
D5	VT	14	VPWR3, COILS	350A S-350
E5	DB	14	VPWR4, FUEL INJECTORS	608A S-608
F8	BK	18	PWR GROUND	570B S-570
F10	TN/LG	12	STARTER SOLENOID, 12V	1 FS-1

## C47, Gray 16-Pin

(Female Terminals)



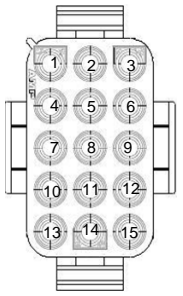
CAVITY	WIRE	Circuit Function	Circuit	To Connector-Pin
01	LG/BK	20	FUEL PUMP RELAY (Hi)	4033 PDB-13
02	RD/LB	20	STARTER MOTOR REQUEST (SMR)	202 PDB-11
03	RD/LG	20	ISP-R	201 PCM70-42
05	PK/LG	20	HS CAN ( - )	800C S-800 <b>TP 58+59</b>
06	WH/LG	20	HS CAN ( + )	700C S-700 <b>TP 58+59</b>
07	TN/YE	20	CLEAN TACH OUTPUT (CTO)	3000 PCM70-10
08	LB/YE	20	CPP-BT (T-19)	1000 PCM50-19
09	DB/YE	20	SCCS-RTN	3100 PCM70-48
10	WH	20	SCCS	3110 PCM70-64
11	VT	20	BOO	181 PCM70-13
12	LG/VT	20	CPP-TT (T-21)	1010 PCM50-21
13	DG	14	FUEL PUMP FEED 1 OF 2	938 PDB-12
14	DG	14	FUEL PUMP FEED 2 OF 2	939 PDB-15
15	YE/OG	20	FUEL PUMP COMM (FPC)	225 PCM70-19
16	BN/WH	20	FUEL PUMP MONITOR (FPM)	518 PCM70-32

Note: Twisted Pairs are highlighted in YELLOW

Note: Double-Crimps are highlighted in GREEN

## PDB, 15-Pin

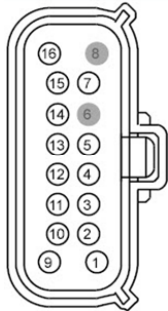
(Female Terminals)



CAVITY	WIRE	Circuit Function	Circuit	To Connector-Pin
01	OG	14	COOLING FAN FEED (1 OF 2)	10A S-10
02	OG	14	COOLING FAN FEED (2 OF 2)	10B S-10
03	BK/WH	18	PWR GROUND	570C S-570
04	YE	20	12V HAAT (KAPWR)	37A S-70
05	WH/RD	14	SCICP FAN 12V	5A SCICP-1
06	LG/YE	20	SMC	7007 PCM70-07
09	GY/OG	20	VPWR (12v KEY ON)	4447 PCM70-67 <b>DBL Crimp</b>
"	GY/OG	20	VPWR (12v KEY ON)	4448 PCM70-68 <b>DBL Crimp</b>
10	BN/PK	20	PCM RELAY CONTROL	5302 PCM70-38
11	RD/LB	20	SMR	4335 PCM70-16 <b>DBL Crimp</b>
"	RD/LB	20	SMR	202 C47-02 <b>DBL Crimp</b>
12	DG	14	FUEL PUMP FEED 1 OF 2	938 C47-13
13	LG/BK	20	FUEL PUMP RELAY (High)	4033 C47-01
14	DB/YE	20	SCICP PCM SIGNAL	7051B S-7051
15	DG	14	FUEL PUMP FEED 2 OF 2	939 C47-14

## AUX, Inline

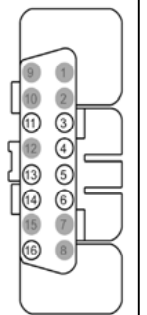
(Female Terminals)



CAVITY	WIRE	Circuit Function	Circuit	To Connector-Pin
1	VT	14	VPWR3, COILS	350B S-350
2	VT	18	VPWR3, NON MIL LOADS	350C S-350
9	DB	14	VPWR4, FUEL INJECTORS	608B S-608
12	BK	16	PWR GROUND	570J S-570
13	BN/VT	18	IAT2	26B PCM70-36
16	RD/LG	16	VPWR2, ENGINE SENSORS	900B S-900

## DLC

(Female Terminals)

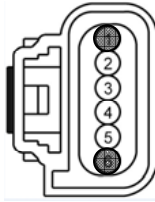


CAVITY	WIRE	Circuit Function	Circuit	To Connector-Pin
4	BK	20	PWR GROUND	570G S-570
5	BK/WH	20	PWR GROUND	570H S-570
6	WH/LG	20	HS CAN ( + )	700B S-700 <b>TP 58+59</b>
13	VT	20	FEPS	7063 PCM70-63
14	PK/LG	20	HS CAN ( - )	800B S-800 <b>TP 58+59</b>
16	YE	20	KAPWR / 12v HAAT	37C S-70

### MAF

(Female Terminals)

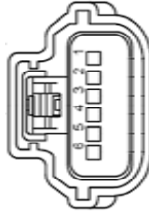
CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
2	GY	20	INTAKE AIR TEMP #1 (IAT)	7047	PCM70-47
3	RD/LG	20	VPWR	900C	S-900
4	LB/RD	20	MAF RTN	7002	PCM70-02
5	TN/LB	20	MAF SIGNAL (FREQ)	7040	PCM70-40



### APPS

(Female Terminals)

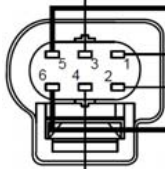
CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	BN/WH	20	APPVREF1	5137	PCM70-45
2	TN/YE	20	APP1	5701	PCM70-28
3	GY/RD	20	APPRTN1	5136	PCM70-44
4	GY	20	APPRTN2	5138	PCM70-60
5	LB/WH	20	APP2	5702	PCM70-29
6	BN	20	APPVREF2	5139	PCM70-61



### UEGO1, RH

(Female Terminals)

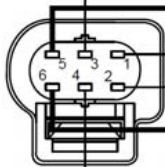
CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	BN/YE	18	UEGO1 Pumping Current	5029	PCM50-29 <b>TP 01+05</b>
2	GY/WH	18	UEGO1 VREF	5015	PCM50-15 <b>TP 06+02</b>
3	RD/WH	18	UEGO1 Heater	5024	PCM50-24
4	RD/LG	18	12v VPWR2	900D	S-900
5	LG	18	UEGO1 Measured Current	5017	PCM50-17 <b>TP 01+05</b>
6	BN/VT	18	UEGO Bank 1	5004	PCM50-04 <b>TP 02+06</b>



### UEGO2, LH

(Female Terminals)

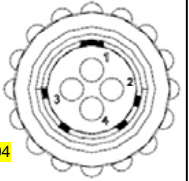
CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	WH	18	UEGO2 Pumping Current	5028	PCM50-28 <b>TP 01+05</b>
2	VT	18	UEGO2 VREF	5040	PCM50-40 <b>TP 02+06</b>
3	RD/BK	18	UEGO2 Heater	5035	PCM50-35
4	RD/LG	18	12v VPWR2	900E	S-900
5	BN/LB	18	UEGO2 Measured Current	5016	PCM50-16 <b>TP 01+05</b>
6	DG/WH	18	UEGO Bank 2	5039	PCM50-39 <b>TP 02+06</b>



### AiM

(Female Terminals)

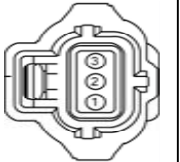
CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	WH/LG	20	HS CAN ( + )	700D	S-700 <b>TP 01+04</b>
2	BK	20	PWR GROUND	570K	S-570
3	YE	20	12V HAAT / KAPWR	37D	S-70
4	PK/LG	20	HS CAN ( - )	800D	S-800 <b>TP 01+04</b>



### ALT

(Female Terminals)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	PK/GY	20	GENLI	4315	PCM70-14
2	YE/LB	20	GENRC	5423	PCM70-53
3	YE	20	VBAT MONITOR	999	BEC-C9



### EFAN

(Female Terminals)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	OG	10	ENGINE COOLING FAN, 12V ( + )	10	RT2
2	BK	10	PWR GROUND	11	RT3



2 1

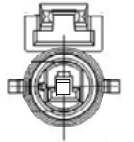
A2

### START1P, Starter Solenoid 12V Feed

(Male Terminal)

**12065172** conn  
**12129493** term (FEMALE)  
**12065249** secondary lock  
 (connector mate on 14B060)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	TN/LG	12	Starter Solenoid, 12V Feed	1	BEC-F10



Note: Twisted Pairs are highlighted in YELLOW

Note: Double-Crimps are highlighted in GREEN

## GROUNDS

**RT1, PWR Ground**  
(Ring Terminal)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	BK	10	MAIN POWER GND	570A	S-570



**RT2, 12C, Engine Cooling Fan**  
(Ring Terminal)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	OG	12	12V, ENGINE COOLING FAN	10	EFAN-1

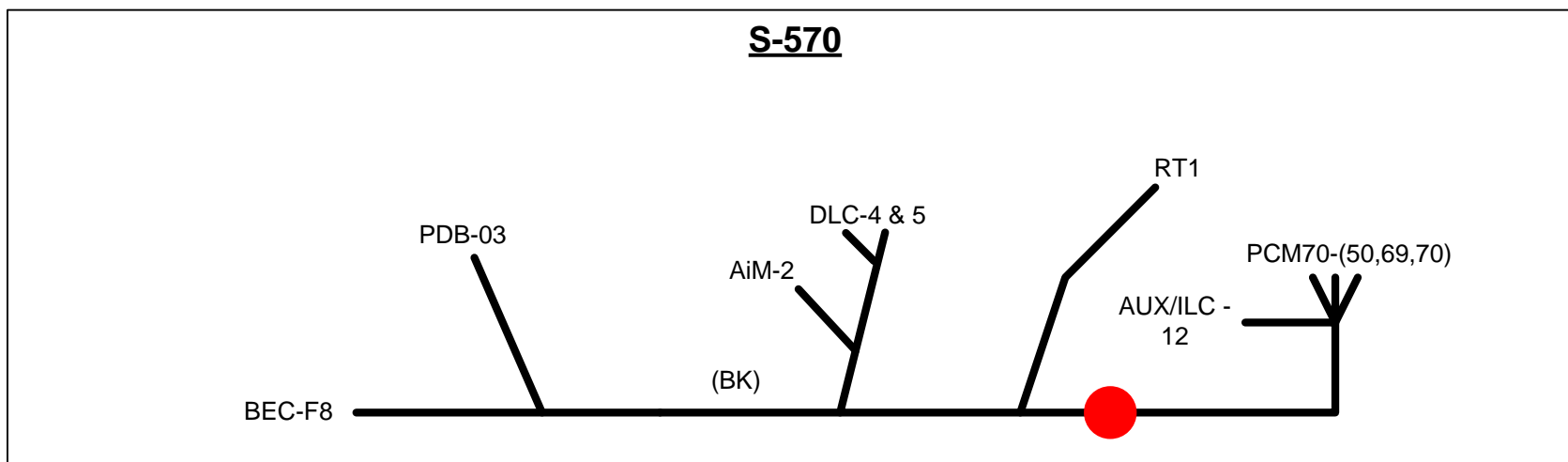
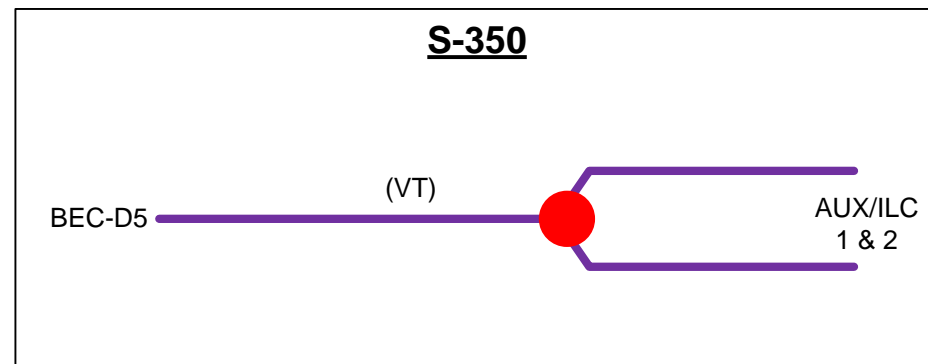
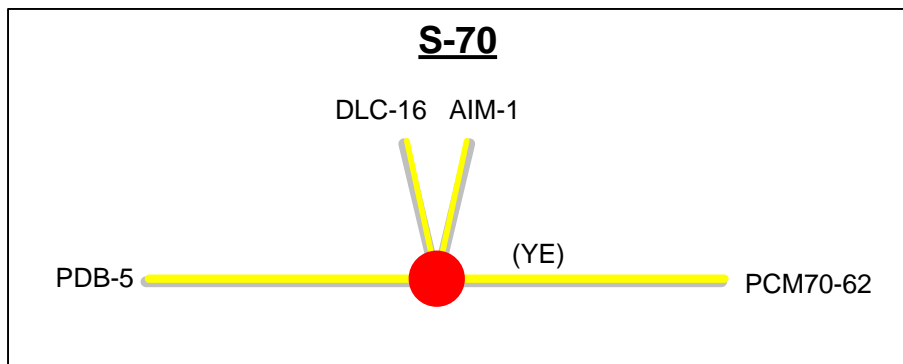


**RT3, Fan Ground**  
(Ring Terminal)

CAVITY	WIRE		Circuit Function	Circuit	To Connector-Pin
1	BK	12	GND, ENGINE COOLING FAN	11	EFAN-2



# SPLICE CHARTS



# SPLICE CHARTS

