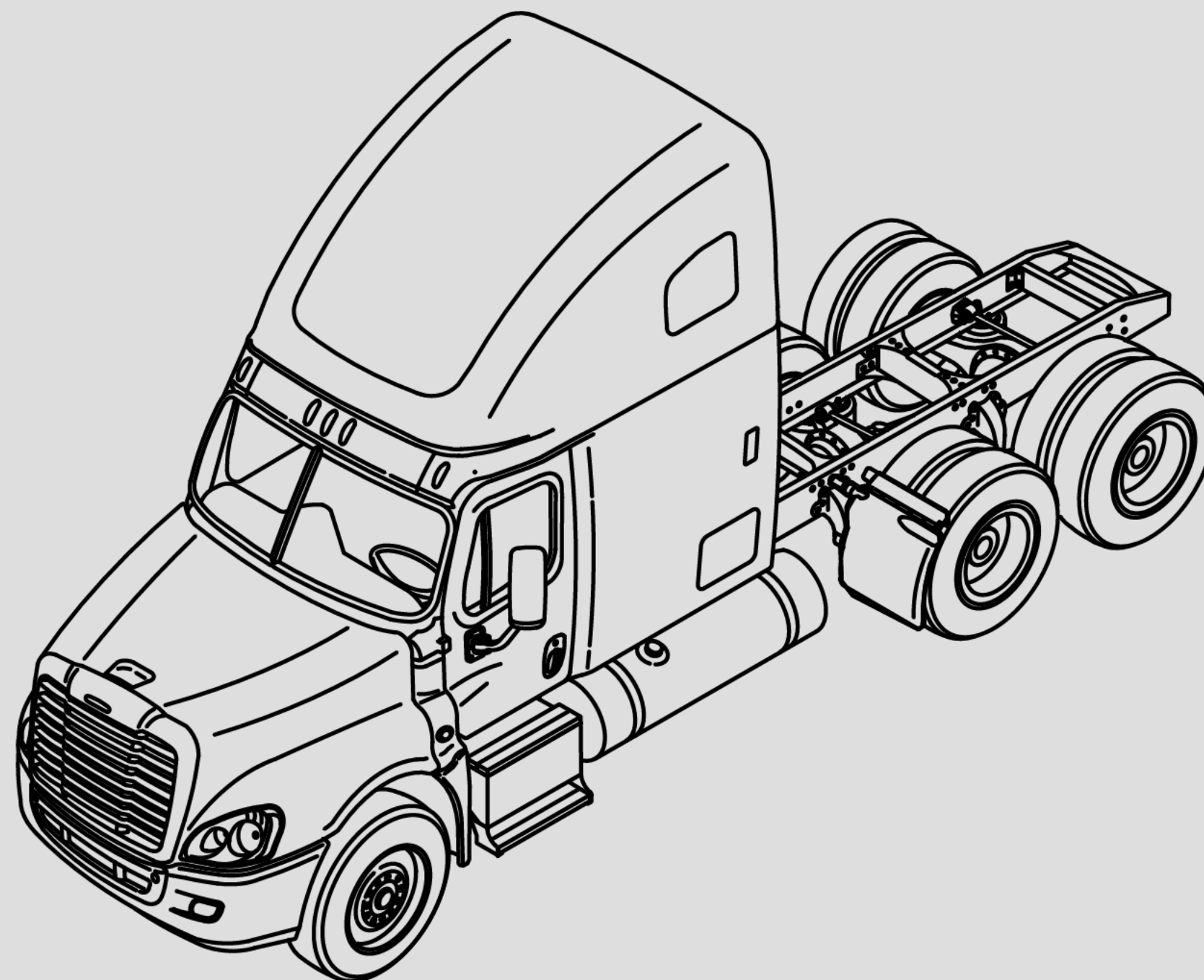


SERVICE TRAINING ACADEMY

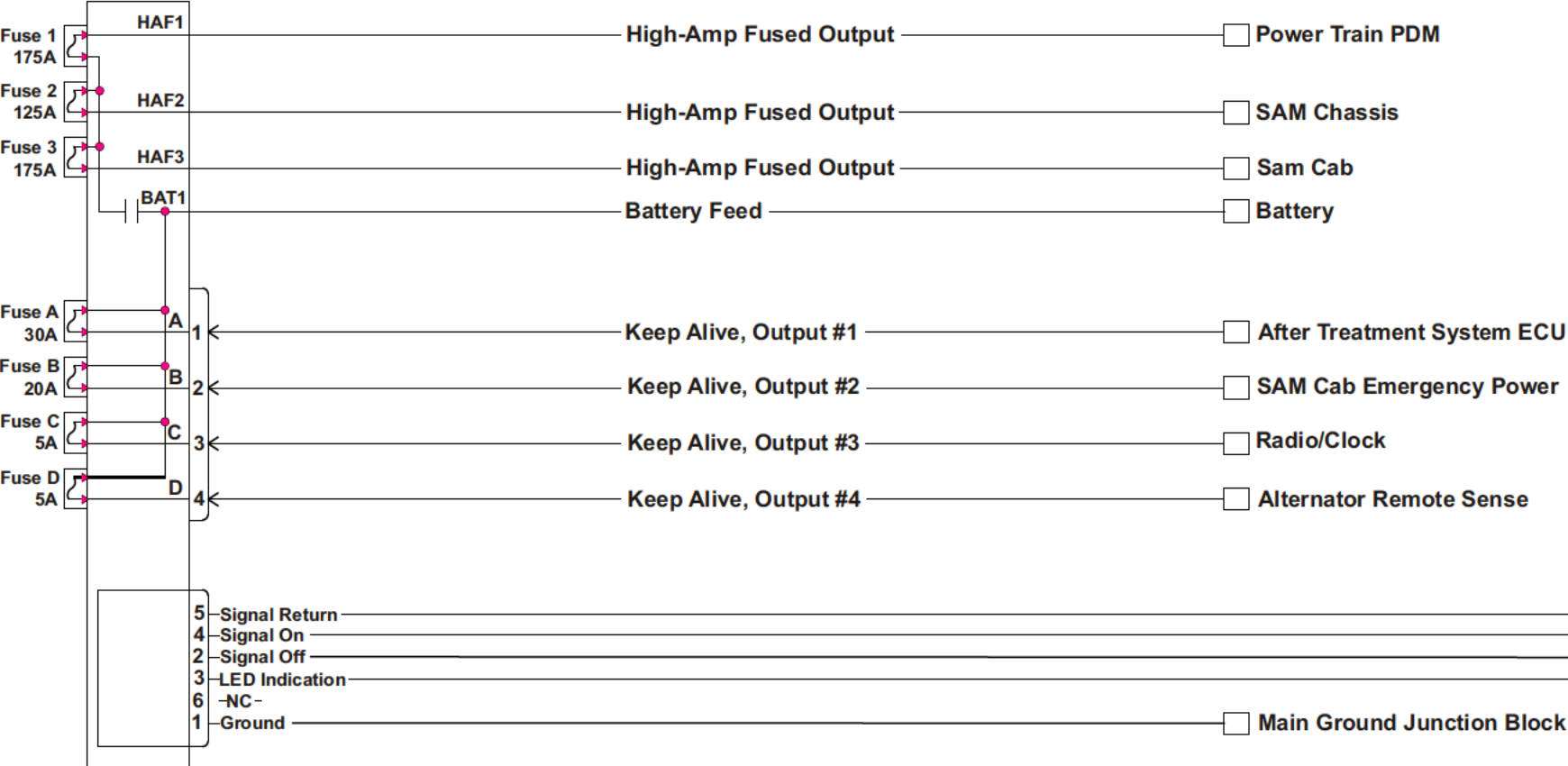
DAIMLER TRUCKS NORTH AMERICA



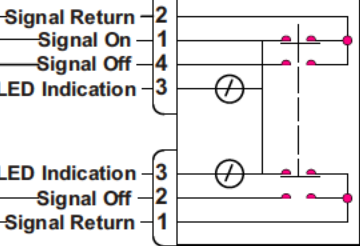
CASCADIA™ 

1	f545633b	PNDB – CLDS Schematic	1 page
2	A06-64611	KIT-ELEC, POWERTRAIN PDM	1 page
3A-3B	A06-74514	KIT-ELEC, POWERTRAIN PDM	2 pages
4A-4B	G06-64121	WRG-BAT, LOW VOLTAGE DISCONNECT	2 pages
5A-5B	G06-61495	WRG-ENG CTRL,DDEC6	2 pages
6	G06-73316	WRG-BAT, LOW VOLTAGE DISC	1 page
7A-7E	f545099-103	SAM Cab & Chassis Input/Output/Grounds	5 pages
8		SAM Cab Connector Locations	1 page
9		SAM Chassis Connector Location	1 page
10A-10C	G06-5313	WRG-MUX CTRL, MODULAR SW FIELD	3 pages
11A-11B	A06-53782	DWG-SWITCH, ROCKER, MSF, MUX	2 pages
12A-12B	A06-53783	SWITCH-ROCKER, MSF, HARDWIRE	2 pages
13		Multiplexing Worksheet	1 page
14	D06-73694	BLK DIAG 2010 ENG CTRL	1 page
15A-15J	G06-56989	WRG-DL, DIAGNOSTIC AND DATALINK	10 pages
16A-16H	G06-61996	WRG-ST, SP, START CONTROL	8 pages

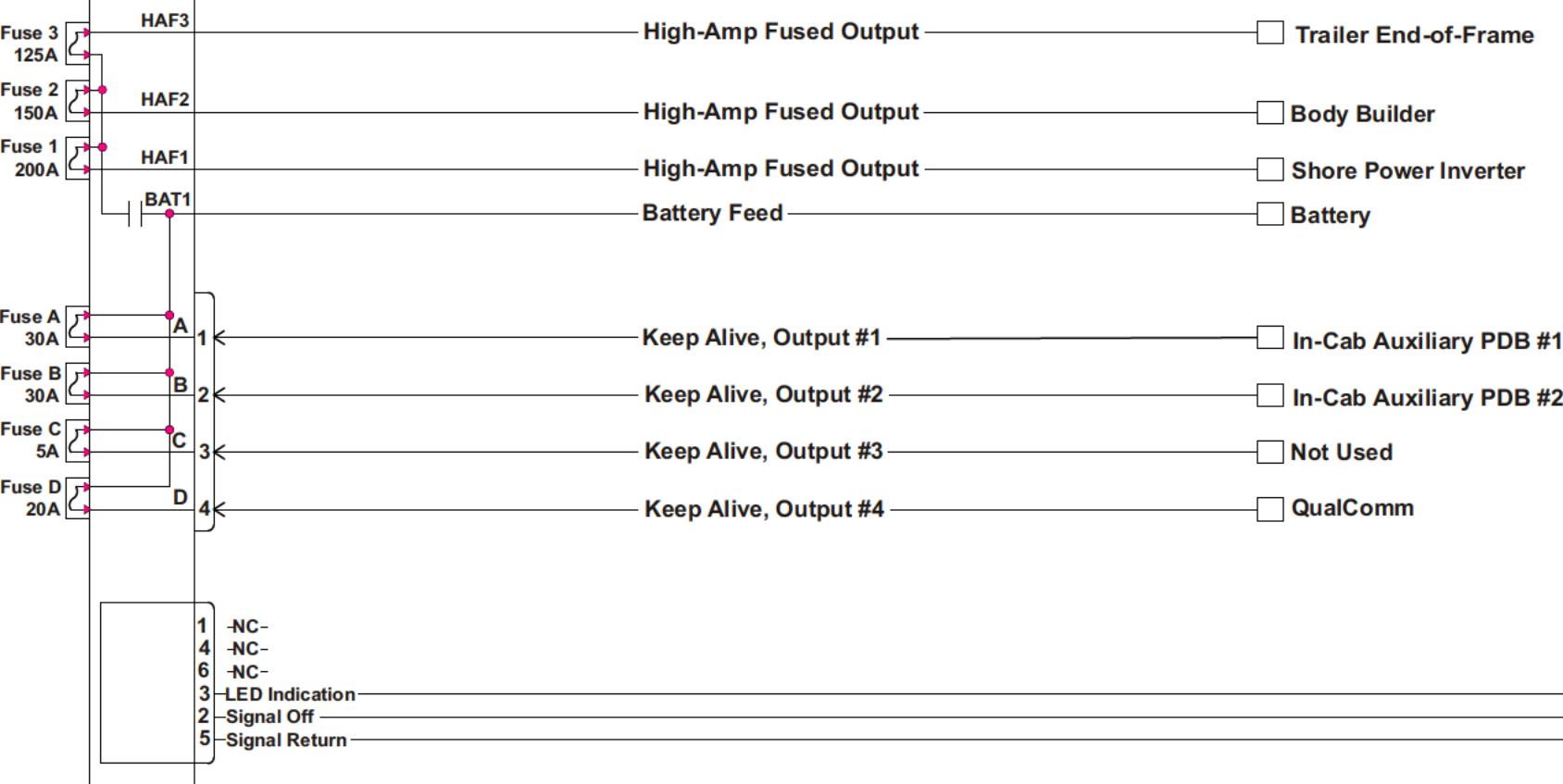
Primary Powernet Distribution Box



Cab Load Disconnect Switch Dual

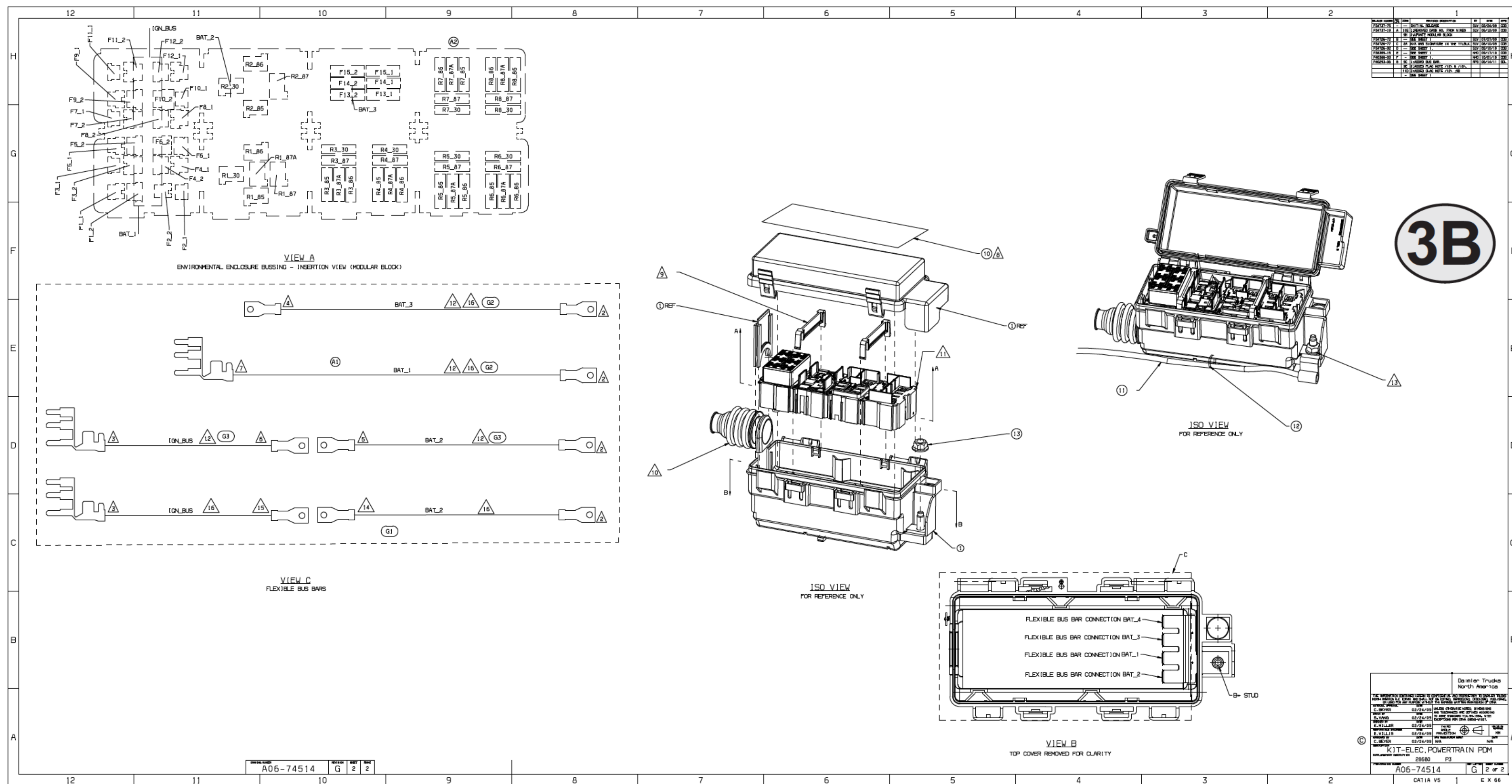


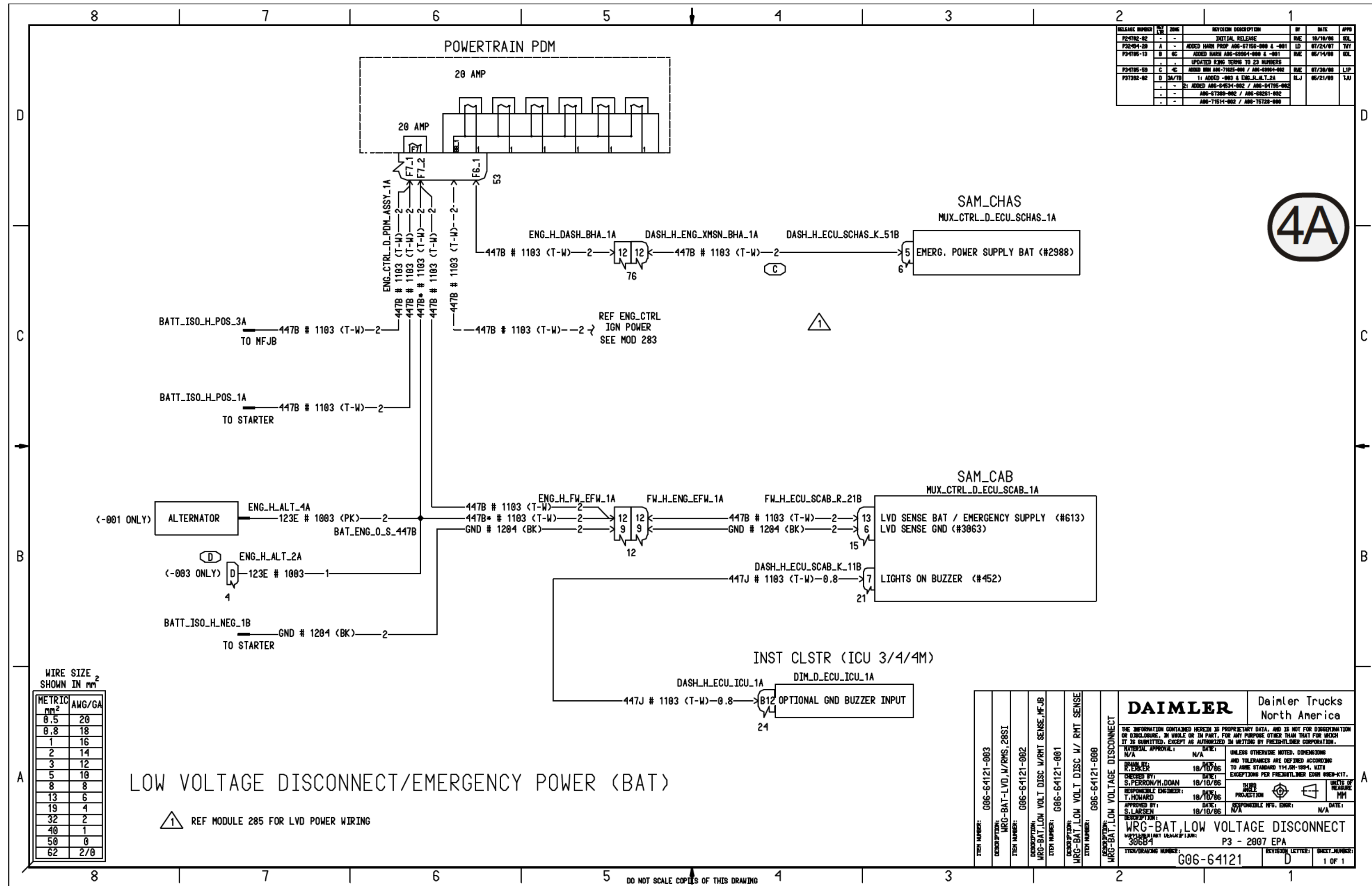
Secondary Powernet Distribution Box (Optional)



PNDB - CLDS Schematic
(Cascadia TM C06.06)

[illegible]





REVISION NUMBER	DATE	DESCRIPTION	BY	DATE	APP
P21102-02	-	INITIAL RELEASE	RL	10/10/00	RL
P22004-00	A	ADDED NAME PROP ADD-01100-000 & -001	LD	07/24/01	LD
P04705-10	B	ADDED NAME ADD-01001-000 & -001	RL	06/14/00	RL
-	-	UPDATED 2300 TERMS TO 23 NUMBERS	-	-	-
P04705-00	C	ADDED NAME ADD-01001-000 / ADD-00001-002	RL	07/20/00	RL
P07302-02	D	1) ADDED -003 & ENG_H_ALT_2A	RL	05/21/00	RL
-	-	2) ADDED -003 & ENG_H_ALT_2A	-	-	-
-	-	ADD-01300-002 / ADD-00201-002	-	-	-
-	-	ADD-01300-002 / ADD-00201-002	-	-	-
-	-	ADD-01300-002 / ADD-00201-002	-	-	-

4B

POWERTRAIN PDM

20 AMP

20 AMP

SAM_CHAS

MUX_CTRL_D_ECU_SCHAS_1A

EMERG. POWER SUPPLY BAT (#2988)

70A IGN RELAY



REF ENG_CTRL
IGN POWER
SEE MOD 283

EMERGENCY POWER

MCM (5,6,8)
MCM (7) IGN 439A

MFJB 175A ENG

SAM_CAB

MUX_CTRL_D_ECU_SCAB_1A

LVD SENSE BAT / EMERGENCY SUPPLY (#613)
LVD SENSE GND (#3063)

LIGHTS ON BUZZER (#452)

INST CLSTR (ICU 3/4/4M)

DIM_D_ECU_ICU_1A

OPTIONAL GND BUZZER INPUT

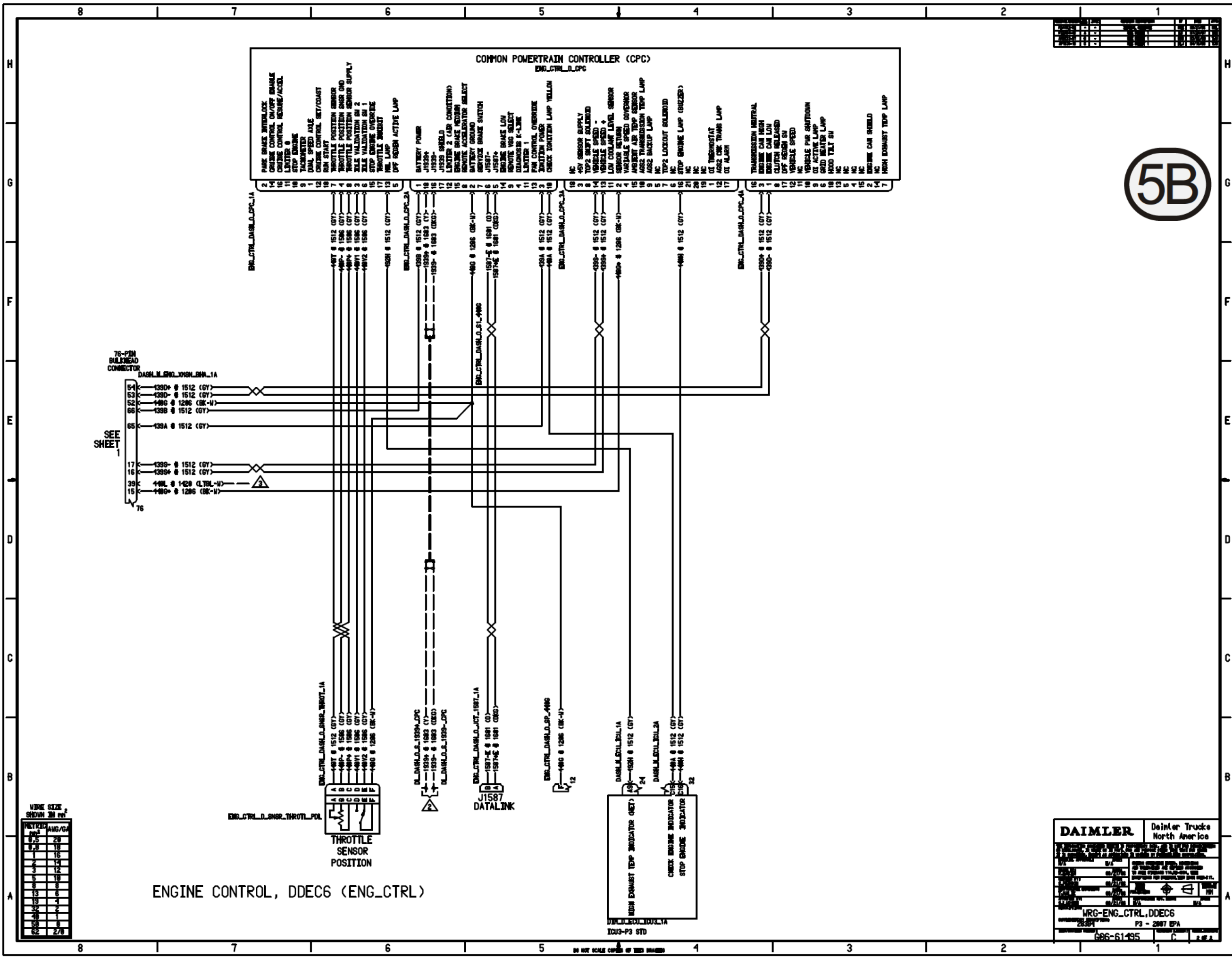
LOW VOLTAGE DISCONNECT/EMERGENCY POWER (BAT)

REF MODULE 285 FOR LVD POWER WIRING

WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	28
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY DAIMLER TRUCKS CORPORATION.			
UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO		UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO	
DATE:	DATE:	DATE:	DATE:
DESIGNED BY: S. PERRON/M. DOAM	DATE: 10/10/00	DESIGNED BY: S. PERRON/M. DOAM	DATE: 10/10/00
RESPONSIBLE ENGINEER: T. HONARD	DATE: 10/10/00	RESPONSIBLE ENGINEER: T. HONARD	DATE: 10/10/00
APPROVED BY: S. J. ARSEN	DATE: 10/10/00	APPROVED BY: S. J. ARSEN	DATE: 10/10/00
DESCRIPTION: WRG-BAT, LOW VOLTAGE DISCONNECT		DESCRIPTION: WRG-BAT, LOW VOLTAGE DISCONNECT	
306B4		306B4	
P3 - 2007 EPA		P3 - 2007 EPA	
REVISION LETTER:		REVISION LETTER:	
D		D	
1 OF 1		1 OF 1	



WIRE SIZE SHOWN IN IN²	AWG/GA
0.5	20
0.75	18
1	16
1.5	14
2	12
3	10
4	8
6	6
10	4
16	2
25	1
35	0
62	2/0

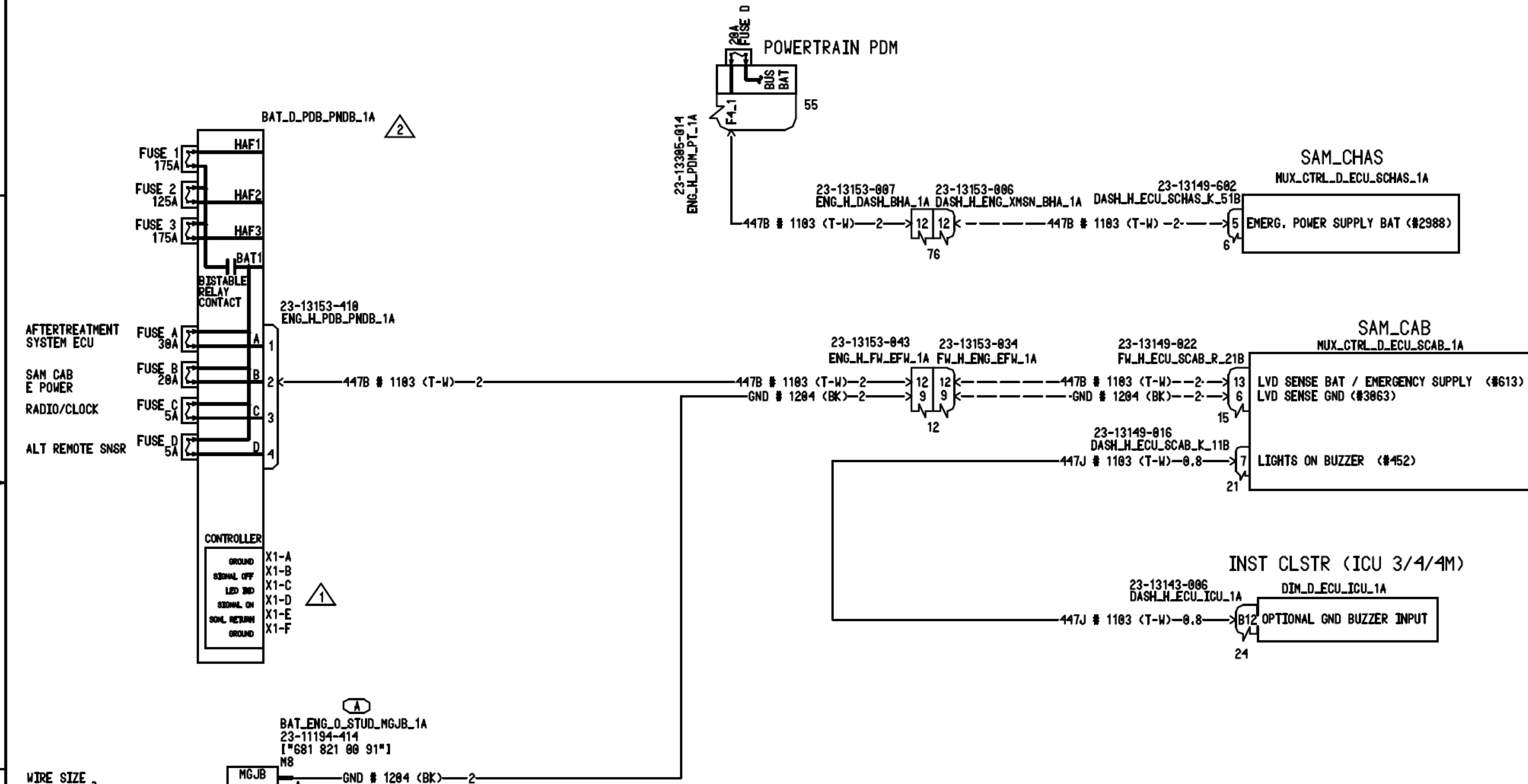
DAIMLER
Daimler Trucks
North America

WRC-ENG_CTRL.DDEC6
28391
P3 - 2007 EPA
606-61495

606-61495
C
2 of 2

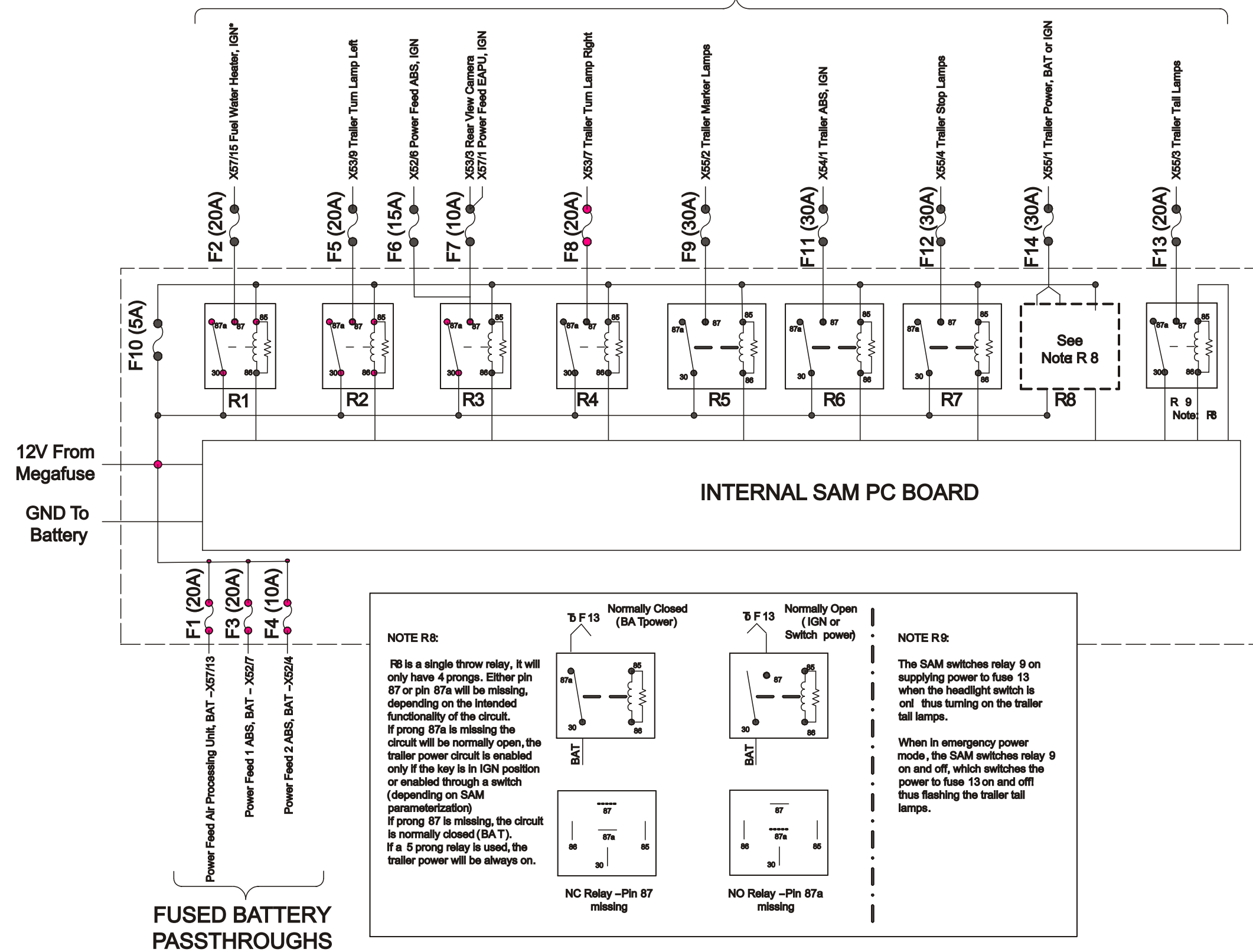
REVISION NUMBER	DATE	DESCRIPTION	BY	DATE	APP
P04737-01	--	INITIAL RELEASE	---	01/05/00	---
P04737-02	--	23-11194-014 HAS 23-11194-011	---	02/25/00	---
P04737-04	B	ADDED BASH PROP 400-76127-000	---	04/26/00	---

6



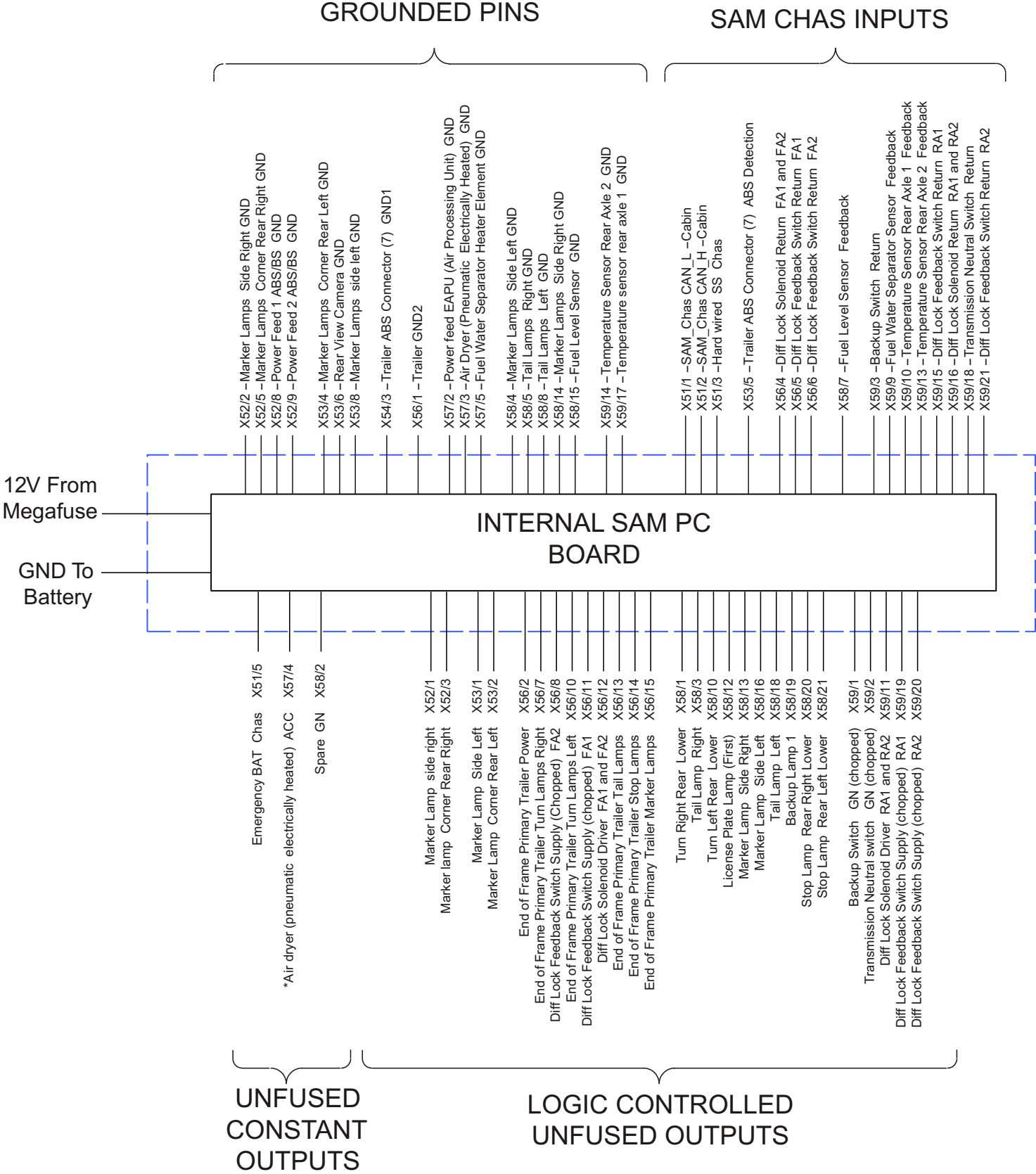
ITEM NUMBER: <

LOGIC CONTROLLED RELAYED, FUSED OUTPUTS



7A

* When specified with Optimized Idle, these pins will not supply power when the key is in the ACC position, nor during an Optimized Idle vehicle shutdown event. Optimized Idle is specified by a SAM Cab parameter.



* When specified with Optimized Idle, these pins will not supply power when the key is in the ACC position, nor during an Optimized Idle vehicle shutdown event. Optimized Idle is specified by a SAM Cab parameter.



12V From
Megafuse

GND To
Battery

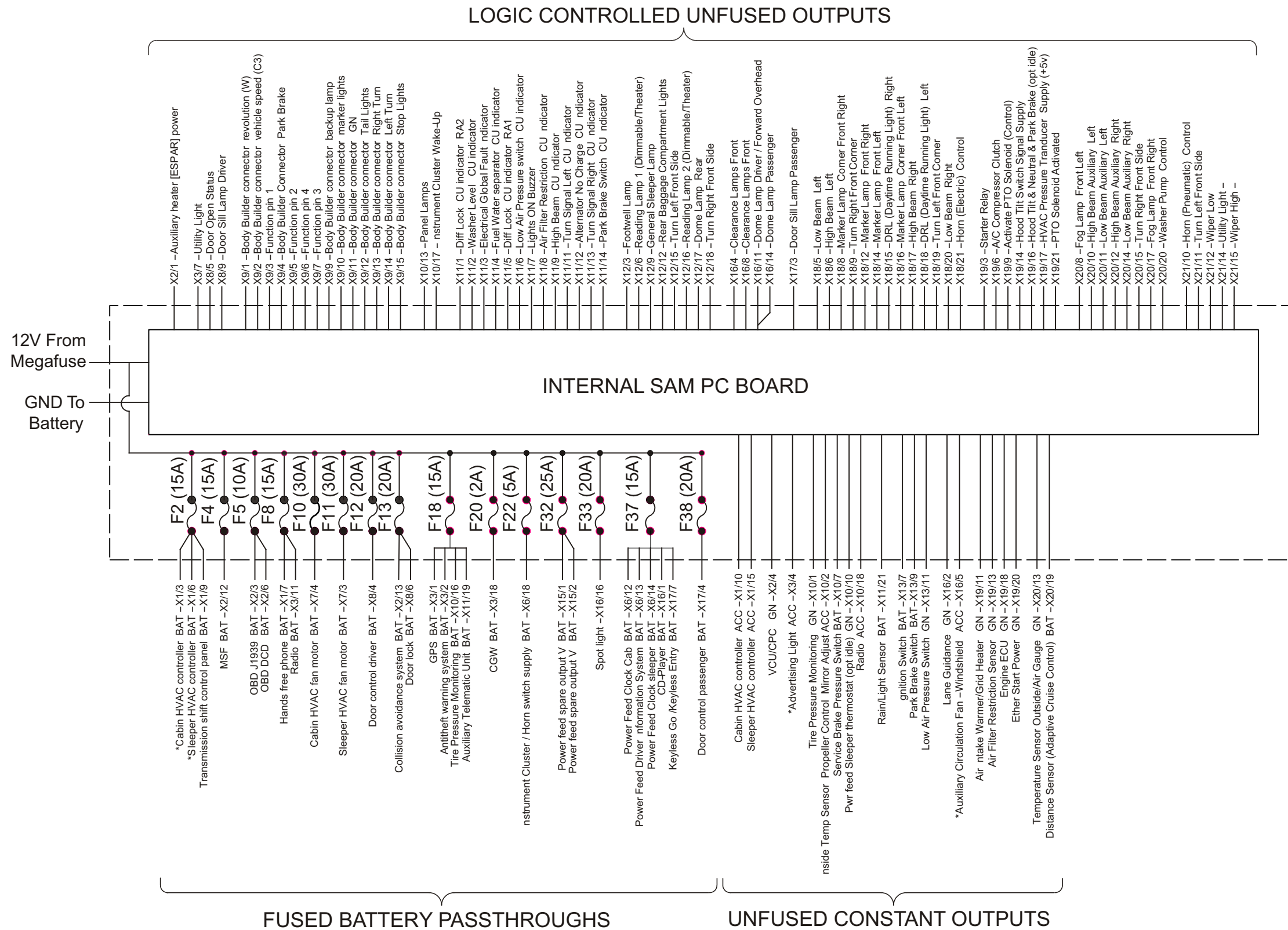
INTERNAL SAM PC BOARD

INPUT PINS

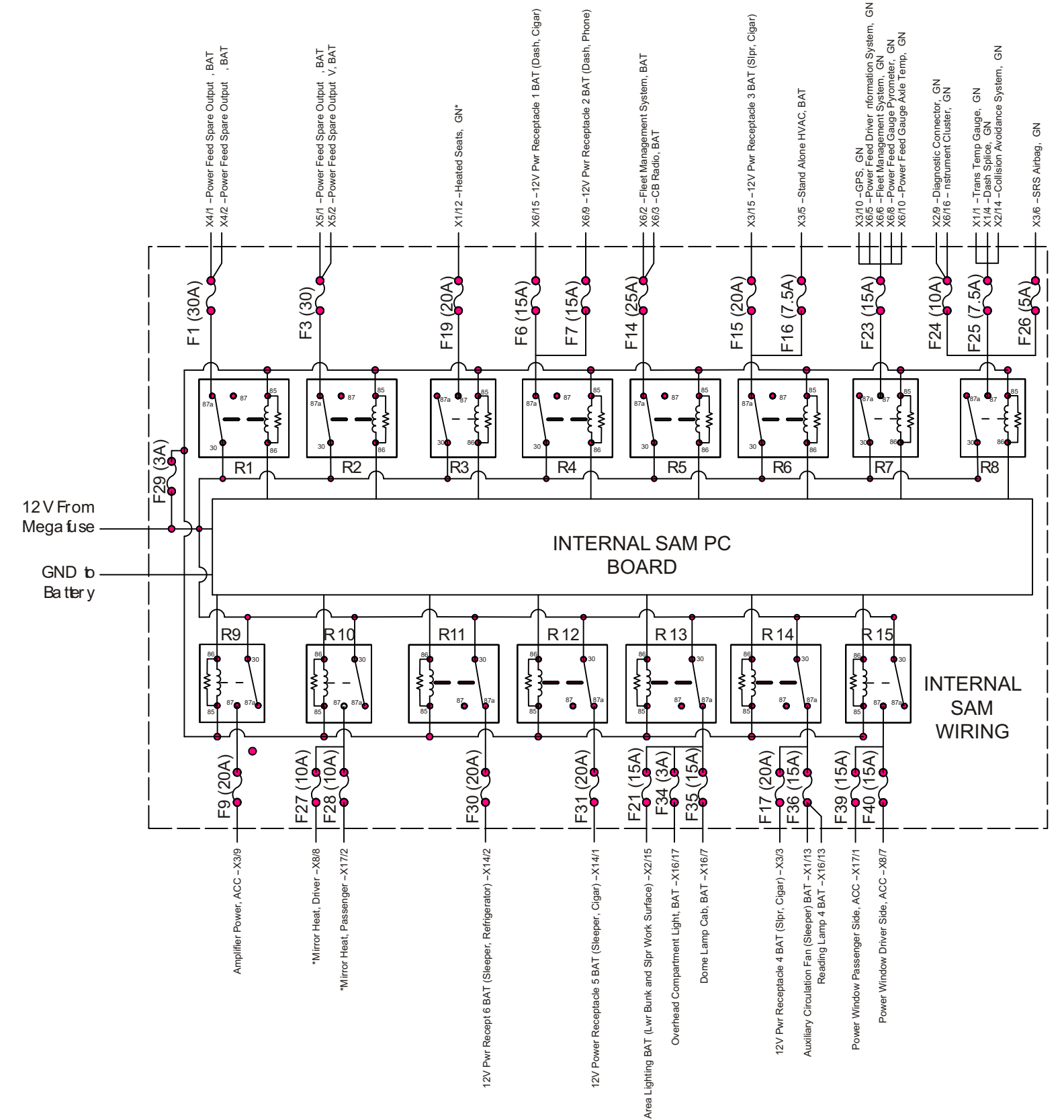
GROUNDING PINS (X18-X21)

GROUNDING PINS (X1-X17)



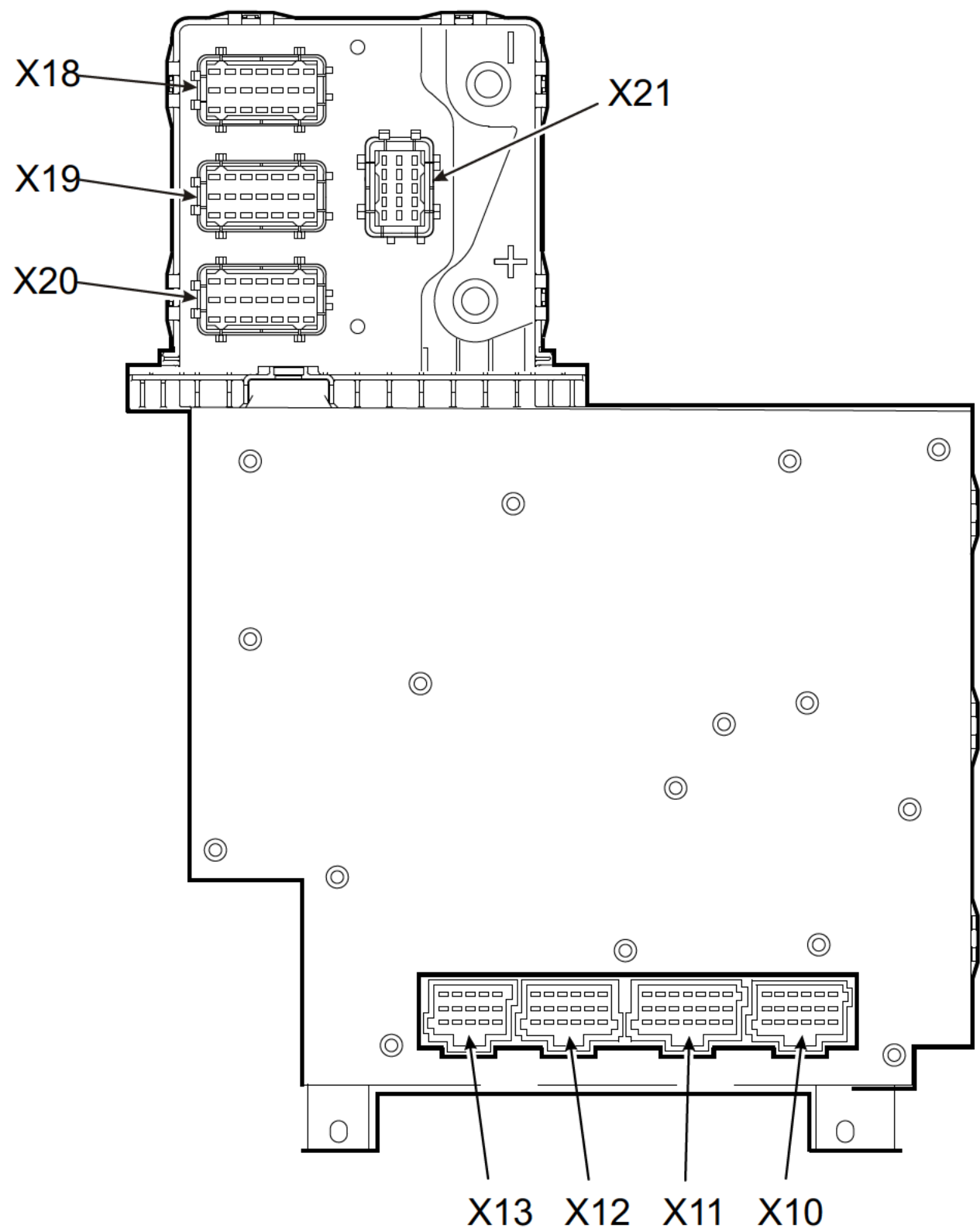


* When specified with Optimized Idle, these pins will not supply power when the key is in the ACC position, nor during an Optimized Idle vehicle shutdown event. Optimized Idle is specified by a SAM Cab parameter.

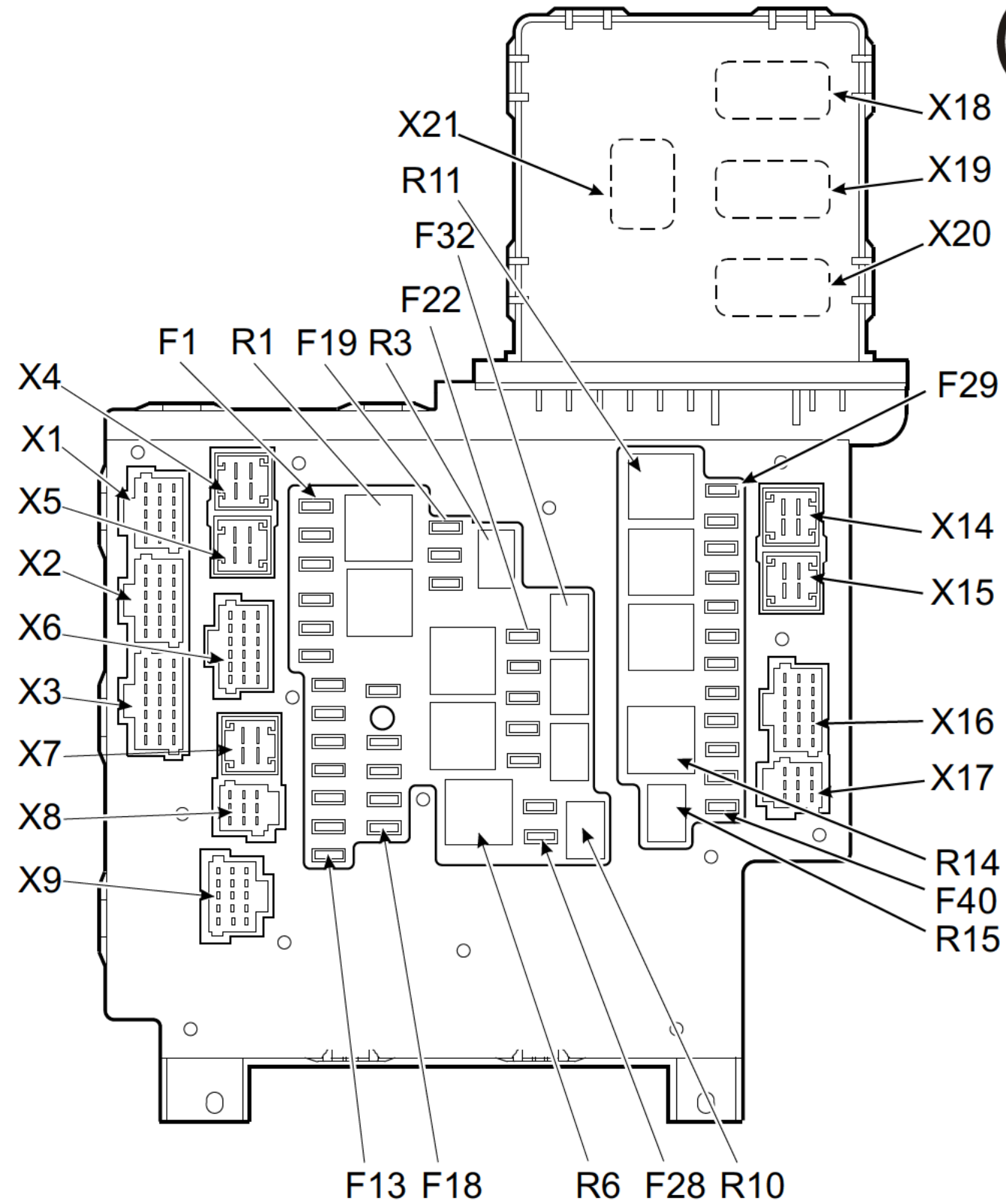


* When specified with Optimized Idle, these pins will not supply power when the key is in the ACC position, nor during an Optimized Idle vehicle shutdown event. Optimized Idle is specified by a SAM Cab parameter.

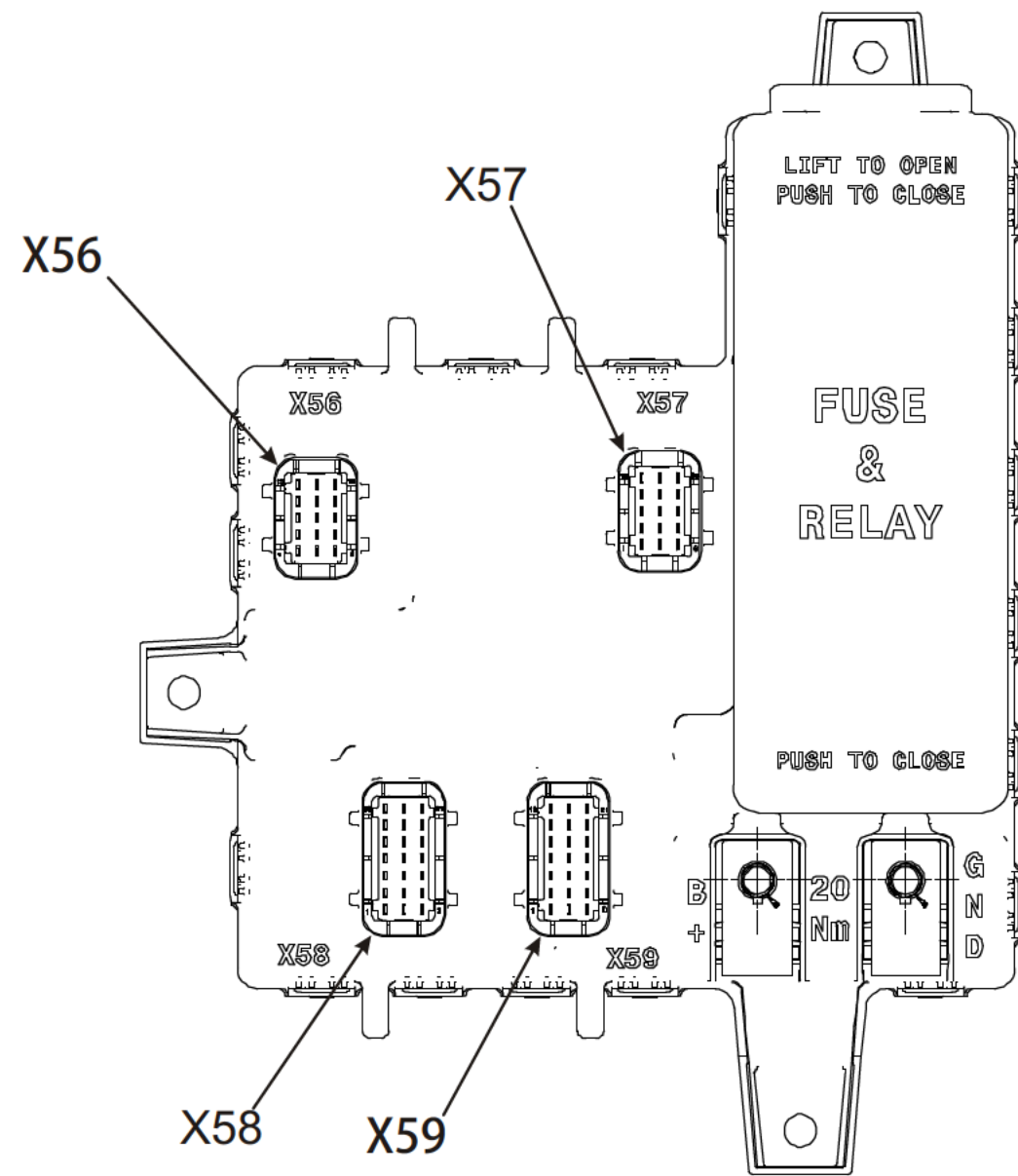




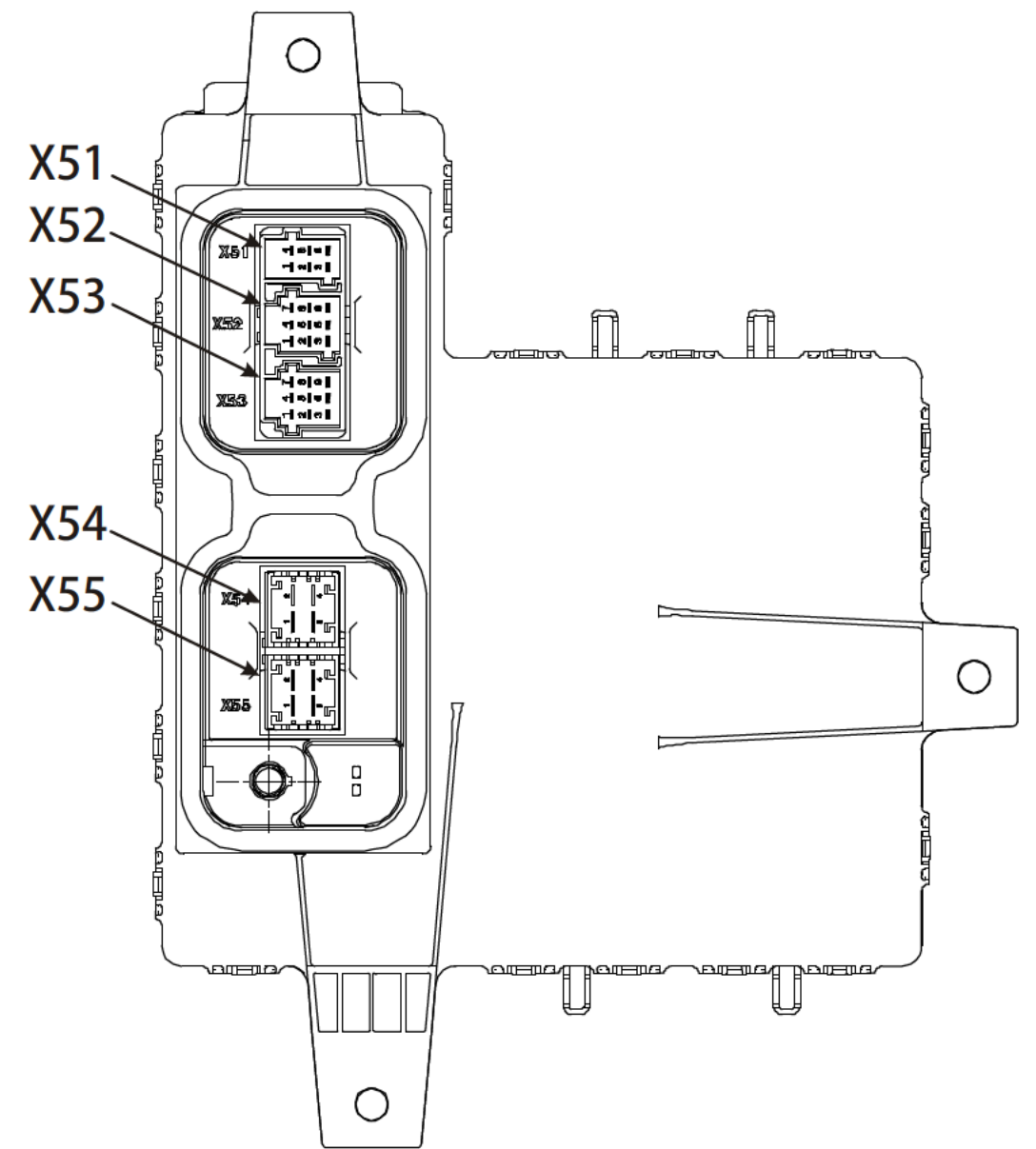
SAM cabin bottom view



SAM cabin top view



FRONT VIEW



REAR VIEW

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24693-C3	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P35015-S6	B	8A	ADD ACRONYM "MSF" TO NOTE	MND	06/23/08	GAP
P34414-10	C	-	ADDED 8HT 3	RWE	06/07/08	SDL
P41086-06	D	7A	1. ADDED 4TH MSF SLAVE.	K1C	02/17/11	MLC
		3C	2. ORDER OF A3,A2,A1 WAS A1,A2,A3.			
		3B	3. ORDER OF A3,A2,A1 WAS A1,A2,A3.			
		4C	4. 0.5 WAS 0.8.			
		4D	5. 0.5 WAS 0.8.			

10A

ITEM NUMBER: G06-53137-001	DESCRIPTION: WRG-MUX_CTRL,MODULAR SW FIELD, P3	ITEM NUMBER: G06-53137-000	DESCRIPTION: WRG-MUX_CTRL,MODULAR SW FIELD, P3	DAIMLER		Daimler Trucks North America		
				THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPRIETARY TO DAIMLER TRUCKS NORTH AMERICA LLC (DTNA) AND SHALL NOT BE COPIED REPRODUCED DISCLOSED PUBLISHED OR USED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF DTNA				
				MATERIAL APPROVAL: N/A	DATE: N/A	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER DTNA 09ENG-W1837.		
				DRAWN BY: R. DOAN	DATE: 10/15/06			
				CHECKED BY: S. PERRON	DATE: 10/15/06			
				RESPONSIBLE ENGINEER: S. PERRON/M. DOAN	DATE: 10/15/06			
				APPROVED BY: G. PITTMAN	DATE: 10/15/06			
				DESCRIPTION: WRG-MUX_CTRL,MODULAR SW FIELD SUPPLEMENTARY DESCRIPTION: 860B4 P3		THIRD ANGLE PROJECTION		UNITS OF MEASURE MM
				ITEM/DRAWING NUMBER: G06-53137		REVISION LETTER: D	SHEET NUMBER: 1 OF 3	

MODULAR SWITCH FIELD
(MSF) SLAVE-DASH 1

MUX_CTRL_H_PNL_SW_MSF_2A MUX_CTRL_D_ECU_MSF_SLV_DASH_1B

14F # 1105 (R) 0.5 1 A1 +12V BATTERY FROM MSF MSTR
507A # 2008 (BK) 0.5 2 A2 DATA LINK FROM MSF MSTR
GND # 1204 (BK) 0.5 3 A3 GROUND FROM MSF MSTR

MUX_CTRL_H_PNL_SW_MSF_1A

14F # 1105 (R) 0.5 1 B1 +12V BATTERY FROM MSF MSTR
507A # 2008 (BK) 0.5 2 B2 DATA LINK FROM MSF MSTR
GND # 1204 (BK) 0.5 3 B3 GROUND FROM MSF MSTR

D5

C1 COMMON 1
C2 CONTACT 1 (N.C.)
C3 CONTACT 1 (N.O.)
C4 CONTACT 2 (N.O.)
C5 CONTACT 2 (N.C.)
C6 COMMON 2

MODULAR SWITCH FIELD
(MSF) SLAVE-DASH 2

MUX_CTRL_H_PNL_SW_MSF_2A MUX_CTRL_D_ECU_MSF_SLV_DASH_2A

GND # 1204 (BK) 0.5 3 A3 GROUND FROM MSF MSTR
507A # 2008 (BK) 0.5 2 A2 DATA LINK FROM MSF MSTR
14F # 1105 (R) 0.5 1 A1 +12V BATTERY FROM MSF MSTR

D4

14F # 1105 (R) 0.5 1 B1 +12V BATTERY FROM MSF MSTR
507A # 2008 (BK) 0.5 2 B2 DATA LINK FROM MSF MSTR
GND # 1204 (BK) 0.5 3 B3 GROUND FROM MSF MSTR

D2

C1 COMMON 1
C2 CONTACT 1 (N.C.)
C3 CONTACT 1 (N.O.)
C4 CONTACT 2 (N.O.)
C5 CONTACT 2 (N.C.)
C6 COMMON 2

MODULAR SWITCH FIELD
(MSF) SLAVE-DASH 3

MUX_CTRL_H_PNL_SW_MSF_4A MUX_CTRL_D_ECU_MSF_SLV_DASH_3A

GND # 1204 (BK) 0.5 3 A3 GROUND FROM MSF MSTR
507A # 2008 (BK) 0.5 2 A2 DATA LINK FROM MSF MSTR
14F # 1105 (R) 0.5 1 A1 +12V BATTERY FROM MSF MSTR

D3

C1 COMMON 1
C2 CONTACT 1 (N.C.)
C3 CONTACT 1 (N.O.)
C4 CONTACT 2 (N.O.)
C5 CONTACT 2 (N.C.)
C6 COMMON 2

MUX_CTRL_H_PNL_SW_MSF_1A

GND # 1204 (BK) 0.5 3 B3 GROUND FROM MSF MSTR
507A # 2008 (BK) 0.5 2 B2 DATA LINK FROM MSF MSTR
14F # 1105 (R) 0.5 1 B1 +12V BATTERY FROM MSF MSTR

D1

5 SAM_CAB
MUX_CTRL_D_ECU_SCAB_1A

MODULAR SW FIELD, GND (#618)
MODULAR SW FIELD, BAT (#616)

DASH_H_ECU_SCAB_K_2B

2 GND # 1204 (BK) 0.8
12 14F # 1105 (R) 0.8

18

MODULAR SWITCH FIELD
(MSF) MASTER

MUX_CTRL_D_ECU_MSF_MA_1B

DASH_H_PNL_SW_MSF_MSTR_1A

DIGITAL INPUT #1
+12V BATTERY
CABIN_CAN LOW
DIGITAL INPUT #2
CABIN_CAN HIGH
GROUND

1 -NC-
2 14F # 1105 (R) 0.8
3 508C # 2008 (DKG) REF DL (MOD160)
4 -NC-
5 508A # 2008 (DKG) REF DL (MOD160)
6 GND # 1204 (BK) 0.8

MUX_CTRL_H_PNL_SW_MSF_1A

SUPPLY VOLTAGE
BUS DATALINK
GROUND

1 14F # 1105 (R) 0.5
2 507A # 2008 (BK) 0.5
3 GND # 1204 (BK) 0.5

CONTINUED ON SHEET 2

MODULAR SWITCH FIELD
(MSF) SLAVE-DASH 4

MUX_CTRL_D_ECU_MSF_SLV_DASH_4A MUX_CTRL_H_PNL_SW_MSF_2A

GROUND FROM MSF MSTR A3
DATA LINK FROM MSF MSTR A2
+12V BATTERY FROM MSF MSTR A1

3 GND # 1204 (BK) 0.5
2 507A # 2008 (BK) 0.5
1 14F # 1105 (R) 0.5

+12V BATTERY FROM MSF MSTR B1
DATA LINK FROM MSF MSTR B2
GROUND FROM MSF MSTR B3

COMMON 1 C1
CONTACT 1 (N.C.) C2
CONTACT 1 (N.O.) C3
CONTACT 2 (N.O.) C4
CONTACT 2 (N.C.) C5
COMMON 2 C6

D2

WIRE SIZE
SHOWN IN mm²

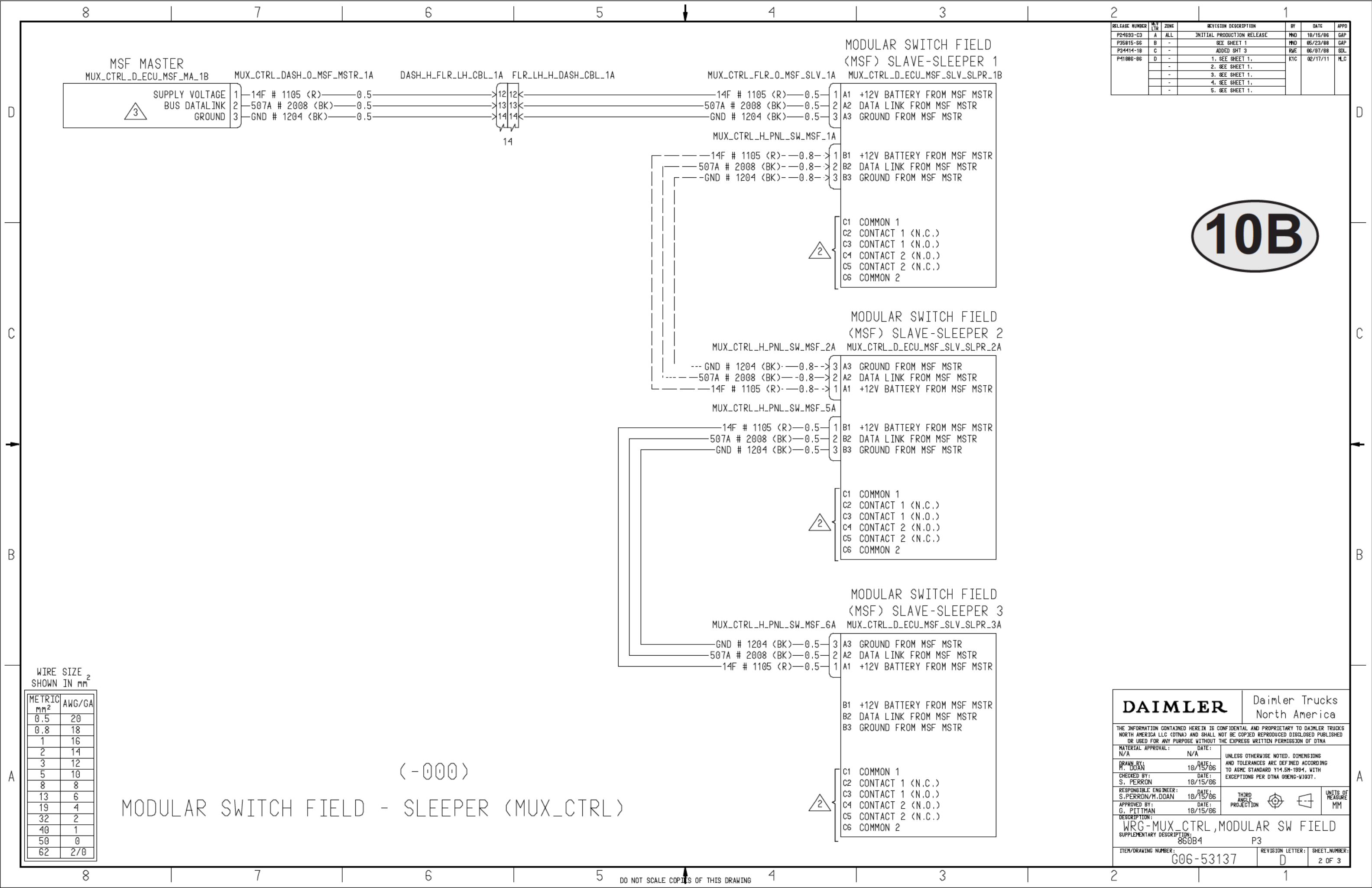
METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

MODULAR SWITCH FIELD (MSF) - DASH (MUX_CTRL)

- 1 IN ADDITION TO HAZARD SWITCH, MSF MASTER MAY CONTAIN UP TO 2 ADDITIONAL MULTIPLEXED SWITCHES
- 2 EACH MSF/SLAVE MODULE MAY CONTAIN UP TO 4 SWITCHES. REFER TO SWITCH & GAUGE REPORT FOR SWITCH ARRANGEMENTS
- 3 MAXIMUM NUMBER OF SUB-BUS DIRECT CONNECTION TO THE MSF MASTER IS 6. SUB-BUS CONSISTS OF SUPPLY VOLTAGE, BUS DATALINK & GROUND

- 4 FOR COMPLETE SYSTEM ARCHITECTURE, REFER TO MODULE 280, NETWORK TOPOLOGY SCHEMATIC, OR WIRE DIAGRAMS IN MODULE 160
- 5 REFER TO MODULE 32A (SAM_CAB) AND MODULE 32K (SAM_CHAS) FOR FUSE & RELAY LOCATION AND CIRCUIT PROTECTION INFORMATION

D2

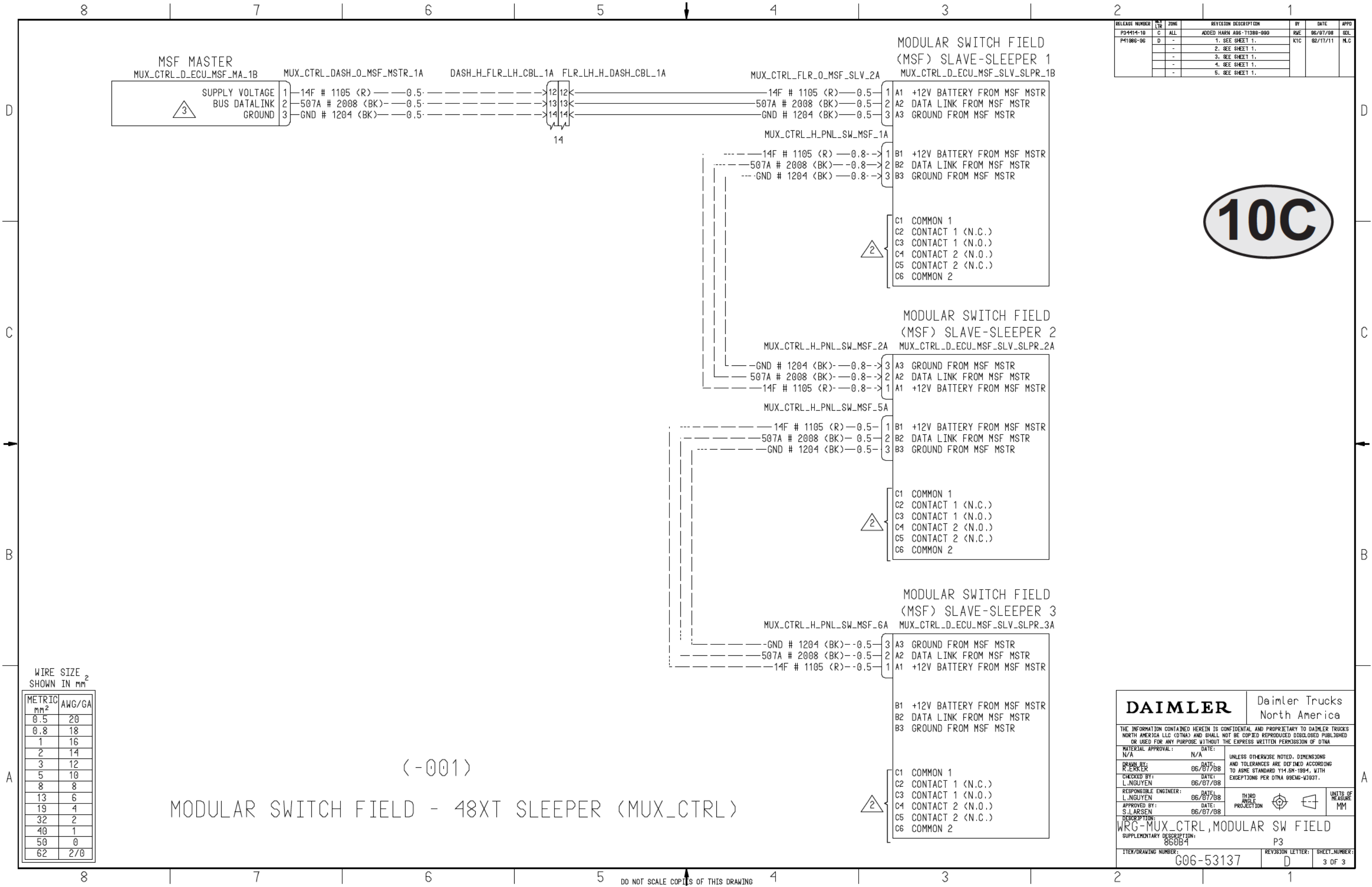


RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24693-C3	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P35015-S6	B	-	SEE SHEET 1	MND	05/23/08	GAP
P34414-10	C	-	ADDED SHT 3	RME	06/07/08	SOL
P41006-06	D	-	1. SEE SHEET 1.	KYC	02/17/11	MLC
			2. SEE SHEET 1.			
			3. SEE SHEET 1.			
			4. SEE SHEET 1.			
			5. SEE SHEET 1.			

10B

WIRE SIZE SHOWN IN mm ²	
METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DAIMLER		Daimler Trucks North America	
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MATERIAL APPROVAL:		DATE:	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER DTNA 09ENG-V1037.
N/A	N/A		
DRAWN BY:	DATE:	THIRD ANGLE PROJECTION	
R. DOAN	10/15/06		
CHECKED BY:	DATE:		UNITS OF MEASURE MM
S. PERRON	10/15/06		
RESPONSIBLE ENGINEER:	DATE:		
S.PERRON/M.DOAN	10/15/06		
APPROVED BY:	DATE:		
G. PITTMAN	10/15/06		
DESCRIPTION:			
WRG-MUX_CTRL, MODULAR SW FIELD			
SUPPLEMENTARY DESCRIPTION:			
860B4 P3			
ITEM/DRAWING NUMBER:		REVISION LETTER:	SHEET NUMBER:
G06-53137		D	2 OF 3



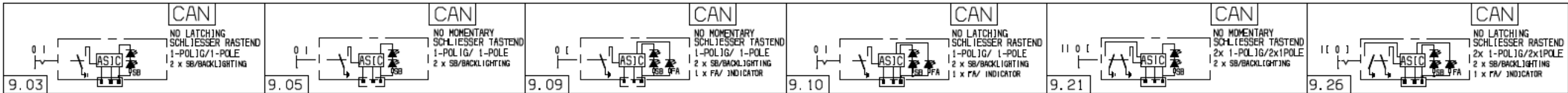
RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P3-4414-18	C	ALL	ADDED HARN AGG-T1388-000	RWE	06/07/08	SDL
P41086-06	D	-	1. SEE SHEET 1.	KTC	02/17/11	NLC
	-	-	2. SEE SHEET 1.			
	-	-	3. SEE SHEET 1.			
	-	-	4. SEE SHEET 1.			
	-	-	5. SEE SHEET 1.			

DAIMLER		Daimler Trucks North America	
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MATERIAL APPROVAL:	DATE:	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER DTNA 09ENG-V1037.	
N/A	N/A		
DRAWN BY:	DATE:	THIRD ANGLE PROJECTION	
R.EKKER	06/07/08		
CHECKED BY:	DATE:		
L.NGUYEN	06/07/08		
RESPONSIBLE ENGINEER:	DATE:		
L.NGUYEN	06/07/08		
APPROVED BY:	DATE:		
S.LARSEN	06/07/08		
DESCRIPTION:			
WRG-MUX_CTRL, MODULAR SW FIELD			
SUPPLEMENTARY DESCRIPTION:			
860B4			
P3			
ITEM/DRAWING NUMBER:	REVISION LETTER:	SHEET NUMBER:	
G06-53137	D	3 OF 3	

D

D

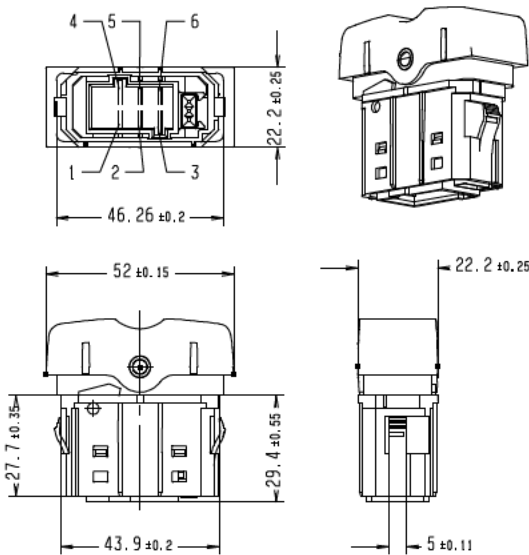
USED CIRCUIT DIAGRAMS



11B

C

C



TYPICAL

ROCKER CAP FOR
-001 AND -071 ONLY

B

B

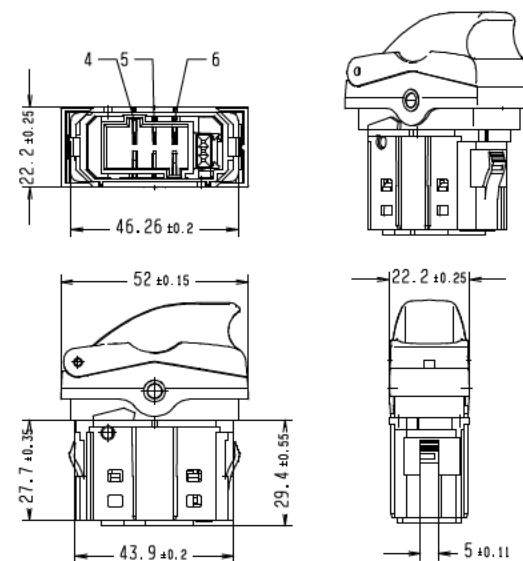
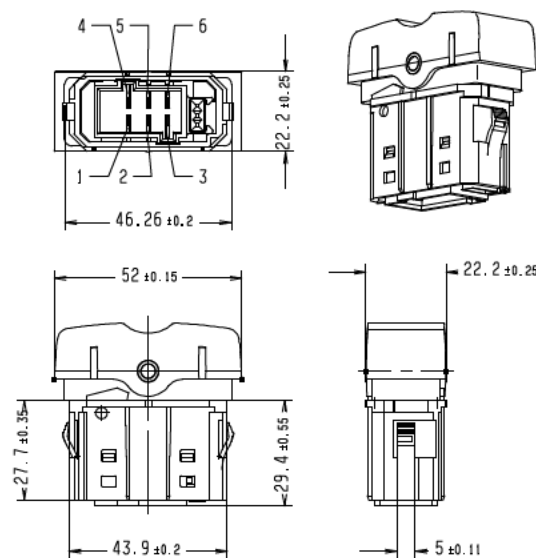
J4	J3	J2	J1	H	G2	G2																																																										
3241.0827	3241.0826	3241.0825	3241.0824	3241.0823	3241.0822	3241.0821	3241.0820	3241.0819	3241.0818	3241.0817	3241.0816	3241.0815	3241.0814	3241.0714	3241.0614	MARQUARDT-SCHALTER-NUMMER MARQUARDT-SCHALTER-NUMMER																																																
132	131	130	129	102	128	127	126	125	124	102	15	74	72	70	68	SWITCH ADDRESS ADRESSE																																																
9.21	9.21	9.21	9.09	9.21	9.10	9.05	9.05	9.05	9.05	9.21	9.03	9.05	9.10	9.10	9.10	MARQUARDT CIRCUIT SCHALTBULD																																																
NONE	NONE	NONE	AMBER	NONE	AMBER	NONE	NONE	NONE	NONE	NONE	NONE	NONE	AMBER	AMBER	AMBER	INDICATOR COLOR FARBE FUNKTIONSANZEIGE																																																
																SWITCH GRAPHIC (WHITE/BACKLIT 560nm GREEN) SYMBOL WEISS SUCHBELEUCHTUNG 560NM GRUEN																																																
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	LATCHING (RAST.) MOMENTARY (TAST.) NONE (OHNE)	UPPER OBEN		ROCKER																																													
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	LATCHING (RAST.) MOMENTARY (TAST.) NONE (OHNE)	CENTER MITTE				POSITION																																											
X	X	X		X						X						LATCHING (RAST.) MOMENTARY (TAST.) NONE (OHNE)	LOWER UNTEN		SCHALT- STELLUNG																																													
QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	DESCRIPTION																																																
ITEM NUMBER	DESCRIPTION	A06-53782-827	DESCRIPTION	SW-MSF, MUX, MID/R DOME LMPs	ITEM NUMBER	A06-53782-826	DESCRIPTION	SW-MSF, MUX, BUNK READG LMPs	ITEM NUMBER	A06-53782-825	DESCRIPTION	SW-MSF, MUX, HDWY DIST ADJ	ITEM NUMBER	A06-53782-824	DESCRIPTION	SW-MSF, MUX, LANE ALERT	ITEM NUMBER	A06-53782-823	DESCRIPTION	SW-MSF, MUX, ICU MENU SELECT	ITEM NUMBER	A06-53782-822	DESCRIPTION	SW-MSF, MUX, ATD REGEN INHIBIT	ITEM NUMBER	A06-53782-821	DESCRIPTION	SW-MSF, MUX, ATD MANUAL REGEN	ITEM NUMBER	A06-53782-820	DESCRIPTION	SW-MSF, MUX, SLEEPER FOOTWELL	ITEM NUMBER	A06-53782-819	DESCRIPTION	SW-MSF, MUX, MID DOME LAMP, BUNK	ITEM NUMBER	A06-53782-818	DESCRIPTION	SW-MSF, MUX, MID DOME LAMP, DASH	ITEM NUMBER	A06-53782-817	DESCRIPTION	SW-MSF, MUX, ICU MENU MY INFO	ITEM NUMBER	A06-53782-816	DESCRIPTION	SW-MSF, MUX, AUX HIGH BEAM	ITEM NUMBER	A06-53782-815	DESCRIPTION	SW-MSF, MUX, READ LMP, LOWER RT	ITEM NUMBER	A06-53782-814	DESCRIPTION	SW-MSF, MUX, OPT4, AMBER, LATCH	ITEM NUMBER	A06-53782-714	DESCRIPTION	SW-MSF, MUX, OPT3, AMBER, LATCH	ITEM NUMBER	A06-53782-614	DESCRIPTION	SW-MSF, MUX, OPT2, AMBER, LATCH
																DAIMLER Daimler Trucks North America		THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPRIETARY TO DAIMLER TRUCKS NORTH AMERICA LLC (DTNA) AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED, PUBLISHED, OR USED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF DTNA																																														
		MATERIAL APPROVAL N/A		DATE N/A		UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER DTNA 09ENG-W1037.										THIRD ANGLE PROJECTION				UNITS OF MEASURE MM																																												
		CHECKED BY A. SOBJESKI		DATE 07/30/09																																																												
		APPROVED BY P. BRANDT		DATE 07/30/09																																																												
		DESCRIPTION		SWITCH, ROCKER, MSF, MUX																																																												
		SUPPLEMENTARY DESCRIPTION		06410 P3																																																												
		ITEM/WORKING NUMBER		A06-53782														REV LETTER K		SHEET NUMBER 2 OF 2																																												

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8		7		6		5		4		3		2		1																			
DELIVERY MUST CONFORM EXACTLY WITH DRAWING SPECIFICATIONS AND, WHERE REQUIRED BY Q.A., WITH APPROVED Q.A. SAMPLES. ABSOLUTELY NO CHANGES ARE PERMITTED WITHOUT PRIOR APPROVAL BY DTNA LLC. THIS INCLUDES CHANGES TO: SOFTWARE, MATERIALS, INTERNAL COMPONENTS, MANUFACTURING PROCESSES.		DIE LIEFERUNGEN MUESSEN EXAKT MIT DEN ANFORDERUNGEN DER ZEICHNUNG UEBEREINSTIMMEN UND, FALLS VERLANGT MIT O.A., MIT GEPRUEFTEN O.A.MUSTERN. ES SIND ABSOLUT KEINE AENDERUNGEN ERLAUBT, AUSSER SIE WURDEN DURCH DTNA GENEHMIGT. DIES BETRIFFT FOLGENDE AENDERUNGEN: SOFTWARE, MATERIALIEN, VERBAUTE KOMPONENTEN UND DEN PRODUKTIONSPROZESS.		1. LIEFERANT MARQUARDT ODER GEPRUEFTER ERSATZLIEFERANT		2. KOMPONENTE IDENTIFIZIERT DURCH DIE SPEZIFIKATION 49-00051		3. DIE SCHALTER WERDEN DURCH LED'S BELEUCHTET		MAIGRUENE HINTERGRUNDBELEUCHTUNG: 560 +/-6nm		GELB: 587 +/-6 nm		ROT: 633 +/-6 nm		4. ALS REFERENZ, SCHALTER WERDEN ZU SCHALTMODULEN VERBUNDEN:		06-53140 MSF MASTER		06-53142 MSF SLAVE		5. ALS REFERENZ, VERBUNDENE SCHALTER P/N'S		06-53144 BLINDKAPPE		A06-53782 FESTVERBUNDENE SCHALTER		6. MINIMALE DRUCKHOEHE 3.2 mm		7. DIE GEZEIGTEN AUSMASSE SIND LEDIGLICH FUER DIE REFERENZMUSTER		8. KONTACT MATERIAL K3	
1. VENDOR: MARQUARDT OR APPROVED EQUIVALENT		2. IDENTIFY COMPONENT PER SPEC 49-00051.		3. SWITCHES ARE LED ILLUMINATED		LIME GREEN BACKLIGHTING: 560 +/-6 nm		AMBER INDICATOR: 587 +/-6 nm		RED INDICATOR: 633 +/-6 nm		4. FOR REFERENCE, SWITCHES CONNECT TO SWITCH MODULES:		06-53140 MSF MASTER		06-53142 MSF SLAVE		5. FOR REFERENCE, ASSOCIATED SWITCH P/N'S		06-53144 BLANK SWITCH COVER		A06-53782 MUX SWITCHES		6. MINIMUM CHARACTER HEIGHT 3.2 mm		7. DIMENSIONS SHOWN ARE FOR REFERENCE ONLY		8. CONTACT MATERIAL MARQUARDT K3					

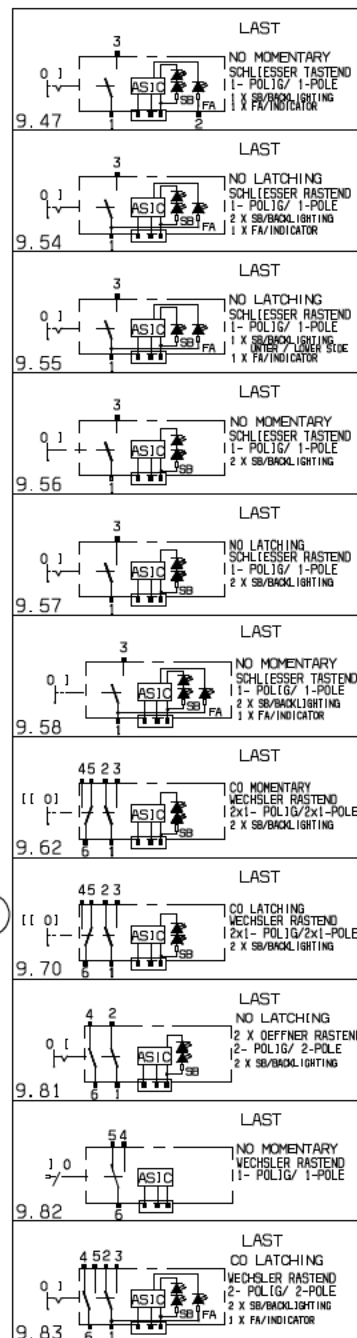
TYPICAL



-017 ONLY

USED CIRCUIT DIAGRAMS

(J3) 0 = CENTER POSITION
 1 = UP (TOP PRESS)
 11 = DOWN (BOTTOM PRESS)

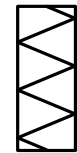
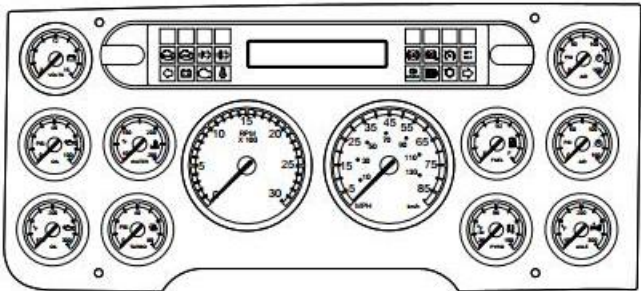
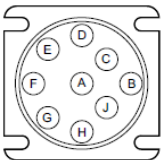
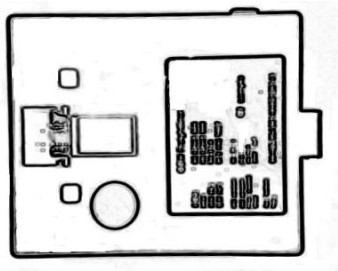
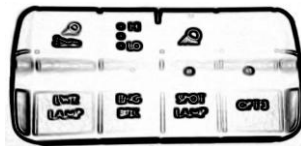
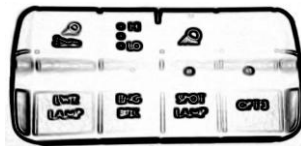
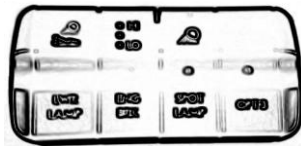
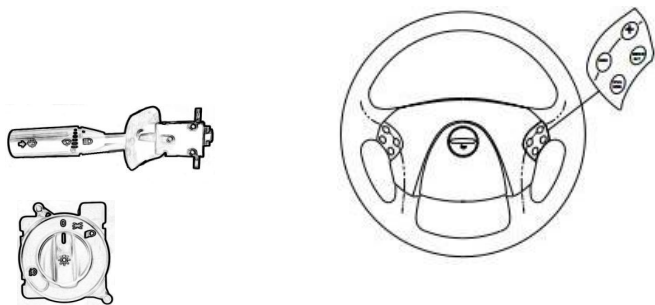


12B

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APP
P38289-04	G	-	1.REMASTERS & REDRAWN IN CATIA V5	NMD	01/12/10	PC
P38618-11	H	4C	2.ADDED -821 AND -822			
		4B	FOR A06-53763-622 9.56 WAS 9.47; 'NONE' WAS 'RED'; REMOVED DOT FROM CROSSHAIRS.	R3P	03/09/10	PC
P42689-03	J	5C	1:ADDED -823 AND -824	R3P	11/21/11	EA
		6B	2:ADDED CIRCUIT DIAGRAM FOR 9.70			
		6D	3:ADDED PIN NOMENCLATURE			
P42689-16	K	5C	ADDED -825	STB	10/02/12	EA
P42689-41	L	-	FIXING SMARAGD ISSUE OF MISSING DRAWING -826	STB	10/11/12	EA

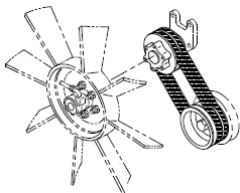
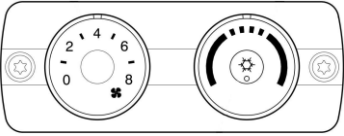
K		J1		G2																													
3241..1825		3241..1824		3241..1823		3241..1822		3241..1821		3241..1820		3241..1819		3241..1818		3241..1817		3241..1816		3241..1815		3241..1814		3241..1776		3241..1714		3241..1676		MARQUARDT PART NUMBER		MARQUARDT-SCHALTER-NUMMER	
202		203		202		201		200		169		153		195		199		198		197		194		193		192		191		SWITCH ADDRESS		ADRESSE	
9.70		9.56		9.70		9.56		9.56		9.47		9.56		9.57		9.57		9.56		9.83		9.55		9.57		9.55		9.57		MARQUARDT CIRCUIT		SCHALTBILD	
NONE		NONE		NONE		NONE		NONE		AMBER		NONE		NONE		NONE		NONE		AMBER		RED		NONE		AMBER		NONE		INDICATOR COLOR		FARBE FUNKTIONSANZEIGE	
 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		 + 		SWITCH GRAPHIC (WHITE/BACKLIT 560nm GREEN) SYMBOL WEISS SUCHBELEUCHTUNG 560NM GRUEN			
X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		LATCHING (RAST.)		MOMENTARY (TAST.)	
																														NONE (OHNE)		UPPER OBEN	
X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		LATCHING (RAST.)		CENTER MITTE	
X				X																										LATCHING (RAST.)		MOMENTARY (TAST.)	
		X				X		X		X		X		X		X		X		X		X		X		X		X		NONE (OHNE)		LOWER UNTEN	
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A06-53783-825		A06-53783-824		A06-53783-823		A06-53783-822		A06-53783-821		A06-53783-820		A06-53783-819		A06-53783-818		A06-53783-817		A06-53783-816		A06-53783-815		A06-53783-814		A06-53783-776		A06-53783-714		A06-53783-676		A06-53783-676		A06-53783-676	
DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION	
SW-MSF, HWD, CC LIMIT		SW-MSF, HWD, LIGHT TEST		SW-MSF, HWD, CC BAND ADJUST		SW-MSF, HWD, HSA OVRD		SW-MSF, HWD, ENGINE START		SW-MSF, HWD, LANE ALERT		SW-MSF, HWD, ATC NORM/SPIN		SW-MSF, HWD, DOME LMP, BUNK		SW-MSF, HWD, DOME LAMP, DASH		SW-MSF, HWD, ENG SHTDWN OVERRIDE		SW-MSF, HWD, REGEN INHIBIT		SW-MSF, HWD, OPT2, RED, LATCH		SW-MSF, HWD, OPT4, NONE, LATCH		SW-MSF, HWD, OPT4, AMBER LATCH		SW-MSF, HWD, OPT3, NONE, LATCH		SW-MSF, HWD, OPT3, NONE, LATCH			
DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER		DAIMLER	
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BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT		BY P. BRANDT	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI		BY A. SOBJESKI	
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE											

Exercise 3.10 Multiplexing / Electronic System Operations

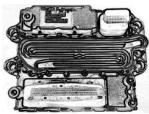
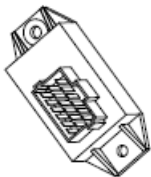
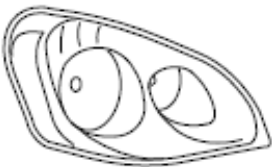
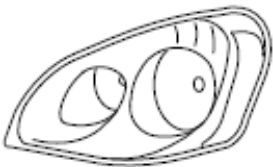


RADIO

COLLISION
AVOIDANCE



HEADLIGHTS



MCM

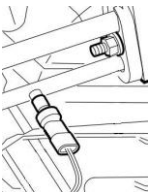
TRANSMISSION
CONTROL
MODULE



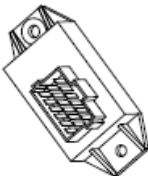
ACM



CPC



HVAC
Transducer



AMBIENT TEMP
SENSOR

LOW AIR
PRESSURE
SWITCHES



RELEASE NUMBER	REV	DATE	REVISION DESCRIPTION	BY	DATE	APP
PMT737-53	-	-	INITIAL RELEASE	RAC	11/21/88	SE
PMT788-J6	A	0F	1. ADDED PAGE 08 SN.	RAC	01/25/10	SE
	-	0E	2. UPDATED XDS/4/46 IN LOG.			
	-	0A	3. ADDED OPT COLE ONLY.			

14

CPC2 HARDWIRED I/O

- OI ALARM
- OI THERMOSTAT
- STOP ENGINE OVERRIDE
- THROTTLE PEDAL M/VS
- LOW COOLANT LEVEL SENSOR
- REMOTE THROTTLE
- VARIABLE SPEED GOVERNOR
- ENGINE STOP
- HOOD TILT SWITCH
- VEHICLE SPEED *
- NEUTRAL SWITCH
- FAST IDLE SWITCH
- MANUAL REGEN
- REGEN INHIBIT
- PARK BRAKE SW **

P/T POWER DISTRIBUTION MODULE (P/T PDM)

- IGNITION SWITCH
- RUN START
- MAG SWITCH
- BATTERIES
- POWER DISTRIBUTION
- STARTING AND CHARGING
- VEHICLE POWER SHUTDOWN FOR OPTIMIZED IDLE

CPC2+ COMMON POWERTRAIN CONTROLLER

MCM2 MOTOR CONTROL MODULE

ACM AFTERTREATMENT CONTROL MODULE

PNDB

ACM HARDWIRED I/O

- AMBIENT TEMP *
- DPF CAN *
- SCR CAN *
- SCR DOSING UNIT *
- TANK LEVEL *
- TANK TEMP *
- LINE HEATER(S) *
- DOSER TEMP *
- COOLANT VALVE
- UREA PUMP
- BATTERY

ICU3/4/4M (INSTRUMENT CLUSTER UNIT)

HARDWIRED INDICATORS:

- MIL LAMP *
- OI ACTIVE LAMP
- WAIT TO START *
- FUEL RESTRICTION

MULTIPLEXED INDICATORS:

- CHECK TRANS
- TRANS TEMP
- PARK BRAKE ON
- LOW COOLANT LEVEL
- BACKUP LAMP
- TACHOMETER
- WIF
- DPF REGENERATION LAMP
- UREA LAMP
- AMBER WARN LAMP
- RED STOP LAMP
- UREA GAUGE
- FUEL LEVEL

BROADCAST DATA:

- FUEL LEVEL

CENTRAL GATEWAY

MODULAR SWITCH FIELD (MSF)

- POWER TAKE OFF SWITCH
- ENGINE FAN OVERRIDE SWITCH
- CRUISE ON/OFF SWITCH
- CRUISE SET/RESUME SWITCH
- ENGINE BRAKE RETARDER SWITCH

VEHICLE SPEED SENSOR

TRANSMISSION ECU

LANE GUIDANCE

ABS (ANTILOCK BRAKE SYSTEM)

9-PIN DIAGNOSTIC CONNECTOR

SAM CHASSIS

- SERVICE BRAKE SWITCH
- CLUTCH SWITCH *
- PARK BRAKE SWITCH *
- A/C STATUS
- TWO SPEED AXLE SWITCH *

SAM CAB

STARTER (NON OPT. IDLE)

HVAC CONTROLS

VORAD SYSTEM

POSITIONING & LOCATION SYSTEMS

- QUALCOMM MCT, IMCT
- QUALCOMM OMNIVISION

LEGEND:

HARDWIRED

J1939 NETWORK

J1587 NETWORK

**** OPT IDLE ONLY**

*** OBD REQUIREMENT**

DAIMLER

Daimler Trucks North America

BLK DIAG 2010 ENG CTRL

2010 EPA

D06-73694

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P2-4706-08	A	ALL	INITIAL PRODUCTION RELEASE	NND	10/15/06	GAP
P2-4706-22	B1	3C	MODIFIED NOTE 14	NND	04/17/07	GAP
	B2	-	SEE SHEET 2			
	B3	-	SEE SHEET 5			
	B4	-	ADDED SHEET 10			

15A

INST CLSTR (ICU3/4/4M)
DIM_D_ECU_ICU3 (REF MOD81B)

DASH_H_ECU_ICU_1A

(-) J1708 NETWORK
(+) J1708 NETWORK

B3-1587-C # 1601 (O)-0.8
B10-1587-C # 1601 (DKG)-0.8

24

CENTRAL GATEWAY
MUX_CTRL_D_ECU_CGW_1A
(REF MOD835)

DASH_H_MDL_CGW_1A

J1708(+)
J1708(-)

2-1587+ # 1601 (DKG)-0.5
8-1587- # 1601 (O)-0.5

12

DL_DASH_O_S_1587+_JBLK
DL_DASH_O_S_1587-_JBLK

DL_DASH_O_JCT_1587_1A

1587+C # 1601 (DKG)-0.8
1587-C # 1601 (O)-0.8

A 1A
B 1B

9-PIN
DIAGNOSTIC
CONNECTOR

DL_DASH_O_JCT_DIGN_9P_1A

F-1587+D # 1601 (DKG)-0.8
G-1587-D # 1601 (O)-0.8
A-GND # 1204 (BK)-0.8
B-331 # 1601 (R)-0.8

9

DL_DASH_O_JCT_1587_2A

1587+D # 1601 (DKG)-0.8
1587-D # 1601 (O)-0.8

A 2A
B 2B

DL_DASH_O_S_GND_9P
GND # 1204 (BK) REF SHEET 2

J1708
JUNCTION
BLOCK
DL_D_JCT_BLK_1708

13 SAM_CAB
MUX_CTRL_D_ECU_SCAB_1A

DASH_H_ECU_SCAB_K_2B

OBD J1939, BAT (#571)
DIAGNOSTICS CONN, GND1 (#564)

3-331 # 1601 (R)-0.8
8-GND # 1204 (BK)-0.8

DIAGNOSTIC & DATALINK SYSTEM, J1587/1708 (DL)

(ENGINEERING NOTE: VAROPTS IS APPLIED ON THIS WIRE DIAGRAM)

WIRE SIZE
SHOWN IN MM²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

ITEM NUMBER:	G06-56989-015
DESCRIPTION:	WR-DL,CAT,MAN,SLPR,PREM,P3
ITEM NUMBER:	G06-56989-014
DESCRIPTION:	WRG-DL,CAT,AUTO,SLPR,PREM,P3
ITEM NUMBER:	G06-56989-013
DESCRIPTION:	WRG-DL,CAT,MAN,DYCB,PREM,P3
ITEM NUMBER:	G06-56989-012
DESCRIPTION:	WRG-DL,CAT,AUTO,DYCB,PREM,P3
ITEM NUMBER:	G06-56989-011
DESCRIPTION:	WRG-DL,POS,MAN,SLPR,PREM,P3
ITEM NUMBER:	G06-56989-010
DESCRIPTION:	WRG-DL,POS,AUTO,SLPR,PREM,P3
ITEM NUMBER:	G06-56989-009
DESCRIPTION:	WRG-DL,POS,MAN,DYCB,PREM,P3
ITEM NUMBER:	G06-56989-008
DESCRIPTION:	WRG-DL,POS,AUTO,DYCB,PREM,P3
ITEM NUMBER:	G06-56989-007
DESCRIPTION:	WRG-DL,CAT,MAN,SLPR,STD,P3
ITEM NUMBER:	G06-56989-006
DESCRIPTION:	WRG-DL,CAT,AUTO,SLPR,STD,P3
ITEM NUMBER:	G06-56989-005
DESCRIPTION:	WRG-DL,CAT,MAN,DYCB,STD,P3
ITEM NUMBER:	G06-56989-004
DESCRIPTION:	WRG-DL,CAT,AUTO,DYCB,STD,P3
ITEM NUMBER:	G06-56989-003
DESCRIPTION:	WRG-DL,POS,MAN,SLPR,STD,P3
ITEM NUMBER:	G06-56989-002
DESCRIPTION:	WRG-DL,POS,AUTO,SLPR,STD,P3
ITEM NUMBER:	G06-56989-001
DESCRIPTION:	WRG-DL,POS,MAN,DYCB,STD,P3
ITEM NUMBER:	G06-56989-000
DESCRIPTION:	WRG-DL,POS,AUTO,DYCB,STD,P3

- 1 APPLY TO: -000 THRU 015
- 2 APPLY TO: -000,-001,-002,-003,-008,-009,-010,-011 (POS ENGINE)
- 3 APPLY TO: -004,-005,-006,-007,-012,-013,-014,-015 (CAT ENGINE)
- 4 APPLY TO: -000,-001,-004,-005,-008,-009,-012,-013 (DAYCAB)
- 5 APPLY TO: -002,-003,-006,-007,-010,-011,-014,-015 (SLEEPER)
- 6 APPLY TO: -004,-006,-012,-014 (CAT ENGINE, AUTO TRANS)
- 7 APPLY TO: -005,-007,-013,-015 (CAT ENGINE, MANUAL TRANS)
- 8 APPLY TO: -000,-002,-008,-010 (POS ENGINE, AUTO TRANS)
- 9 APPLY TO: -001,-003,-009,-011 (POS ENGINE, MANUAL TRANS)
- 10 APPLY TO: -008 THRU 015 (PREMIUM)

11 TERMINALS SHALL BE GOLD PLATED FOR ALL J1939 CIRCUITS

12. FOR COMPLETE SYSTEM ARCHITECTURE, REFER TO
MODULE 280, NETWORK TOPOLOGY SCHEMATIC

13 REFER TO MODULE 32A (SAM_CAB) AND MODULE
32K (SAM_CHAS) FOR FUSE & RELAY LOCATION
AND CIRCUIT PROTECTION INFORMATION

14 TO OTHER J1587 DEVICES: ABS (MOD330),
AUTO TRANSMISSION (MOD34B), VORAD (MOD736),
LANE GUIDANCE (MOD736), QUALCOMM (786), ENGINE
PERFORMANCE MONITOR (813)

FREIGHTLINER
LLC

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION
OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH
IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.

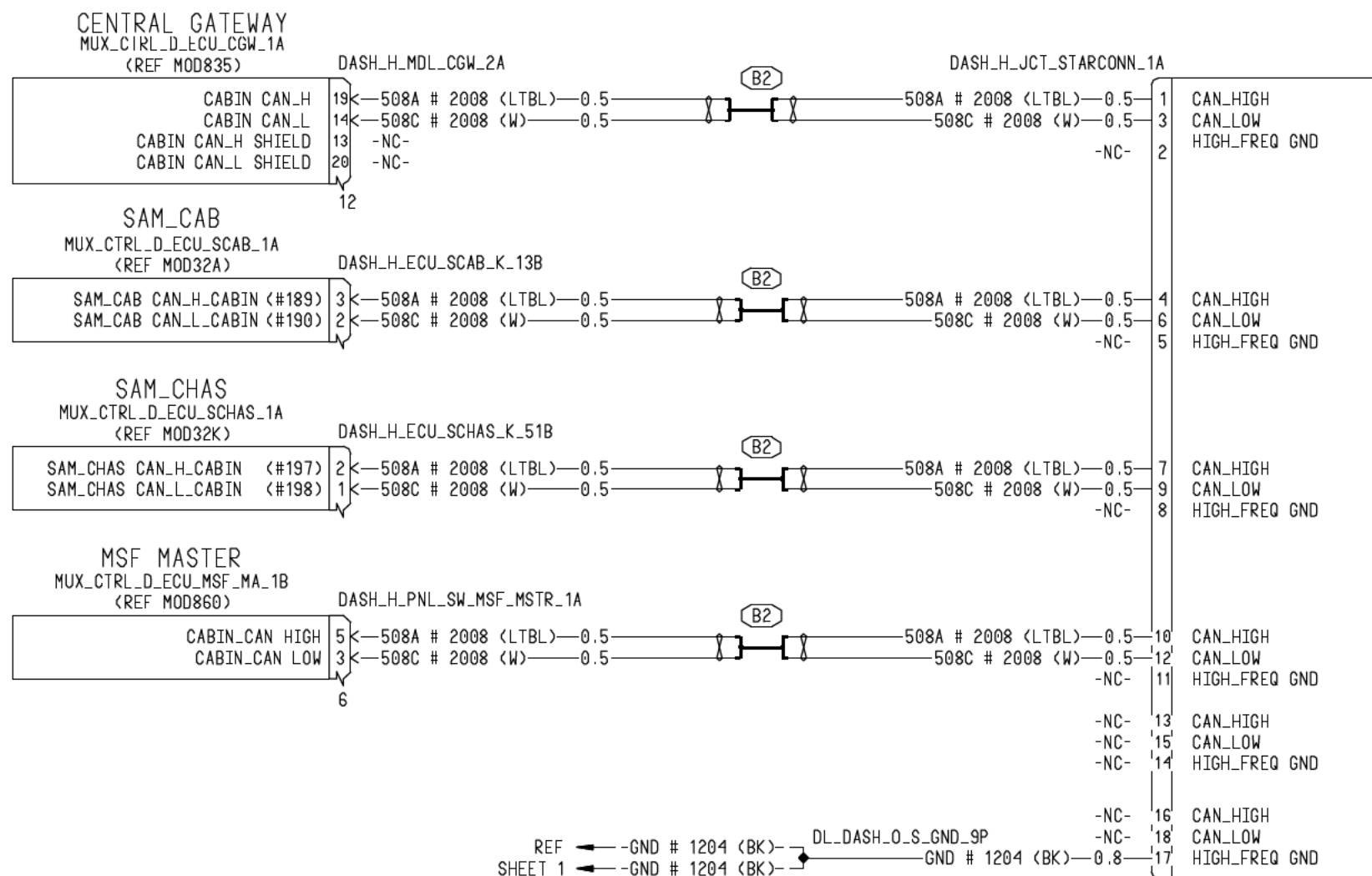
MATERIAL APPROVAL:	DATE:	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSM 0000-K17.
DRAWN BY: M. DOAN	DATE: 10/15/06	THIRD ANGLE PROJECTION
CHECKED BY: S. PERRON	DATE: 10/15/06	UNITS OF MEASURE MM
RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN	DATE: 10/15/06	APPROVED BY: G. PITTMAN
APPROVED BY: G. PITTMAN	DATE: 10/15/06	RESPONSIBLE MFG. ENGR: J. WEDDLE
DATE: 10/15/06	DATE: 04/17/07	

DESCRIPTION:
WRG-DL, DIAGNOSTIC AND DATALINK
160B4 P3

ITEM/DRAWING NUMBER:	REVISION LETTER:	SHEET NUMBER:
G06-56989	B	1 OF 10

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P21706-08	A	ALL	INITIAL PRODUCTION RELEASE	NND	10/15/06	GAP
P21706-22	B1	-	SEE SHEET 1	NND	04/17/07	GAP
	B2	6C-6D	WAS 48-25354-200, IS -201			
	B2	6C-6D	REMOVE NOTE 14			
	B3	-	SEE SHEET 5			
	B4	-	SEE SHEET 10			

15B



FREIGHTLINER LLC

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MATERIAL APPROVAL: DATE: .

UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOSH 0900-K17.

DRAWN BY: H. DOAN DATE: 10/15/06

CHECKED BY: S. PERRON DATE: 10/15/06

RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN DATE: 10/15/06

APPROVED BY: G. PITTMAN DATE: 10/15/06

THIRD ANGLE PROJECTION

UNITS OF MEASURE: MM

RESPONSIBLE MFG. ENGR: J. WEDDLE DATE: 04/17/07

DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK

SUPPLEMENTARY DESCRIPTION: 160B4 P3

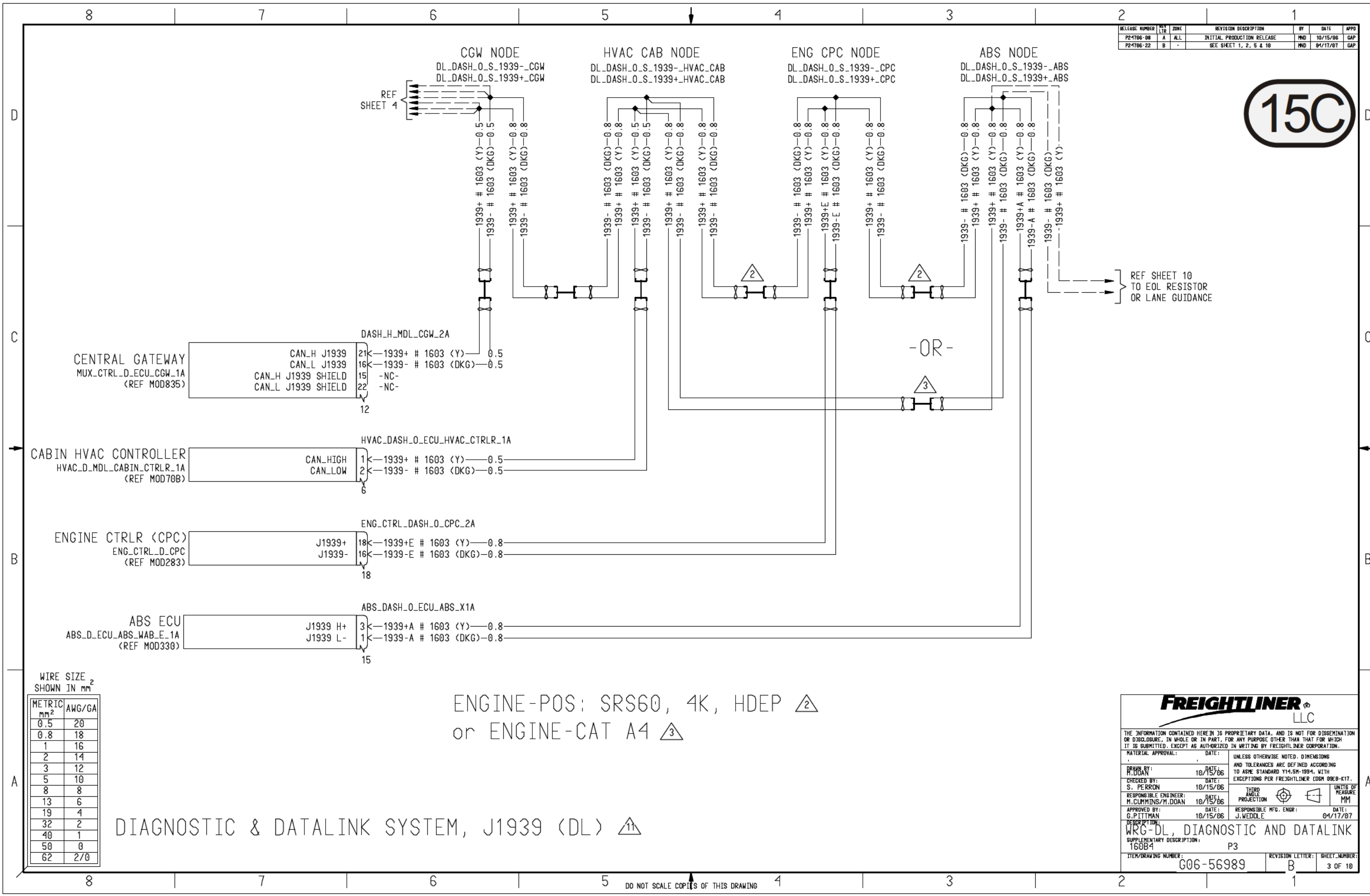
ITEM/DRAWING NUMBER: G06-56989

REVISION LETTER: B

SHEET NUMBER: 2 OF 10

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P21786-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P21786-22	B	-	SEE SHEET 1, 2, 5 & 10	MND	04/17/07	GAP

15C



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MATERIAL APPROVAL:	DATE:
DRAWN BY:	DATE:
CHECKED BY:	DATE:
RESPONSIBLE ENGINEER:	DATE:
APPROVED BY:	DATE:
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOHM 09E0-KIT.	
THIRD ANGLE PROJECTION	UNITS OF MEASURE: MM
RESPONSIBLE MFG. ENGR:	DATE:
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK 160B4	
ITEM/DRAWING NUMBER: G06-56989	REVISION LETTER: B SHEET NUMBER: 3 OF 10

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P24706-22	B	-	SEE SHEET 1, 2, 5 & 10	MND	04/17/07	GAP

15D

CGW NODE
DL_DASH_O_S_1939-_CGW
DL_DASH_O_S_1939+_CGW

RADIO NODE
DL_DASH_O_S_1939-_RAD
DL_DASH_O_S_1939+_RAD

ICU NODE
DL_DASH_O_S_1939-_ICU
DL_DASH_O_S_1939+_ICU

REF
SHEET 3

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
DL_A4
REF SHEET 5
TO HVAC
SLEEPER NODE

-OR-

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
DL_B4
REF SHEET 5
TO DIAGNOSTIC
CONNECTOR NODE

INST CLSTR (ICU4M)
DIM_D_ECU_ICU4M_1A
(REF MOD81B)

DASH_H_ECU_ICU_2A

1939+C # 1603 (Y)-0.8
1939-C # 1603 (DKG)-0.8
D5
D9
(+) J1939 NETWORK
(-) J1939 NETWORK

32

AUDIO_DASH_O_RADIO_1A RADIO REF (MOD74D)

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8
3
4
J1939 (+)
J1939 (-)

16

-OR-

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
DL_C4
REF SHEET 5
TO HVAC
SLEEPER NODE

-OR-

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8
DL_D4
REF SHEET 5
TO DIAGNOSTIC
CONNECTOR NODE

ICU4M
and/or
PREMIUM
RADIO

ICU3
or
ICU4

ICU3/ICU4, NO PREMIUM RADIO

ICU4M and/or PREMIUM RADIO

DIAGNOSTIC & DATALINK SYSTEM, J1939 (DL)

WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DO NOT SCALE COPIES OF THIS DRAWING

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MATERIAL APPROVAL:	DATE:
DRAWN BY: H. DOAN	DATE: 10/15/06
CHECKED BY: S. PERRON	DATE: 10/15/06
RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN	DATE: 10/15/06
APPROVED BY: G. PITTMAN	DATE: 10/15/06
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSN 0908-K17.	
THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
RESPONSIBLE MFG. ENGR: J. WEDDLE	DATE: 04/17/07
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK	
SUPPLEMENTARY DESCRIPTION: 160B4 P3	
ITEM/DRAWING NUMBER: G06-56989	REVISION LETTER: B
SHEET NUMBER: 4 OF 10	

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P24706-22	B1	-	SEE SHEET 1	MND	04/17/07	GAP
	B2	-	SEE SHEET 2			
	B3	TR	WAS 48-25354-280, JS -282			
	B3	TR	REMOVE NOTE 14			
	B4	-	SEE SHEET 10			

15E

HVAC SLEEPER NODE
DL_DASH_O_S_1939-_HVAC_SLPR
DL_DASH_O_S_1939+_HVAC_SLPR

9-PIN DIAG CONN NODE
DL_DASH_O_S_1939-_DIGN_9P
DL_DASH_O_S_1939+_DIGN_9P

REF SHEET 4
TO ICU NODE

DL_A4 1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

REF SHEET 4
TO CGW NODE

DL_C4 1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

SLEEPER
5

SLEEPER
HVAC CTRLR
HVAC_D_MDL_SLPR_CTRLR_1A
(REF MOD70C)

HVAC_AUX_FLR_O_CTRLR_HVAC_1A

CAN_LOW
CAN_HIGH

2 1939- # 1603 (DKG)-0.5
1 1939+ # 1603 (Y)-0.5

6

FLR_LH_H_DASH_CBL_2A DASH_H_FLR_LH_CBL_2A

13 13 1939- # 1603 (DKG)-0.8
12 12 1939+ # 1603 (Y)-0.8

14

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

DASH_H_ENG_XMSN_BHA_1A

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

55
56
76

CAT ENGINE 3

REF SHT 6, CONFIG 1 OR 2
REF SHT 7, CONFIG 26
REF SHT 9, CONFIG 21 OR 24

REF SHEET 4
TO ICU NODE

DL_B4 1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

REF SHEET 4
TO CGW NODE

DL_D4 1939+ # 1603 (Y)-0.8
1939- # 1603 (DKG)-0.8

DAYCAB
4

DL_DASH_O_RES_DL_1939_2A

1939- # 1603 (DKG)-0.8
1939+ # 1603 (Y)-0.8

2
1

POS ENGINE 2

REF SHT 6, CONFIG 3 OR 4
REF SHT 7, CONFIG 27
REF SHT 9, CONFIG 22,
23, 25 OR 27

CENTRAL GATEWAY
MUX_CTRL_D_ECU_CGW_1A
(REF MOD835)

DASH_H_MDL_CGW_2A

DIAGNOSTIC CAN_L
DIAGNOSTIC CAN_L SHIELD
DIAGNOSTIC CAN_H
DIAGNOSTIC CAN_H SHIELD

18 508G # 2008 (BR-W)-0.5
24 -NC-
23 508E # 2008 (BR-LTBL)-0.5
17 -NC-
12

B3

DL_DASH_O_JCT_DIGN_9P_1A

9-PIN
DIAGNOSTIC
CONNECTOR

H 508E # 2008 (BR-LTBL)-0.5
J 508G # 2008 (BR-W)-0.5
C 1939+D # 1603 (Y)-0.8
D 1939-D # 1603 (DKG)-0.8

WIRE SIZE
SHOWN IN MM²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

SLEEPER 5 or DAYCAB 4

ENGINE-POS: SRS60, 4K, HDEP 2

or ENGINE-CAT A4 3

DIAGNOSTIC & DATALINK SYSTEM, J1939 (DL) 11

FREIGHTLINER LLC

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MATERIAL APPROVAL: DATE: 10/15/06

DRAWN BY: M. DOAN DATE: 10/15/06

CHECKED BY: S. PERRON DATE: 10/15/06

RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN DATE: 10/15/06

APPROVED BY: G. PITTMAN DATE: 10/15/06

RESPONSIBLE MFG. ENGR: J. WEDDLE DATE: 04/17/07

DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK

SUPPLEMENTARY DESCRIPTION: 160B4 P3

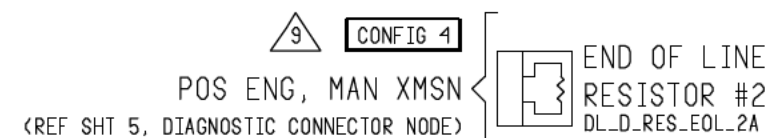
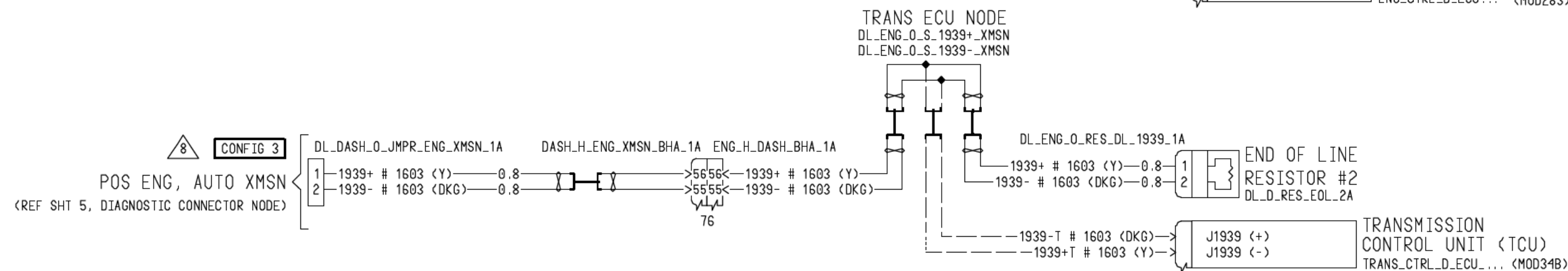
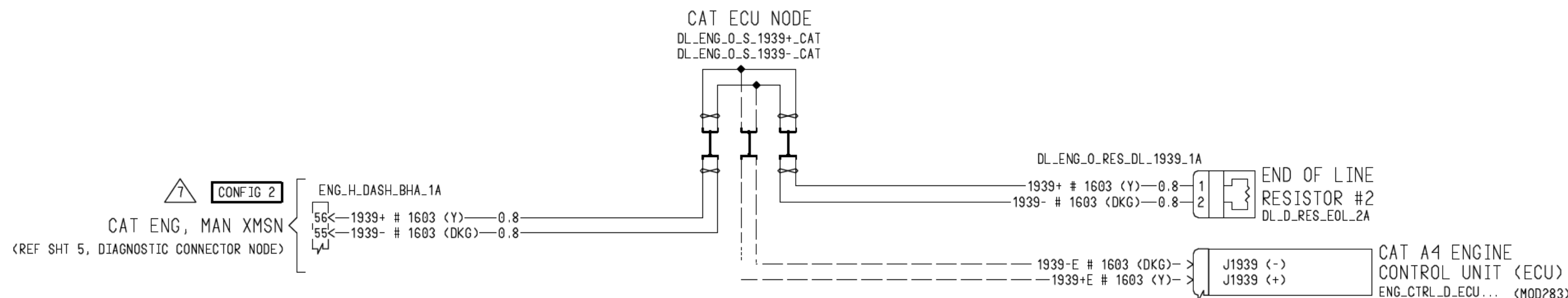
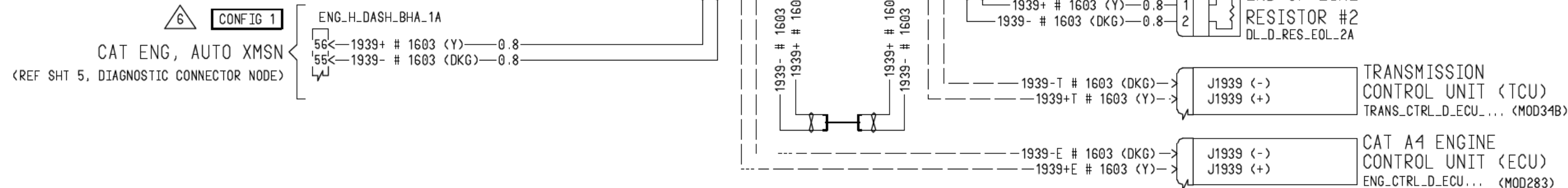
ITER/DRAWING NUMBER: G06-56989

REVISION LETTER: B

SHEET NUMBER: 5 OF 10

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-08	A	ALL	INITIAL PRODUCTION RELEASE	NND	10/15/06	GAP
P24706-22	B	-	SEE SHEET 1, 2, 5 & 10	NND	04/17/07	GAP

15F



WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DIAGNOSTIC & DATALINK SYSTEM, J1939: ENGINE/TRANSMISSION (DL)

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MATERIAL APPROVAL:		DATE:	
DRAWN BY: H. DOAN		DATE: 10/15/06	
CHECKED BY: S. PERRON		DATE: 10/15/06	
RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN		DATE: 10/15/06	
APPROVED BY: G. PITTMAN		DATE: 10/15/06	
THIRD ANGLE PROJECTION		UNITS OF MEASURE MM	
RESPONSIBLE MFG. ENGR: J. WEDDLE		DATE: 04/17/07	
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK			
SUPPLEMENTARY DESCRIPTION: 160B4		P3	
ITEM/DRAWING NUMBER: G06-56989		REVISION LETTER: B	
		SHEET NUMBER: 6 OF 10	

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P24706-22	B	-	SEE SHEET 1, 2, 5 & 10	MND	04/17/07	GAP

15G

NO VORAD

CAT ENG, ALI XMSN

ALI XMSN DSPLY NODE
TRANS_CTRL_DASH_O.S_1939+_ALI
TRANS_CTRL_DASH_O.S_1939-_ALI

23-13148-204
DL_DASH_O.RES_DL_1939_2A

END OF LINE
RESISTOR #2

ALI XMS DSPLY
TRANS_CTRL_D... (MOD34B)

J1939 (-)
J1939 (+)

REF SHEET 5
TO DIAGNOSTIC
CONNECTOR NODE

DASH_H_ENG_XMSN_BHA_1A ENG_H_DASH_BHA_1A

1939+ # 1603 (Y) 5656 1939+ # 1603 (Y) 0.8
1939- # 1603 (DKG) 5555 1939- # 1603 (DKG) 0.8
1939+ # 1603 (Y) 5857 1939- # 1603 (DKG) 0.8
1939- # 1603 (DKG) 5758 1939+ # 1603 (Y) 0.8

76

CAT ECU NODE
DL_ENG_O.S_1939+_CAT
DL_ENG_O.S_1939-_CAT

TRANS ECU NODE
DL_ENG_O.S_1939+_XMSN
DL_ENG_O.S_1939-_XMSN

TRANSMISSION
CONTROL UNIT (TCU)
TRANS_CTRL_D_ECU... (MOD34B)

J1939 (-)
J1939 (+)

CAT A4 ENGINE
CONTROL UNIT (ECU)
ENG_CTRL_D_ECU... (MOD283)

J1939 (-)
J1939 (+)

1939-T # 1603 (DKG)
1939+T # 1603 (Y)

ALI XMSN DSPLY NODE
TRANS_CTRL_DASH_O.S_1939+_ALI
TRANS_CTRL_DASH_O.S_1939-_ALI

23-13148-204
DL_DASH_O.RES_DL_1939_2A

END OF LINE
RESISTOR #2

ALI XMS DSPLY
TRANS_CTRL_D... (MOD34B)

J1939 (-)
J1939 (+)

23-13148-206
DL_DASH_O.JMPR_ENG_XMSN_1A

REF SHEET 5
TO DIAGNOSTIC
CONNECTOR NODE

DASH_H_ENG_XMSN_BHA_1A ENG_H_DASH_BHA_1A

1939+ # 1603 (Y) 5656 1939+ # 1603 (Y) 0.8
1939- # 1603 (DKG) 5555 1939- # 1603 (DKG) 0.8
1939+ # 1603 (Y) 5857 1939+ # 1603 (Y) 0.8
1939- # 1603 (DKG) 5758 1939- # 1603 (DKG) 0.8

76

TRANS ECU NODE
DL_ENG_O.S_1939+_XMSN
DL_ENG_O.S_1939-_XMSN

TRANSMISSION
CONTROL UNIT (TCU)
TRANS_CTRL_D_ECU... (MOD34B)

J1939 (-)
J1939 (+)

1939-T # 1603 (DKG)
1939+T # 1603 (Y)

WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DIAGNOSTIC & DATALINK SYSTEM, J1939: ENGINE/TRANSMISSION (DL) 11

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MATERIAL APPROVAL:	DATE:
DRAWN BY: H. DOAN	DATE: 10/15/06
CHECKED BY: S. PERRON	DATE: 10/15/06
RESPONSIBLE ENGINEER: M. CUMMINS/H. DOAN	DATE: 10/15/06
APPROVED BY: G. PITTMAN	DATE: 10/15/06
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSK 0000-K17.	
THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
RESPONSIBLE MFG. ENGR: J. WEDDLE	DATE: 04/17/07
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK	
SUPPLEMENTARY DESCRIPTION: 160B4 P3	
ITEM/DRAWING NUMBER: G06-56989	REVISION LETTER: B
SHEET NUMBER: 7 OF 10	

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VORAD

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P21786-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P21786-22	B	-	SEE SHEET 1, 2, 5 & 10	MND	04/17/07	GAP

15H

CAT ENG, AUTO XMSN (REF SHT 9, CONFIG 21)
or CAT ENG, ALI XMSN (REF SHT 9, CONFIG 24)

6 CONFIG 11

ENG_H-DASH_BHA_1A

56<-1939+ # 1603 (Y)-0.8
55<-1939- # 1603 (DKG)-0.8
57<-1939- # 1603 (DKG)-0.8
58<-1939+ # 1603 (Y)-0.8
76

CAT ECU NODE
DL_ENG_O_S_1939+_CAT
DL_ENG_O_S_1939-_CAT

TRANS ECU NODE
DL_ENG_O_S_1939+_XMSN
DL_ENG_O_S_1939-_XMSN

1939-T # 1603 (DKG)-
1939+T # 1603 (Y)-

J1939 (-)
J1939 (+)

TRANSMISSION
CONTROL UNIT (TCU)
TRANS_CTRL_D_ECU... (MOD34B)

1939-E # 1603 (DKG)-
1939+E # 1603 (Y)-

J1939 (-)
J1939 (+)

CAT A4 ENGINE
CONTROL UNIT (ECU)
ENG_CTRL_D_ECU... (MOD283)

CAT ENG, MAN XMSN (REF SHT 9, CONFIG 21)

7 CONFIG 12

ENG_H-DASH_BHA_1A

56<-1939+ # 1603 (Y)-0.8
55<-1939- # 1603 (DKG)-0.8
57<-1939- # 1603 (DKG)-0.8
58<-1939+ # 1603 (Y)-0.8
76

CAT ECU NODE
DL_ENG_O_S_1939+_CAT
DL_ENG_O_S_1939-_CAT

TRANS ECU NODE
DL_ENG_O_S_1939+_XMSN
DL_ENG_O_S_1939-_XMSN

1939-E # 1603 (DKG)-
1939+E # 1603 (Y)-

J1939 (-)
J1939 (+)

CAT A4 ENGINE
CONTROL UNIT (ECU)
ENG_CTRL_D_ECU... (MOD283)

POS ENG, AUTO XMSN (REF SHT 9, CONFIG 22)
or POS ENG, ALI XMSN (REF SHT 9, CONFIG 25)

8 CONFIG 13

ENG_H-DASH_BHA_1A

56<-1939+ # 1603 (Y)-0.8
55<-1939- # 1603 (DKG)-0.8
57<-1939- # 1603 (DKG)-0.8
58<-1939+ # 1603 (Y)-0.8
76

1939-T # 1603 (DKG)-
1939+T # 1603 (Y)-

J1939 (+)
J1939 (-)

TRANSMISSION
CONTROL UNIT (TCU)
TRANS_CTRL_D_ECU... (MOD34B)

WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DIAGNOSTIC & DATALINK SYSTEM, J1939: ENGINE/TRANSMISSION (DL) 11

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MATERIAL APPROVAL:	DATE:
DRAWN BY: M. DOAN	DATE: 10/15/06
CHECKED BY: S. PERRON	DATE: 10/15/06
RESPONSIBLE ENGINEER: M. CUMMINS/M. DOAN	DATE: 10/15/06
APPROVED BY: G. PITTMAN	DATE: 10/15/06
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOHM 0908-KIT.	
THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
RESPONSIBLE MFG. ENGR: J. WEDDLE	DATE: 04/17/07
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK	
SUPPLEMENTARY DESCRIPTION: 160B4 P3	
ITEM/DRAWING NUMBER: G06-56989	REVISION LETTER: B
SHEET NUMBER: 8 OF 10	

VORAD

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-08	A	ALL	INITIAL PRODUCTION RELEASE	MND	10/15/06	GAP
P24706-22	B	-	SEE SHEET 1, 2, 5 & 10	MND	04/17/07	GAP

- 6 CAT ENG, AUTO XMSN (REF SHT 8, CONFIG 11)
- 7 CAT ENG, MAN XMSN (REF SHT 8, CONFIG 12)

CONFIG 21

DASH_H_ENG_XMSN_BHA_1A

56 1939+ # 1603 (Y) REF SHEET 5, TO
55 1939- # 1603 (DKG) DIAGNOSTIC CONN NODE
58 1939+ # 1603 (Y)
57 1939- # 1603 (DKG)

DASH_H_CHAS_F_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

ALI XMSN DSPLY NODE
TRANS_CTRL_DASH_O_S_1939+_ALI
TRANS_CTRL_DASH_O_S_1939-_ALI

- 6 CAT ENG, ALI XMSN
(REF SHT 8, CONFIG 11)

CONFIG 24

DASH_H_ENG_XMSN_BHA_1A

56 1939+ # 1603 (Y) REF SHEET 5, TO
55 1939- # 1603 (DKG) DIAGNOSTIC CONN NODE
58 1939+ # 1603 (Y)
57 1939- # 1603 (DKG)

DASH_H_CHAS_F_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

ALI XMS DSPLY
TRANS_CTRL_D...MOD34B)

J1939 (-)
J1939 (+)

VORAD ECU NODE

CAWS_CHAS_F_O_S_1939+_VORAD
CAWS_CHAS_F_O_S_1939-_VORAD

151

- 8 POS ENG, AUTO XMSN
(REF SHT 8, CONFIG 13)

CONFIG 22

DASH_H_ENG_XMSN_BHA_1A

56 1939+ # 1603 (Y) REF SHEET 5
55 1939- # 1603 (DKG) TO DIAGNOSTIC
58 1939+ # 1603 (Y) CONNECTOR NODE
57 1939- # 1603 (DKG)

DL_DASH_O_JMPR_ENG_XMSN_1A

1
2

DASH_H_CHAS_F_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

ALI XMSN DSPLY NODE
TRANS_CTRL_DASH_O_S_1939+_ALI
TRANS_CTRL_DASH_O_S_1939-_ALI

- 9 POS ENG, MAN XMSN
(REF SHT 5, TO DIAGN
CONNECTOR NODE)

CONFIG 23

CAWS_DASH_O_JMPR_CHAS_F_1A

1 1939+ # 1603 (Y)
2 1939- # 1603 (DKG)

DASH_H_CHAS_F_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

- 8 POS ENG, ALI XMSN
(REF SHT 8, CONFIG 13)

CONFIG 25

DASH_H_ENG_XMSN_BHA_1A

56 1939+ # 1603 (Y) REF SHEET 5
55 1939- # 1603 (DKG) TO DIAGNOSTIC
58 1939+ # 1603 (Y) CONNECTOR NODE
57 1939- # 1603 (DKG)

DL_DASH_O_JMPR_ENG_XMSN_1A

1
2

DASH_H_CHAS_F_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

ALI XMS DSPLY
TRANS_CTRL_D... (MOD34B)

J1939 (-)
J1939 (+)

CHAS_F_H_DASH_BHB_1A

11 1939+ # 1603 (Y)
10 1939- # 1603 (DKG)

CAWS_CHAS_F_O_RES_DL_1939_1A

1 1939+ # 1603 (DKG)
2 1939- # 1603 (Y)

END OF LINE
RESISTOR #2
DL_D_RES_EOL_2A

VORAD FRONT ANTENNA
CAWS_D_ANI_VORAD_1A
(MOD736)

J1939 (-)
J1939 (+)

WIRE SIZE
SHOWN IN MM²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

DIAGNOSTIC & DATALINK SYSTEM, J1939: ENGINE/TRANS, W/VORAD (DL)

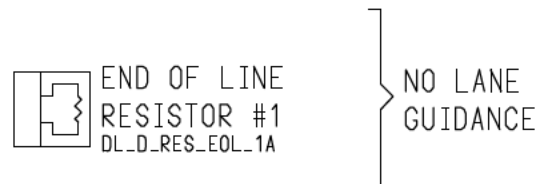
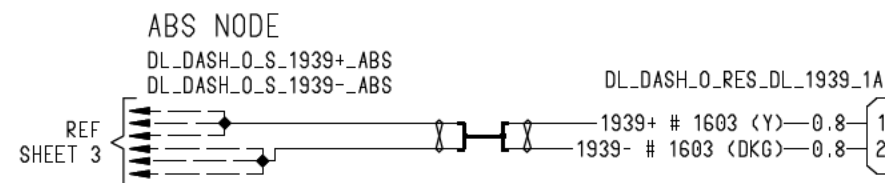
11

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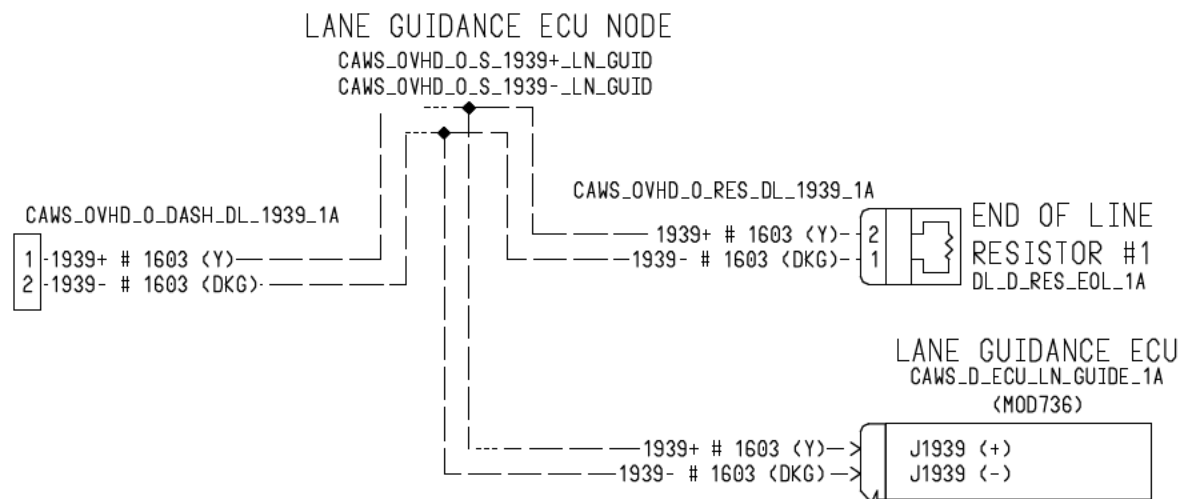
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MATERIAL APPROVAL:	DATE:
DRAWN BY: H. DOAN	DATE: 10/15/06
CHECKED BY: S. PERRON	DATE: 10/15/06
RESPONSIBLE ENGINEER: M. CUMMINS/H. DOAN	DATE: 10/15/06
APPROVED BY: G. PITTMAN	DATE: 10/15/06
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK 160B4	DATE: 04/17/07
ITER/DRAWING NUMBER: G06-56989	REVISION LETTER: B
SHEET NUMBER: 9 OF 10	

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24706-22	B	ALL	ADD SHEET 10	END	04/17/07	GAP

15J



-OR-



WITH
LANE
GUIDANCE

WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

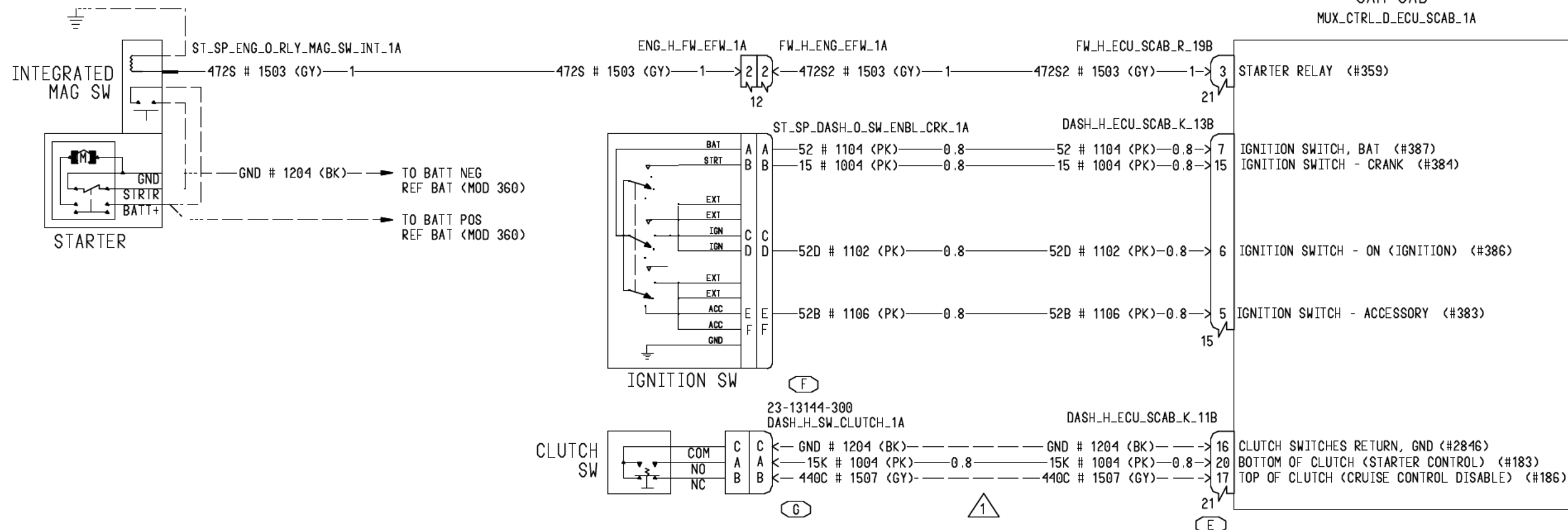
DIAGNOSTIC & DATALINK SYSTEM, J1939: W/ -or- W/O LANE GUIDANCE (DL) ⚠

FREIGHTLINER LLC	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.	
MATERIAL APPROVAL:	DATE:
DRAWN BY: H. DOAN	DATE: 10/15/06
CHECKED BY: S. PERRON	DATE: 10/15/06
RESPONSIBLE ENGINEER: M. DOAN/M. CUMMINS	DATE: 10/15/06
APPROVED BY: G. PITTMAN	DATE: 10/15/06
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSM 0909-K17.	
THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
RESPONSIBLE MFG. ENGR: J. WEDDLE	DATE: 04/17/07
DESCRIPTION: WRG-DL, DIAGNOSTIC AND DATALINK 160B4	
ITEM/DRAWING NUMBER: G06-56989	REVISION LETTER: B
SHEET NUMBER: 10 OF 10	

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P2102-02	-	-	INITIAL RELEASE	RWE	09/21/06	SOL
P32194-15	A	-	ADDED HARN PROP A06-61151-000	LD	07/21/07	TWY
P32194-04	B	3/4	1. ADDED - 084 THRU - 007	TSM	11/20/07	SOL
			2. SEE SHEETS 5 THRU 8			
P31688-57	C	-	SEE SHIT 5 AND 7	RWE	05/16/08	TWY
P35900-45	D	6C	ADDED MISSING HARN A06-61389-000	RWE	08/22/08	SOL
P36700-P4	E	3B	DASH_H_ECU_SCAB_K_11B	ABL	02/08/09	SOL
			PIN 17 WAS PIN 20			
			PIN 20 WAS PIN 17			
			DEVIATION # FRA-061129-04-1002			
			SEE SHEETS 2 THRU 8			
P37700-R4	F	5B	23-13144-300 WAS 23-13144-301	RWE	06/26/09	SOL
P37700-R1	G	5B	ADDED ONLY	RWE	06/07/09	SOL
	G	-	SEE SHIT 2,5,6			

16A

SAM CAB
MUX_CTRL_D_ECU_SCAB_1A



WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

- 1 REF MOD 149 FOR CRUISE CONTROL WIRING
- 2 REF MOD 34B FOR TRANS WIRING

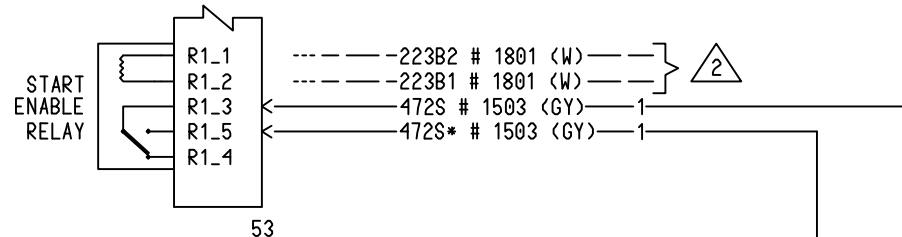
FOR ENGINEERING REFERENCE ONLY:
VARIANT OPTIONS HAVE BEEN USED
ON THIS DRAWING

DAIMLER										Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.											
MATERIAL APPROVAL:		DATE:		UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOSH 0908-K17.							
N/A		N/A									
DRAWN BY:		DATE:		THIRD ANGLE PROJECTION							
R. LERKER		09/21/06									
CHECKED BY:		DATE:									
S. PERRON		09/21/06		UNITS OF MEASURE MM							
RESPONSIBLE ENGINEER:		DATE:									
T. HALL, JR.		09/21/06									
APPROVED BY:		DATE:		RESPONSIBLE MFG. ENGR:		DATE:					
S. LARSEN		09/21/06		N/A		N/A					
DESCRIPTION:											
WRG-ST SP, START CONTROL											
SUPPLEMENTARY DESCRIPTION: 156B4											
P3 - 2007 EPA											
ITEM/DRAWING NUMBER:										REVISION LETTER:	
G06-61996										G	
										SHEET NUMBER:	
										1 OF 8	

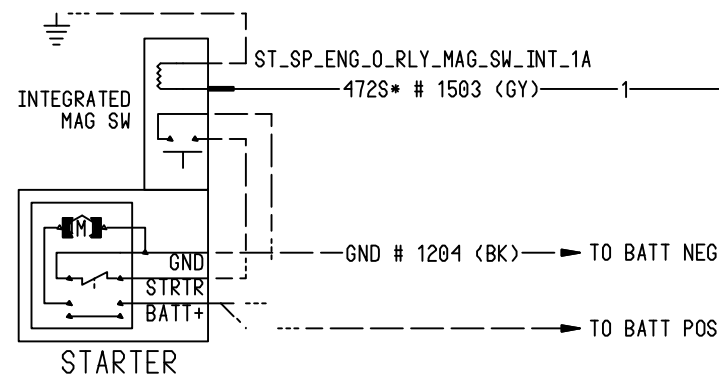
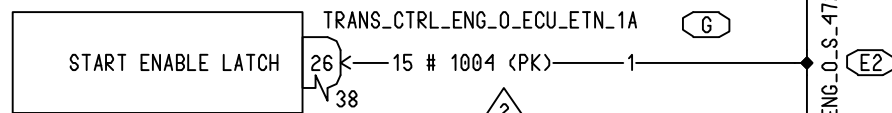
RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24702-82	-	-	INITIAL RELEASE	RME	09/21/06	SDL
P32494-15	A	-	ADDED HARN PROP A06-67151-001	LD	07/24/07	TWY
P32494-04	B	-	SEE SHEETS 1,2,4,5,6, AND 7,ADDED HARN	TSM	11/20/07	SDL
P34688-57	C	-	SEE SHT 5 AND 7	RME	05/16/08	TWY
P35900-A5	D	6C	ADDED MISSING HARN A06-37300-002	RME	08/22/08	SDL
P36700-P4	E	3B	1:DASH_H_ECU_SCAB_K_11B PIN 17 WAS PIN 20, PIN 20 WAS PIN17 DEVIATION #FRA-061129-04-1002 SEE SHEET 1 THRU 8 2:ST_SP_ENG_O.S.-472S-1A WAS ST_SP_ENG_O.S.-472S* SEE SHEETS 3,4,7,8	ASL	02/08/09	SDL
P37700-B4	F	4B	REMOVED CIRCUITS FOR CLUTCH SW	RME	06/26/09	SDL
P37700-R1	G	-	SEE SHT 1,2,5,6	RME	08/07/09	SDL

16B

POWERTRAIN
POWER DISTRIBUTION
MODULE (PDM)
ENG_CTRL_D_PDM_ASSY_1A



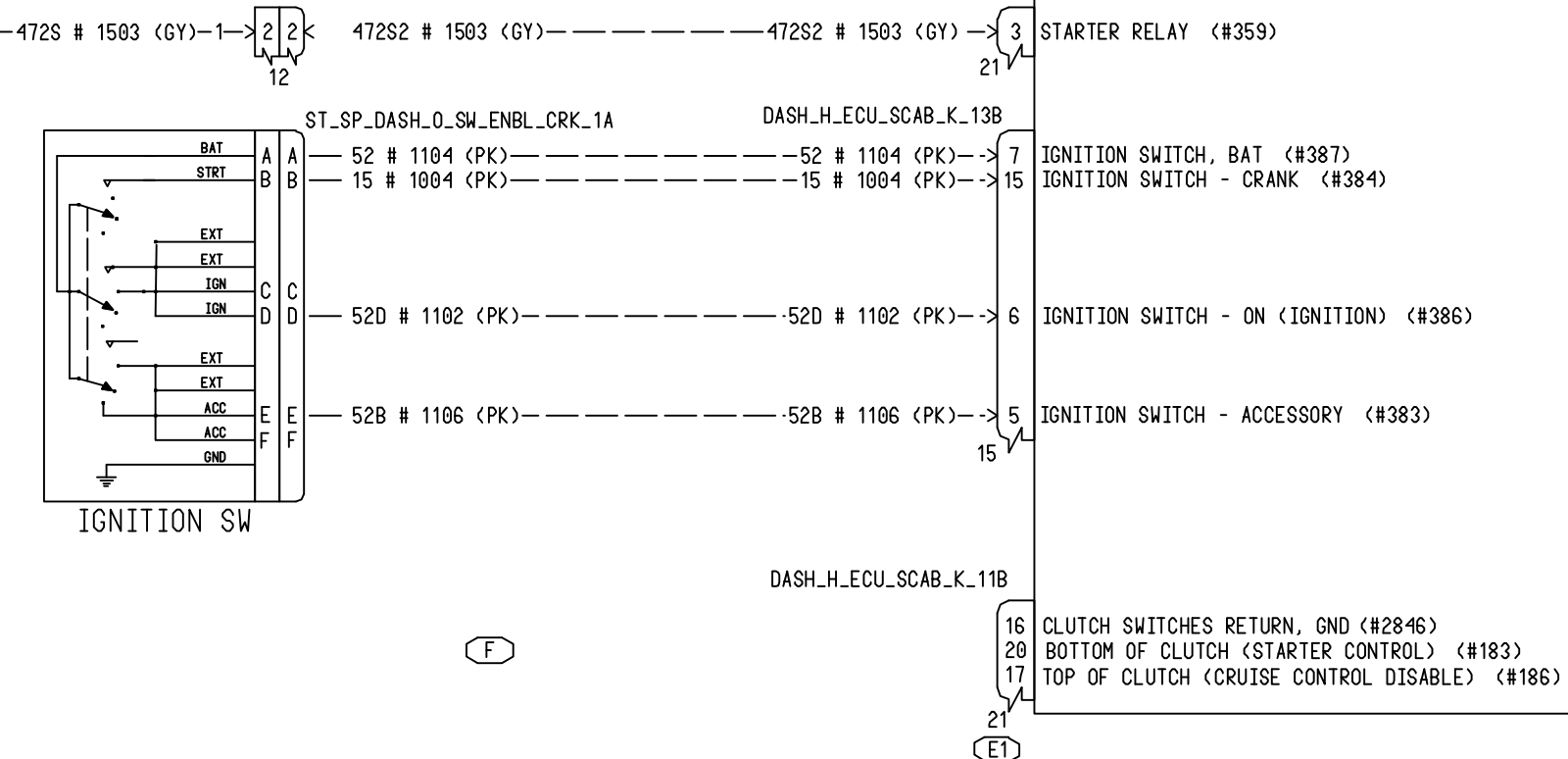
EATON TRANSMISSION ECU



ENG_H_FW_EFW_1A

FW_H_ENG_EFW_1A

FW_H_ECU_SCAB_R_19B



WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

-002 STRT CTRL, INTEGRATED MAG SWITCH (IMS), DM3

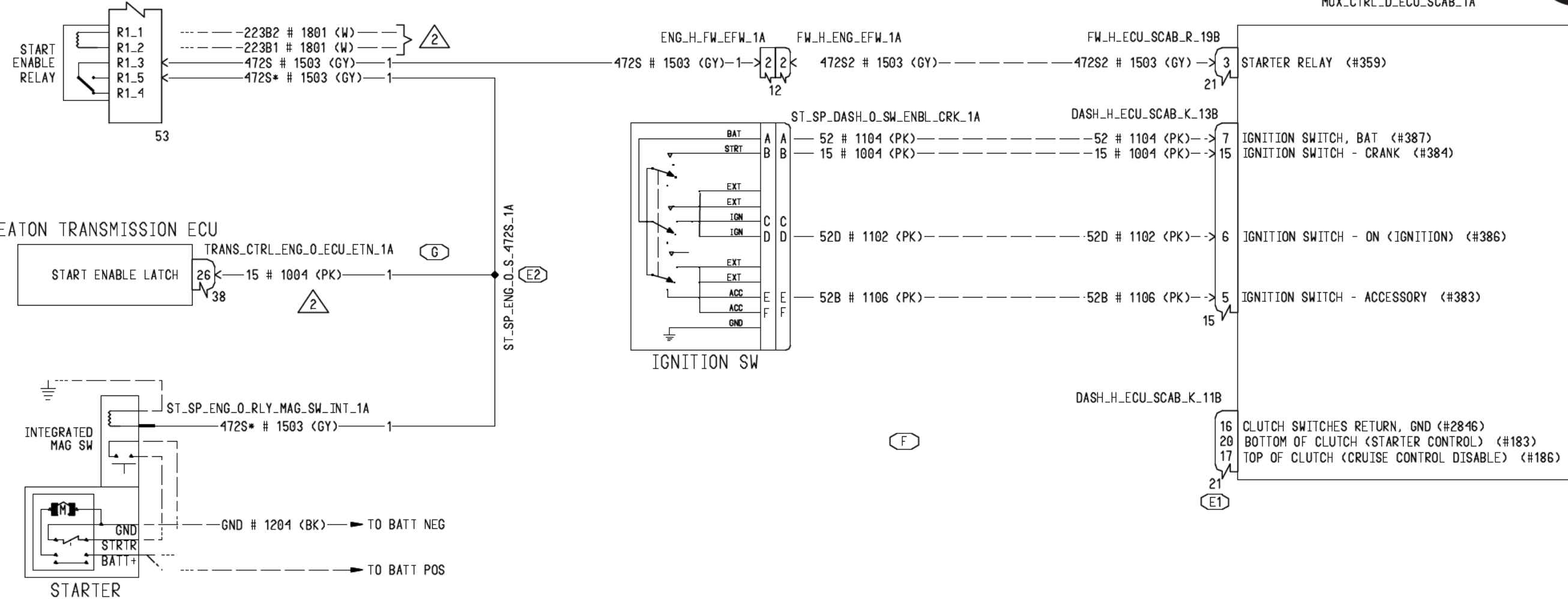
DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL: N/A	DATE: N/A	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSM 09E0-K17.	
DRAWN BY: R.ERKER	DATE: 09/21/06	THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
CHECKED BY: S.PERRON	DATE: 09/21/06		
RESPONSIBLE ENGINEER: T.MALIK	DATE: 09/21/06	RESPONSIBLE MFG. ENGR: N/A	DATE: N/A
APPROVED BY: S.LARSEN	DATE: 09/21/06	DESCRIPTION: WRG-ST SP, START CONTROL 156B4 P3 - 2007 EPA	
ITEM/DRAWING NUMBER: G06-61996		REVISION LETTER: G	SHEET NUMBER: 3 OF 8

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24782-82	-	-	INITIAL RELEASE	RWE	08/21/06	SDL
P32494-15	A	-	ADDED HARN PROP AG6-67151-001	LD	07/21/07	TNY
P32494-04	B	-	SEE SHEETS 1,2,4,5,6, AND 7 ADDED HARN	TSM	11/20/07	SDL
P34688-57	C	-	SEE SHT 5 AND 7	RWE	05/16/08	TNY
P35900-A5	D	GC	ADDED MISSING HARN AG6-37380-882	RWE	08/22/08	SDL
P36700-P4	E	3B	1:DASH_H_ECU_SCAB_K_11B PIN 17 WAS PIN 20, PIN 20 WAS PIN17 DEVIATION HFRA-061129-04-1002 SEE SHEET 1 THRU 8 2:ST_SP_ENG_O.S.-472S-1A WAS ST_SP_ENG_O.S.-472S* SEE SHEETS 3,4,7,8	ASL	02/08/09	SDL
P37100-B4	F	4B	REMOVED CIRCUITS FOR CLUTCH SW	RWE	06/26/09	SDL
P37700-R1	G	-	SEE SHT 1,2,5,6	RWE	08/07/09	SDL

16C

POWERTRAIN
POWER DISTRIBUTION
MODULE (PDM)
ENG_CTRL_D_PDM_ASSY_1A

SAM CAB
MUX_CTRL_D_ECU_SCAB_1A



WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

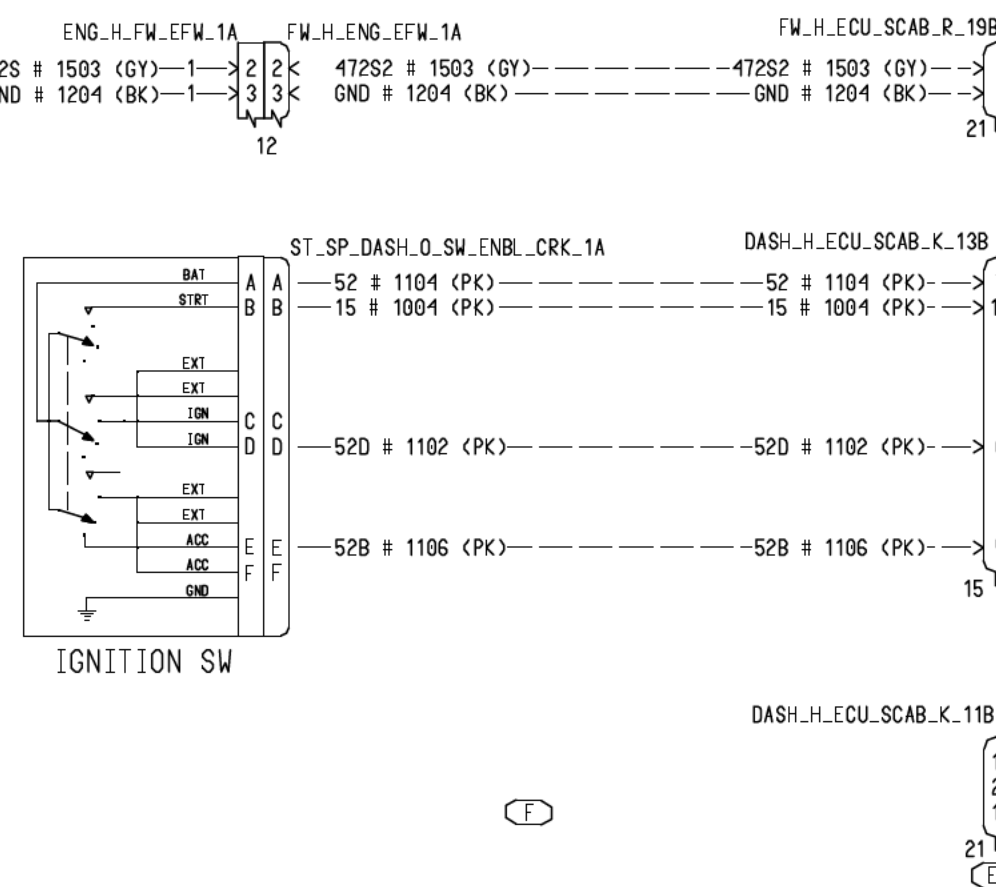
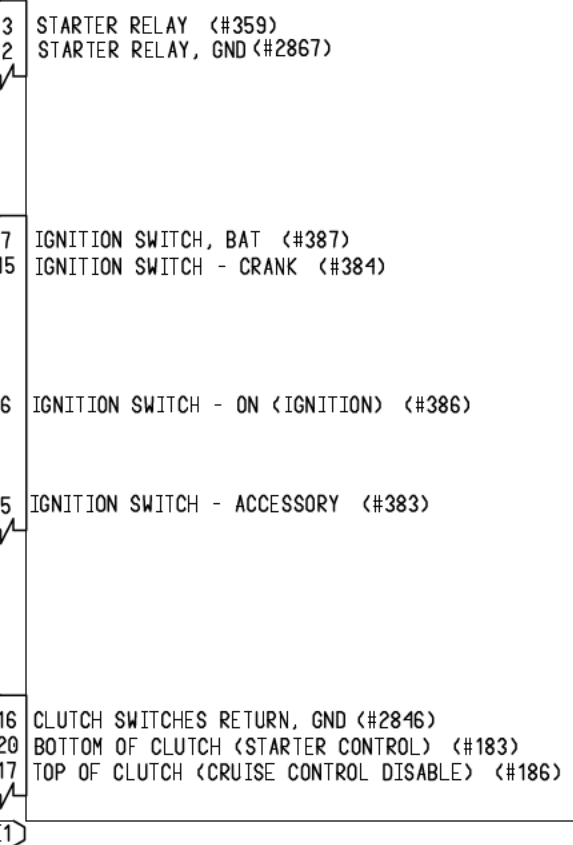
-002 STRT CTRL, INTEGRATED MAG SWITCH (IMS), DM3

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL:		DATE:	
N/A		N/A	
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER ENG 0908-K17.			
DRAWN BY: R. ECKER	DATE: 09/21/06	THIRD ANGLE PROJECTION	 UNITS OF MEASURE MM
CHECKED BY: S. PERRON	DATE: 09/21/06		
RESPONSIBLE ENGINEER: T. MALIK	DATE: 09/21/06		
APPROVED BY: S. LARSEN	DATE: 09/21/06	RESPONSIBLE MFG. ENGR:	DATE:
		N/A	N/A
DESCRIPTION: WRG-ST SP, START CONTROL SUPPLEMENTARY DESCRIPTION: 156B4 P3 - 2007 EPA			
ITEM/DRAWING NUMBER:		REVISION LETTER:	SHEET NUMBER:
G06-61996		G	3 OF 8

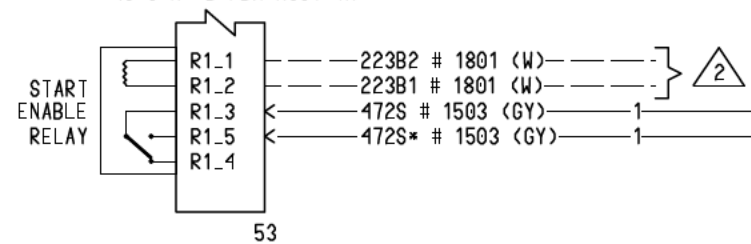
RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P24102-B2	-	-	INITIAL RELEASE	RME	09/21/06	SDL
P32494-15	A	-	SEE SHEET 1	LD	07/24/07	TVY
P32494-04	B	-	SEE SHEETS 1 AND 5 THRU 8	TSM	11/28/07	SDL
P34588-57	C	-	SEE SHT 5 AND 7	RME	05/16/08	TVY
P35980-A5	D	GC	ADDED MISSING HARN A06-ST380-003	RME	08/22/08	SDL
P36700-P4	E	3B	1:DASH_H.ECU_SCAB_K_11B PIN 17 WAS PIN 20, PIN 20 WAS PIN 17 DEVIATION 4 FRA-061129-04-1002 SEE SHEETS 1 THRU 8 2:ST.SP.ENG_O.S_472S_1A WAS ST.SP.ENG_O.S_472S* SEE SHEETS 3,4,7,8 REMOVED CIRCUITS FOR CLUTCH SW	ARL	02/08/09	SDL
P37700-04	F	-B		RME	06/26/09	SDL
P37700-R1	G	-	SEE SHT 1,2,5,6	RME	08/07/09	SDL

16D

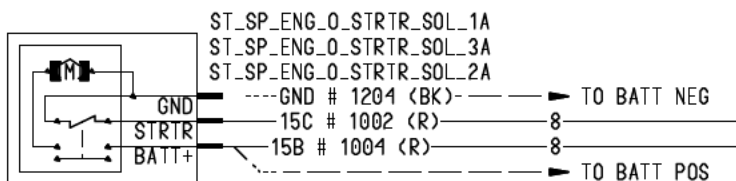
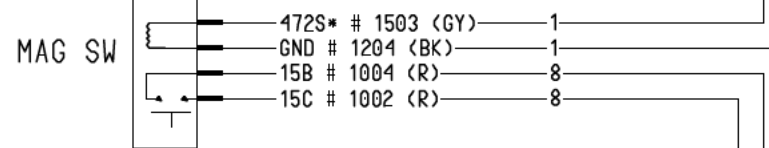
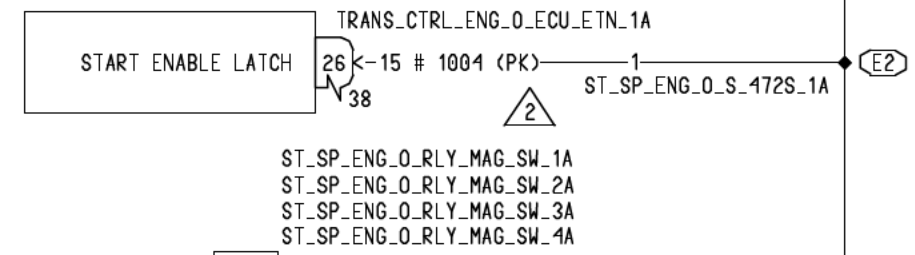
SAM CAB
MUX_CTRL_D_ECU_SCAB_1A



POWERTRAIN
POWER DISTRIBUTION
MODULE (PDM)
ENG_CTRL_D_PDM_ASSY_1A



EATON TRANSMISSION ECU



WIRE SIZE
SHOWN IN mm²

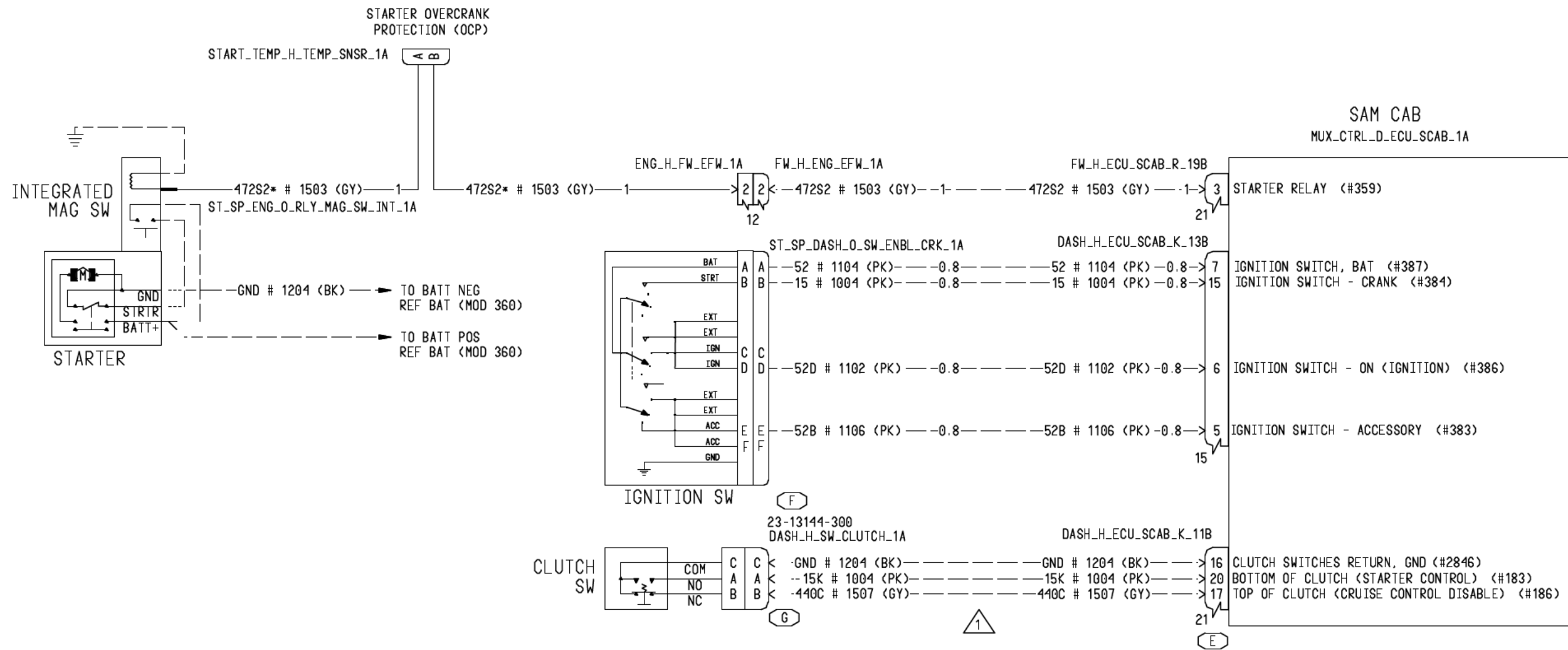
METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

-003 STRT CTRL, MAG SWITCH, DM3

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL: N/A	DATE: N/A	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EDSM 0908-K17.	
DRAWN BY: R. LARKER	DATE: 09/21/06	THIRD ANGLE PROJECTION	
CHECKED BY: S. PERRON	DATE: 09/21/06	UNITS OF MEASURE MM	
RESPONSIBLE ENGINEER: T. MALIK	DATE: 09/21/06	RESPONSIBLE MFG. ENGR: N/A	DATE: N/A
APPROVED BY: S. LARSEN	DATE: 09/21/06		
DESCRIPTION: WRG-ST SP, START CONTROL			
SUPPLEMENTARY DESCRIPTION: 15684 P3 - 2007 EPA			
ITEM/DRAWING NUMBER: G06-61996	REVISION LETTER: G	SHEET NUMBER: 4 OF 8	

RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P32494-B4	B	-	INITIAL RELEASE	TGM	11/20/07	SDL
P34688-S7	C	-	ADDED HARN A06-68145-002/A06-T1019-000	RME	05/16/08	TWY
P35900-A5	D	-	SEE SHTS 1-4	RME	08/22/08	SDL
P36700-P4	E	3B	DASH_H_ECU_SCAB_K_11B	ASL	02/08/09	SDL
			PIN 17 WAS PIN 20			
			PIN 20 WAS PIN 17			
			DEVIATION H FRA-061129-04-1002			
			SEE SHEETS 1THRU 8			
P37700-B4	F	-B	23-13144-300 WAS 23-13144-301	RME	06/26/09	SDL
P37700-R1	G	SB	ADDED OVL	RME	08/07/09	SDL
	G	-	SEE SHT 1,2,6			

16E



WIRE SIZE
SHOWN IN mm²

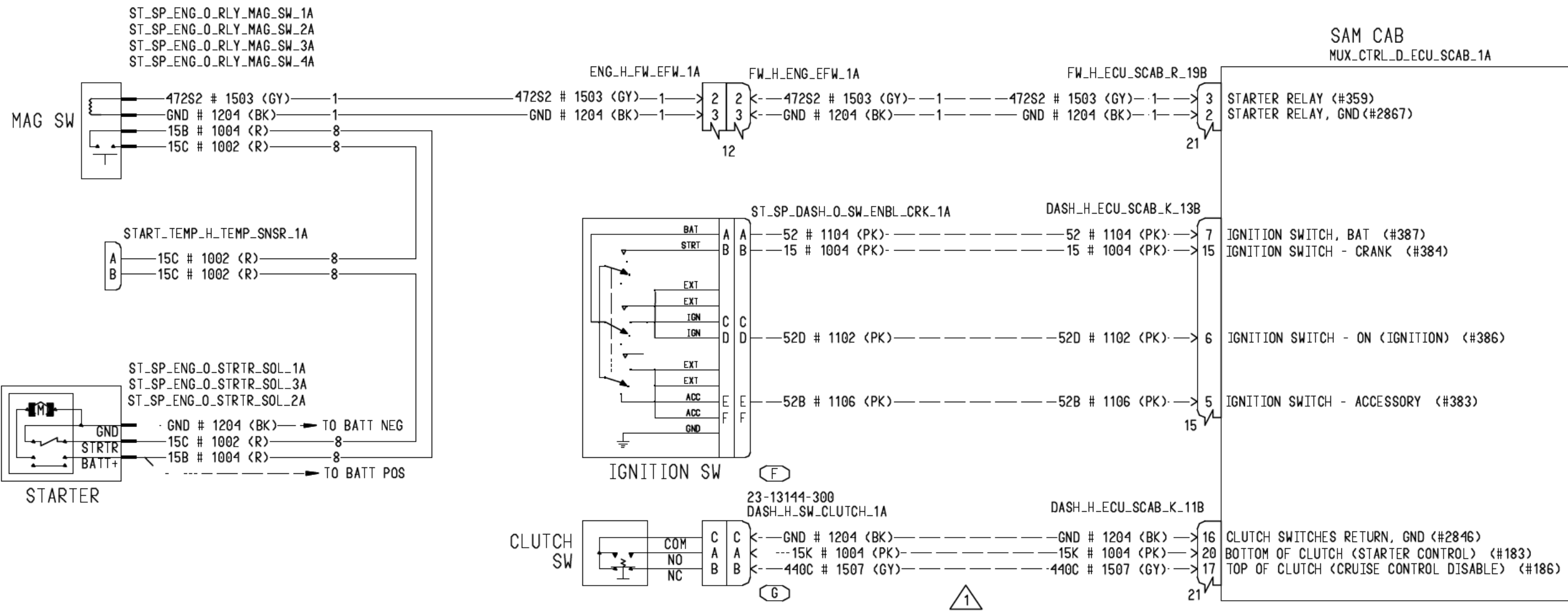
METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

-004 STRT CTRL, INTERGRATED MAG SW (IMS) W/ TEMP SNSR

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL: N/A	DATE: N/A	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER E08M 09E0-K17.	
DRAWN BY: R.ERKER	DATE: 09/21/06	THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
CHECKED BY: S.PERRON	DATE: 09/21/06		
RESPONSIBLE ENGINEER: T.MALIK	DATE: 09/21/06	RESPONSIBLE MFG. ENGR: N/A	DATE: N/A
DESCRIPTION: WRG-ST SP, START CONTROL			
SUPPLEMENTARY DESCRIPTION: 15684 P3 - 2007 EPA			
ITEM/DRAWING NUMBER: G06-61996		REVISION LETTER: G	SHEET NUMBER: 5 OF 8

RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P32491-84	B	-	INITIAL RELEASE	TBM	11/28/87	SOL
P34688-57	C	-	SEE SHT 5 AND 7	RME	05/16/88	TWY
P35980-A5	D	-	SEE SHTS 1-4	RME	08/22/88	SOL
P36780-P4	E	3B	DASH_H_ECU_SCAB_K_11B	ASL	02/08/89	SOL
			PIN 17 WAS PIN 20			
			PIN 20 WAS PIN 17			
			DEVIATION # FRA-061129-84-1882			
			SEE SHEETS 1 THRU 6			
P37700-B4	F	5B	23-13144-300 WAS 23-13144-301	RME	06/26/89	SOL
P37700-R1	G	5B	ADDED OVLY	RME	08/07/89	SOL
	C	-	SEE SHT 1,2,5			

16F



WIRE SIZE
SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

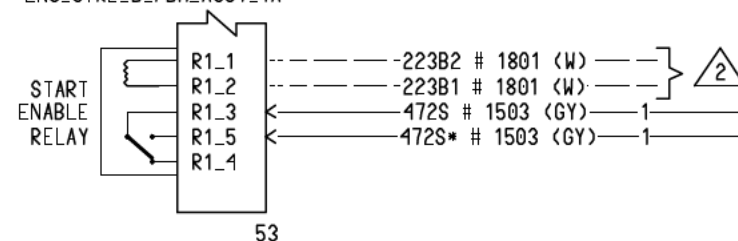
-005 STRT CRTL, MAG SW, W/ TEMP SNSR

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL:	N/A	DATE:	N/A
DESIGNED BY:	R. LERKER	DATE:	09/21/86
CHECKED BY:	S. PERRON	DATE:	09/21/86
RESPONSIBLE ENGINEER:	T. MALIK	DATE:	09/21/86
APPROVED BY:	S. LARSEN	DATE:	09/21/86
DESCRIPTION:	WRG-ST SP, START CONTROL 15684 P3 - 2007 EPA		
ITEM/DRAWING NUMBER:	G06-61996	REVISION LETTER:	G
		SHEET NUMBER:	6 OF 8

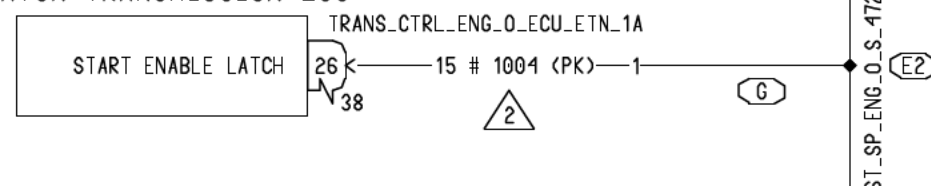
RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P32494-01	B	-	INITIAL RELEASE	TSM	11/29/07	SOL
P34688-57	C	-	ADDED HARN A06-68145-083/A06-T1819-001	RUE	06/16/08	TVY
P35900-A5	D	-	SEE SHTS 1-4	RUE	08/22/08	SOL
P36700-P1	E	38	1:DASH_H_ECU_SCAB_K_11B PIN 17 WAS PIN 20, PIN 20 WAS PIN 17	ASL	02/08/09	SOL
			DEVIATION H FRA-061129-04-1002 SEE SHEETS 1 THRU 8			
	E	68	ST_SP_ENG_O.S.-472S-1A WAS ST_SP_ENG_O.S.-472S* SEE SHEETS 3,4,7,8			
P37700-B1	F	48	REMOVED CIRCUITS FOR CLUTCH SW	RUE	06/26/09	SOL
P37700-R1	G	-	SEE SHT 1,2,5,6.	RUE	08/07/09	SOL

16G

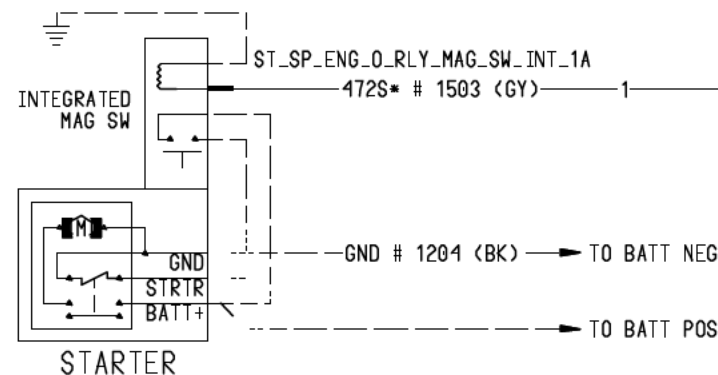
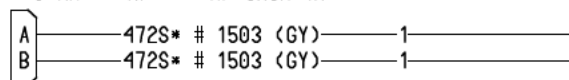
POWERTRAIN POWER DISTRIBUTION MODULE (PDM) ENG_CTRL_D_PDM_ASSY_1A



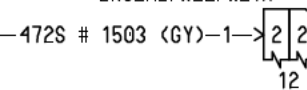
EATON TRANSMISSION ECU



START_TEMP_H_TEMP_SNSR_1A



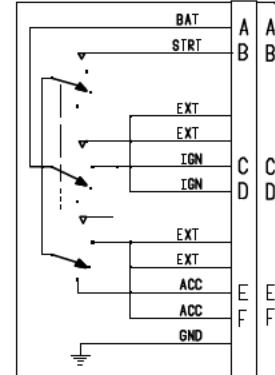
ENG_H_FW_EFW_1A FW_H_ENG_EFW_1A



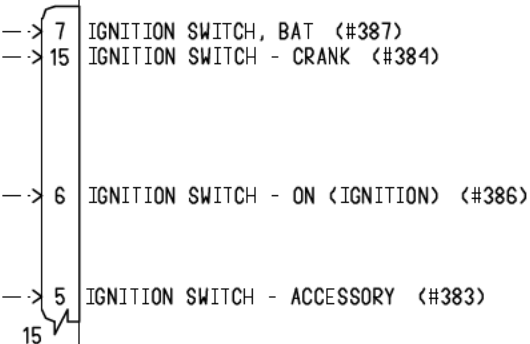
FW_H_ECU_SCAB_R_19B



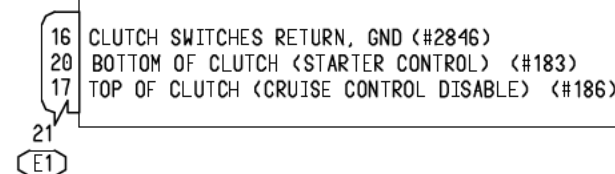
ST_SP_DASH_O_SW_ENBL_CRK_1A



DASH_H_ECU_SCAB_K_13B



DASH_H_ECU_SCAB_K_11B



WIRE SIZE SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

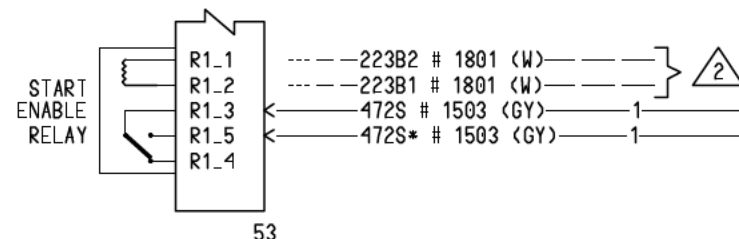
-006 STRT CRTL, INTEGRATED MAG SW (IMS), W/ TEMP SNSR DM3

DAIMLER		Daimler Trucks North America	
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MATERIAL APPROVAL:	N/A	DATE:	N/A
DRAWN BY: R. ECKER	09/21/06	DATE:	09/21/06
CHECKED BY: S. PERRON	09/21/06	DATE:	09/21/06
RESPONSIBLE ENGINEER: T. MALIK	09/21/06	DATE:	09/21/06
APPROVED BY: S. LARSEN	09/21/09	DATE:	09/21/09
UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOSH 0900-K17.		THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
DESCRIPTION:		RESPONSIBLE MFG. ENGR:	N/A
WRG-ST SP, START CONTROL			
SUPPLEMENTARY DESCRIPTION: 15684		P3 - 2007 EPA	
ITEM/DRAWING NUMBER:	G06-61996	REVISION LETTER:	G
		SHEET NUMBER:	7 OF 8

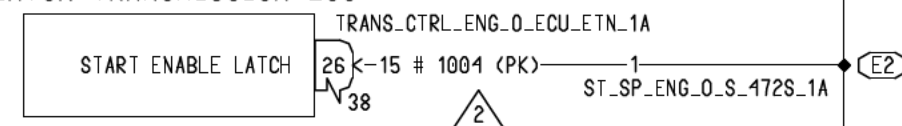
RELEASE NUMBER	REV	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P32494-B1	B	-	INITIAL RELEASE	TSM	11/29/97	SDL
P34688-S7	C	-	SEE SHT 5 AND 7	RUE	06/16/98	TWY
P35900-A5	D	-	SEE SHTS 1-4	RUE	08/22/98	SDL
P36700-P1	E	3B	DASH_H_ECU_SCAB_K_11B PIN 17 WAS PIN 20, PIN 20 WAS PIN 17 DEVIATION #FRA-061129-04-1002 SEE SHEETS 1 THRU 8 ST_SP_ENG_O_S_472S_1A WAS ST_SP_ENG_O_S_472S_1A WAS	ASL	02/08/99	SDL
P37700-B1	F	4B	REMOVED CIRCUITS FOR CLUTCH SW	RUE	06/26/99	SDL
P37700-R1	G	-	SEE SHT 1,2,5,6	RUE	07/08/99	SDL

16H

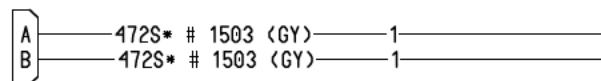
POWERTRAIN POWER DISTRIBUTION MODULE (PDM) ENG_CTRL_D_PDM_ASSY_1A



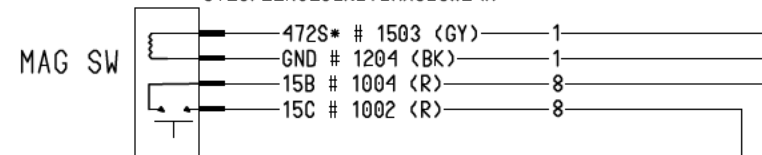
EATON TRANSMISSION ECU



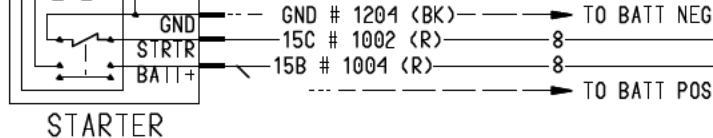
START_TEMP_H_TEMP_SNSR_1A



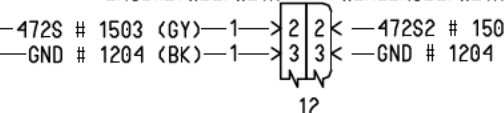
ST_SP_ENG_O_RLY_MAG_SW_1A ST_SP_ENG_O_RLY_MAG_SW_2A ST_SP_ENG_O_RLY_MAG_SW_3A ST_SP_ENG_O_RLY_MAG_SW_4A



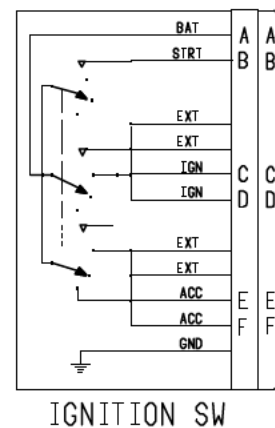
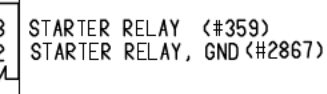
ST_SP_ENG_O_STRTR_SOL_1A ST_SP_ENG_O_STRTR_SOL_3A ST_SP_ENG_O_STRTR_SOL_2A



ENG_H_FW_EFW_1A

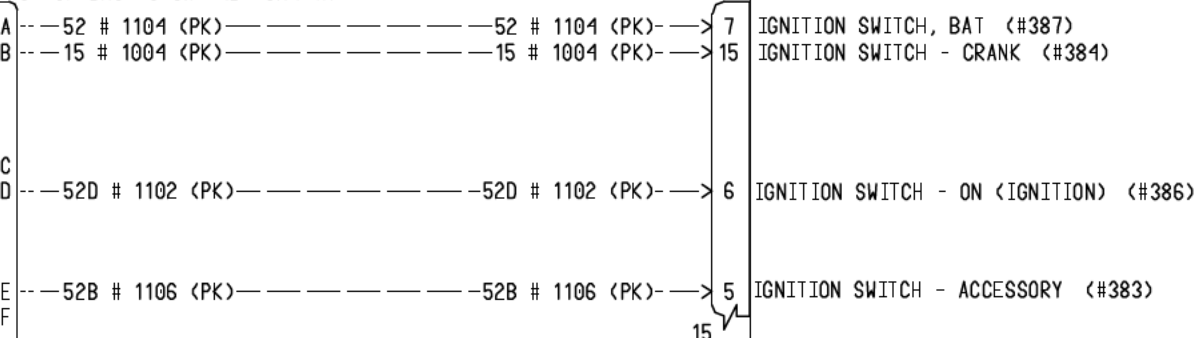


FW_H_ECU_SCAB_R_19B

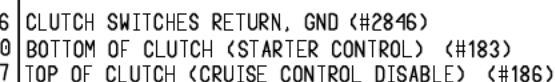


ST_SP_DASH_O_SW_ENBL_CRK_1A

DASH_H_ECU_SCAB_K_13B



DASH_H_ECU_SCAB_K_11B



WIRE SIZE SHOWN IN mm²

METRIC mm ²	AWG/GA
0.5	20
0.8	18
1	16
2	14
3	12
5	10
8	8
13	6
19	4
32	2
40	1
50	0
62	2/0

-007 STRT CTRL, MAG SW, DM3, W/TEMP SNSR DM3

DAIMLER		Daimler Trucks North America	
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY FREIGHTLINER CORPORATION.			
MATERIAL APPROVAL:	N/A	DATE:	N/A
DRAWN BY: R. ECKER	09/21/06	DATE:	09/21/06
CHECKED BY: S. PERRON	09/21/07	DATE:	09/21/07
RESPONSIBLE ENGINEER: T. MALIK	09/21/07	DATE:	09/21/07
APPROVED BY: S. LARSEN	09/21/07	DATE:	09/21/07
DESCRIPTION:		UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOHM 0900-K17.	
SUPPLEMENTARY DESCRIPTION: 156B1		THIRD ANGLE PROJECTION	UNITS OF MEASURE MM
WRG-ST SP, START CONTROL		RESPONSIBLE MFG. ENGR:	N/A
ITEM/DRAWING NUMBER:		REVISION LETTER:	SHEET NUMBER
G06-61996		G	8 OF 8