

# **SERVICE MANUAL**

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## **SERVICE MANUAL SECTION**

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT  
Models Built March, 2008 and After — ELECTRICAL CIRCUIT DIAGRAMS**

**Model: 3200  
Start Date: 03/19/2008**

**Model: 4100  
Start Date: 03/19/2008**

**Model: 4300  
Start Date: 03/19/2008**

**Model: 4400  
Start Date: 03/19/2008**

**Model: 7300  
Start Date: 03/19/2008**

**Model: 7400  
Start Date: 03/19/2008**

**Model: 7500  
Start Date: 03/19/2008**

**Model: 7600  
Start Date: 03/19/2008**

**Model: 7700  
Start Date: 03/19/2008**

**Model: 8500  
Start Date: 03/19/2008**

**Model: 8600**  
**Start Date: 03/19/2008**

**Model: RXT**  
**Start Date: 03/19/2008**

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## 2. INSTRUCTIONS AND CHARTS (CHAPTER 2)

### 2.1. ABBREVIATIONS, P. 1

INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2	
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				ABBREVIATIONS	
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ACCESS	ACCESSORY	CRUS	CRUISE	PWR	POWER
ACCUM	ACCUMULATOR	CUR	CURRENT	PRESS	PRESSURE
AC	AIR CONDITIONING	DPNL	DASHBOARD	RAD	RADIO
AIR CLNR	AIR CLEANER	DFTR	DEFLECTOR	RLY	RELAY
ALT	ALTERNATOR	DFR	DEFROSTER	RES	RESISTOR
ACCEL	ACCELERATOR	DEG	DEGREE	REGEN	REGENERATE
AFTR	AFTERTREATMENT	DIAG	DIAGRAM	R	RIGHT
AMM	AMMETER	DSL	DIESEL	RTR	ROTOR
AMP	AMPERE	DIFF	DIFFERENTIAL	SNSR	SENSOR
AMP HR	AMPERE HOUR	DIMR	DIMMER	SHLD	SHIELD
AMPL	AMPLIFIER	ELEC	ELECTRICAL	SHFT	SHIFTER
ARM	ARMATURE	ELEX	ELECTRONIC	SLPR	SLEEPER
ARSR	ARRESTER	ENG	ENGINE	SLV	SLEEVE
ASSY	ASSEMBLY	EXH	EXHAUST	SPKR	SPEAKER
AUX	AUXILIARY	FL	FLUID	SPR	SPRING
B/U	BACK-UP	FWD	FORWARD	STD	STANDARD
BTRY	BATTERY	FR	FRONT	STRG	STEERING
BM	BENCHMARKING	FREQ	FREQUENCY	STLITE	SATELLITE
BLK	BLOCK	GA	GAUGE	SUNSH	SUNSHADE
BOOS	BOOSTER	GEN	GENERATOR	SW	SWITCH
BOT	BOTTOM	GND	GROUND	SYS	SYSTEM
BK	BRAKE	HARN	HARNESS	TACH	TACHOMETER
BRKR	BREAKER	HDLP	HEADLAMP	TEMP	TEMPERATURE
BRTHR	BREATHER	HTD	HEATED	TERM	TERMINAL
BRI	BRIGHT	HT TR	HEAT TREAT	THROT	THROTTLE
BUZ	BUZZER	HTR	HEATER	THRU	THROUGH
CA	CABLE	HP	HORSEPOWER	TRAC	TRACTION
CD	CANDELA	HYD	HYDRAULIC	TRLR	TRAILER
CP	CANDLEPOWER	ID	IDENTIFICATION	XDGR	TRANSDUCER
CAP	CAPACITOR	IGN	IGNITION	XFER	TRANSFER
CAT	CATERPILLAR	ILLUM	ILLUMINATION	XFMR	TRANSFORMER
CHAS	CHASSIS	IND	INDICATOR	XSTR	TRANSISTOR
CH	CHOKE	INST	INSTRUMENT	XMSN	TRANSMISSION
CIRC	CIRCUIT	INT	INTERMITTENT	XMTR	TRANSMITTER
CLK	CLOCK	L	LEFT	TRK	TRUCK
CW	CLOCKWISE	LT	LIGHT	UPR	UPPER
CLSTR	CLUSTER	LTR	LIGHTER	VLV	VALVE
CL	CLUTCH	LWR	LOWER	VERT	VERTICAL
COL	COLUMN	MAG	MAGNET	VM	VOLTMETER
COMM	COMMUTATOR	MOD	MODULATOR	VOL	VOLUME
CMPNT	COMPONENT	MDL	MODULE	WSHR	WASHER
CPRSR	COMPRESSOR	MOT	MOTOR	WHL	WHEEL
CONN	CONNECTOR	MTD	MOUNTED	WDO	WINDOW
CONT	CONTINUE	NEG	NEGATIVE	WSHLD	WINDSHIELD
CSL	CONSOLE	N/	NOT WITH	WPR	WIPER
CONT	CONTACT	NO	NUMBER	W/	WITH
CONT	CONTROL	PASS	PASSENGER	W/O	WITHOUT
CONV	CONVERTER	POSN	POSITION		
CLR	COOLER	POS	POSITIVE		
CTSY	COURTESY	POT	POTENTIOMETER		

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
RAW6	04DEC07	DELETED AC & RR FROM	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500
		ABBREVIATIONS LIST			59974G	12SEP06 AE08056608 001

Figure 1 Abbreviations

## 2.2. ACRONYMS, P. 2

INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2			
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				ACRONYMS			

## 2.3. CIRCUIT DIAGRAM INSTRUCTIONS, P. 3

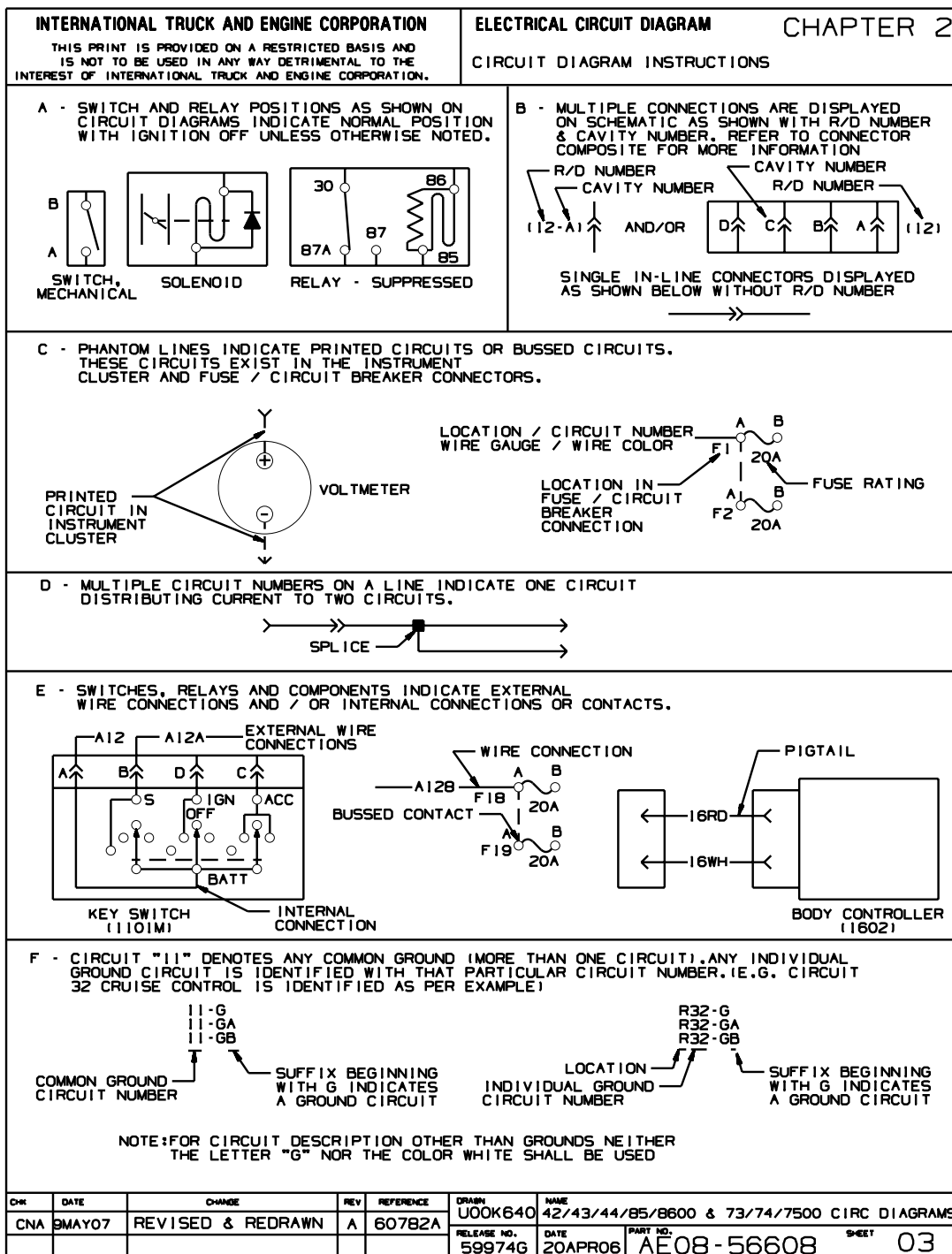


Figure 3 Circuit Diagram Instructions

## 2.4. CIRCUIT NUMBER IDENTIFICATION AND COLOR, P. 4

INTERNATIONAL TRUCK AND ENGINE CORPORATION

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ELECTRICAL CIRCUIT DIAGRAM

CHAPTER 2

CIRCUIT NUMBER IDENTIFICATION AND COLOR

CIRCUIT NUMBER	COLOR	DESCRIPTION
1	LTBL	ALTERNATOR - FIELD
2	RD	ALTERNATOR - CHARGE
3	DKBL	SERIAL / DATA COMMUNICATION J1587 / J1708 (+)
	GY	SERIAL / DATA COMMUNICATION J1587 / J1708 (-)
4	DKBL	SERIAL / DATA COMMUNICATION J1922 (+)
	GY	SERIAL / DATA COMMUNICATION J1922 (-)
5	YL	SERIAL / DATA COMMUNICATION J1939 /11 / J1939/15 (+)
	GN	SERIAL / DATA COMMUNICATION J1939 /11 / J1939/15 (-)
6	GY	LOW VOLTAGE ELECTRONIC FEED (LESS THAN 9 VOLTS)
7	RD	ALTERNATOR - RESISTANCE
8		
9	GY	LOW VOLTAGE ELECTRONIC GROUND
10	WH	CHASSIS / ENGINE GROUND
11	WH	CAB / SLEEPER GROUND
12	LTBL	ACCESSORY FEED
13	PK	IGNITION FEED
	BK	IGNITION FEED (BODY BUILDER CONNECTOR)
14	RD	BATTERY FEED
15	RD	KEY SWITCH FEED
16		
17	PK	STARTER CONTROL
18	PK	GLOW PLUG / PRE-HEATER
19	GY	ENGINE SHUTDOWN
20	LTGN	REMOTE POWER MODULE
21	TN	COLD START CONTROLS (ETHER)
22	TN	TIRE PRESSURE MONITORING / CONTROL
23	TN	ENGINE FAN / SHUTTERS
24	GY	ENGINE EXHAUST BRAKE
25	TN	PYROMETER
26	TN	AMMETER
27	TN	VOLTMETER
28	TN	INSTRUMENTS AND GAUGES
29	TN	ENGINE WATER TEMPERATURE
30	TN	ENGINE OIL TEMPERATURE
31	TN	TRANSMISSION OIL TEMPERATURE
32	TN	AXLE OIL TEMPERATURE
33	TN	ENGINE OIL LEVEL
34	TN	COOLANT LEVEL
35	TN	ENGINE OIL PRESSURE
36	TN	FUEL LEVEL
37	TN	FUEL PUMP
38	GY	LIFT AXLE
39	GY	AIR DRYER HEATER
40	GY	LOW AIR PRESSURE WARNING
41	TN	AIR TEMPERATURE
42	GY	FRONT AXLE ENGAGED
43	GY	POWER DIVIDER LOCK (PDL) WARNING
44	GY	PARK BRAKE WARNING
45	LTGN	ANTI-THEFT WARNING

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	
-		REVISED AND REDRAWN	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500	
					RELEASE NO.	DATE	PART NO.
					59974G	20APR06	AE08056608
							004

Figure 4 Circuit Number Identification and Color

## 2.5. CIRCUIT NUMBER IDENTIFICATION AND COLOR, P. 5

INTERNATIONAL TRUCK AND ENGINE CORPORATION

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ELECTRICAL CIRCUIT DIAGRAM

CHAPTER 2

CIRCUIT NUMBER IDENTIFICATION AND COLOR (CONT)

CIRCUIT NUMBER	COLOR	DESCRIPTION
46	GY	POWER TAKE-OFF WARNING
47	GY	SPEEDOMETER
48	GY	TACHOMETER
49	GY	DIFFERENTIAL LOCK WARNING
50	YL	LIGHT SWITCH FEED
51	YL	DIMMER SWITCH FEED
52	YL	HEADLIGHT HI - BEAM
53	YL	HEADLIGHT LO - BEAM
54	BN	PARKING / MARKER LIGHTS
55	OR	TURN SIGNAL - FEED
56	OR	TURN SIGNAL LIGHTS - LEFT
	YL	TURN SIGNAL LIGHTS - LEFT (BODY BUILDER CONNECTION)
	OR	TURN SIGNAL LIGHTS - RIGHT
57	LTGN	TURN SIGNAL LIGHTS - RIGHT (BODY BUILDER CONNECTION)
58	BN	CLEARANCE / IDENTIFICATION LIGHTS
59	GY	SOLENOID
60	OR	HAZARD LIGHTS
61	GY	AIR SUSPENSION
62	DKBL	PANEL LIGHTS
63	DKBL	COURTESY / DOME LIGHTS
64	YL	FOG / DRIVING LIGHTS
65	OR	CAB REAR FLOOD LIGHTS
66	YL	DAYTIME RUNNING LIGHTS
67	GY	OBSTACLE AVOIDANCE / REMOTE SENSOR
68	BN	TAIL LIGHTS
69	BN	LICENSE PLATE LIGHT
70	OR	STOP LIGHTS
	RD	STOP LIGHTS (BODY BUILDER CONNECTION)
	OR	BACK-UP LIGHTS
71	LTBL	BACK-UP LIGHTS (BODY BUILDER CONNECTION)
72	OR	TRAILER AUXILIARY FEED - BATTERY
73	LTGN	PWM
74	LTGN	HEATER RECIRCULATION MOTOR
75	LTGN	HEATER BLOWER MOTOR
76	LTGN	AUXILIARY FAN
77	LTGN	AIR CONDITIONER
78	LTGN	MIRRORS - HEATED, MOTORIZED
79	GY	SEAT BELTS
80	BK	SLEEPER BOX RELAY - FEED
81	LTGN	POWER DOOR LOCKS
82	GY	WINDSHIELD WIPER
83	LTGN	POWER WINDOWS
84	LTGN	CIGAR LIGHTER
85	GY	HORN

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
RAW6	04DEC07	REVISED AND REDRAWN	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500
					RELEASE NO.	DATE
					59974G	12SEP06
						PART NO.
						AE08056608
						SHEET
						005

Figure 5 Circuit Number Identification and Color (Cont.)

## 2.6. CIRCUIT NUMBER IDENTIFICATION AND COLOR, P. 6

INTERNATIONAL TRUCK AND ENGINE CORPORATION <small>THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.</small>				<b>ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2</b> CIRCUIT NUMBER IDENTIFICATION AND COLOR (CONT)																																																																																																																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">CIRCUIT NUMBER</th> <th style="width: 15%;">COLOR</th> <th style="width: 70%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr><td>86</td><td>LTGN</td><td>RADIO - ENTERTAINMENT</td></tr> <tr><td>87</td><td>GY</td><td>WINDSHIELD WASHER</td></tr> <tr><td>88</td><td>LTGN</td><td>CLOCK / HOURMETER</td></tr> <tr><td>89</td><td>VT</td><td>AIR BAG</td></tr> <tr><td>90</td><td>GY</td><td>HYDRAULIC BRAKE PUMP</td></tr> <tr><td>91</td><td>VT</td><td>INTERCOMMUNICATIONS</td></tr> <tr><td>92</td><td>TN</td><td>TRANSMISSION CONTROLS - ELECTRONIC</td></tr> <tr><td>93</td><td>TN</td><td>AXLE SHIFT CONTROL</td></tr> <tr><td>94</td><td>GY</td><td>ANTILOCK BRAKE SYSTEM</td></tr> <tr><td>95</td><td>TN</td><td>EXHAUST EMISSION</td></tr> <tr><td>96</td><td>YL</td><td>SNOW PLOW LIGHTS / CRUISE CONTROLS</td></tr> <tr><td>97</td><td>VT</td><td>ENGINE CONTROLS - ELECTRONIC</td></tr> <tr><td>98</td><td>BK</td><td>DATALINK AND DIAGNOSTICS</td></tr> <tr><td>99</td><td>VT</td><td>ACCELERATOR POSITION SENSOR (APS)</td></tr> <tr><td>100</td><td>GY</td><td>AIR HORN (ELECTRIC SOLENOID ACTUATED)</td></tr> <tr><td>101</td><td>TN</td><td>BRAKE APPLICATION AIR</td></tr> <tr><td>102</td><td>YL</td><td>FLASH TO PASS</td></tr> <tr><td>103</td><td>LTGN</td><td>BODY BUILDER AUXILIARY FEED</td></tr> <tr><td>104</td><td>DKBL</td><td>REMOTE START / STOP</td></tr> <tr><td>105</td><td>LTGN</td><td>HEATED SEATS</td></tr> <tr><td>106</td><td>OR</td><td>HIGH VOLTAGE ALTERNATOR AC CHARGE</td></tr> <tr><td>107</td><td>GY</td><td>INSTRUMENT CLUSTER ELECTRONIC FEED (5V)</td></tr> <tr><td>108</td><td>GY</td><td>BRAKE PAD WEAR SENSOR</td></tr> <tr><td>109</td><td>GY</td><td>SLACK ADJUSTER</td></tr> <tr><td>110</td><td>GY</td><td>INSTRUMENT CLUSTER ELECTRONIC GROUND</td></tr> <tr><td>111</td><td>TN</td><td>FUEL FILTER RESTRICTION TRANSDUCERS</td></tr> <tr><td>112</td><td>GY</td><td>LIFT GATE</td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">PREFIX</th> <th style="width: 85%;">LOCATION</th> </tr> </thead> <tbody> <tr><td>A</td><td>CAB - INSTRUMENT PANEL MODULE</td></tr> <tr><td>B</td><td>CAB - DRIVER CONTROL MODULE</td></tr> <tr><td>C</td><td>CAB - HEADER / CLEARANCE LIGHTS</td></tr> <tr><td>D</td><td>CAB - ROOF / REAR PANEL</td></tr> <tr><td>E</td><td>CAB - LEFT DOOR / DOORS</td></tr> <tr><td>F</td><td>CAB - RIGHT DOOR / DOORS</td></tr> <tr><td>H</td><td>CAB - SLEEPER</td></tr> <tr><td>J</td><td>CAB - DASH (OUTSIDE)</td></tr> <tr><td>K</td><td>ENGINE / RADIATOR</td></tr> <tr><td>L</td><td>TRANSMISSION</td></tr> <tr><td>M</td><td>CHASSIS / FRONT END (CAB DASH PANEL FORWARD)</td></tr> <tr><td>N</td><td>CHASSIS - CENTER SECTION (CAB DASH PANEL TO CAB REAR CROSS MEMBER)</td></tr> <tr><td>P</td><td>CHASSIS - WHEEL BASE SECTION</td></tr> <tr><td>R</td><td>CHASSIS - SUSPENSION / REAR AXLE / AXLES</td></tr> <tr><td>S</td><td>CHASSIS - AF SECTION / STOP / TAIL / TURN LIGHTS</td></tr> <tr><td>T</td><td>TRAVEL DOORS</td></tr> <tr><td>U</td><td>HOOD MTD HEADLIGHTS / MARKER LIGHTS</td></tr> <tr><td>V</td><td>SLEEPER ROOF / BACK PANEL WIRING</td></tr> <tr><td>W</td><td>WARDROBE CABINET WIRING</td></tr> </tbody> </table>								CIRCUIT NUMBER	COLOR	DESCRIPTION	86	LTGN	RADIO - ENTERTAINMENT	87	GY	WINDSHIELD WASHER	88	LTGN	CLOCK / HOURMETER	89	VT	AIR BAG	90	GY	HYDRAULIC BRAKE PUMP	91	VT	INTERCOMMUNICATIONS	92	TN	TRANSMISSION CONTROLS - ELECTRONIC	93	TN	AXLE SHIFT CONTROL	94	GY	ANTILOCK BRAKE SYSTEM	95	TN	EXHAUST EMISSION	96	YL	SNOW PLOW LIGHTS / CRUISE CONTROLS	97	VT	ENGINE CONTROLS - ELECTRONIC	98	BK	DATALINK AND DIAGNOSTICS	99	VT	ACCELERATOR POSITION SENSOR (APS)	100	GY	AIR HORN (ELECTRIC SOLENOID ACTUATED)	101	TN	BRAKE APPLICATION AIR	102	YL	FLASH TO PASS	103	LTGN	BODY BUILDER AUXILIARY FEED	104	DKBL	REMOTE START / STOP	105	LTGN	HEATED SEATS	106	OR	HIGH VOLTAGE ALTERNATOR AC CHARGE	107	GY	INSTRUMENT CLUSTER ELECTRONIC FEED (5V)	108	GY	BRAKE PAD WEAR SENSOR	109	GY	SLACK ADJUSTER	110	GY	INSTRUMENT CLUSTER ELECTRONIC GROUND	111	TN	FUEL FILTER RESTRICTION TRANSDUCERS	112	GY	LIFT GATE	PREFIX	LOCATION	A	CAB - INSTRUMENT PANEL MODULE	B	CAB - DRIVER CONTROL MODULE	C	CAB - HEADER / CLEARANCE LIGHTS	D	CAB - ROOF / REAR PANEL	E	CAB - LEFT DOOR / DOORS	F	CAB - RIGHT DOOR / DOORS	H	CAB - SLEEPER	J	CAB - DASH (OUTSIDE)	K	ENGINE / RADIATOR	L	TRANSMISSION	M	CHASSIS / FRONT END (CAB DASH PANEL FORWARD)	N	CHASSIS - CENTER SECTION (CAB DASH PANEL TO CAB REAR CROSS MEMBER)	P	CHASSIS - WHEEL BASE SECTION	R	CHASSIS - SUSPENSION / REAR AXLE / AXLES	S	CHASSIS - AF SECTION / STOP / TAIL / TURN LIGHTS	T	TRAVEL DOORS	U	HOOD MTD HEADLIGHTS / MARKER LIGHTS	V	SLEEPER ROOF / BACK PANEL WIRING	W	WARDROBE CABINET WIRING
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87	GY	WINDSHIELD WASHER																																																																																																																																	
88	LTGN	CLOCK / HOURMETER																																																																																																																																	
89	VT	AIR BAG																																																																																																																																	
90	GY	HYDRAULIC BRAKE PUMP																																																																																																																																	
91	VT	INTERCOMMUNICATIONS																																																																																																																																	
92	TN	TRANSMISSION CONTROLS - ELECTRONIC																																																																																																																																	
93	TN	AXLE SHIFT CONTROL																																																																																																																																	
94	GY	ANTILOCK BRAKE SYSTEM																																																																																																																																	
95	TN	EXHAUST EMISSION																																																																																																																																	
96	YL	SNOW PLOW LIGHTS / CRUISE CONTROLS																																																																																																																																	
97	VT	ENGINE CONTROLS - ELECTRONIC																																																																																																																																	
98	BK	DATALINK AND DIAGNOSTICS																																																																																																																																	
99	VT	ACCELERATOR POSITION SENSOR (APS)																																																																																																																																	
100	GY	AIR HORN (ELECTRIC SOLENOID ACTUATED)																																																																																																																																	
101	TN	BRAKE APPLICATION AIR																																																																																																																																	
102	YL	FLASH TO PASS																																																																																																																																	
103	LTGN	BODY BUILDER AUXILIARY FEED																																																																																																																																	
104	DKBL	REMOTE START / STOP																																																																																																																																	
105	LTGN	HEATED SEATS																																																																																																																																	
106	OR	HIGH VOLTAGE ALTERNATOR AC CHARGE																																																																																																																																	
107	GY	INSTRUMENT CLUSTER ELECTRONIC FEED (5V)																																																																																																																																	
108	GY	BRAKE PAD WEAR SENSOR																																																																																																																																	
109	GY	SLACK ADJUSTER																																																																																																																																	
110	GY	INSTRUMENT CLUSTER ELECTRONIC GROUND																																																																																																																																	
111	TN	FUEL FILTER RESTRICTION TRANSDUCERS																																																																																																																																	
112	GY	LIFT GATE																																																																																																																																	
PREFIX	LOCATION																																																																																																																																		
A	CAB - INSTRUMENT PANEL MODULE																																																																																																																																		
B	CAB - DRIVER CONTROL MODULE																																																																																																																																		
C	CAB - HEADER / CLEARANCE LIGHTS																																																																																																																																		
D	CAB - ROOF / REAR PANEL																																																																																																																																		
E	CAB - LEFT DOOR / DOORS																																																																																																																																		
F	CAB - RIGHT DOOR / DOORS																																																																																																																																		
H	CAB - SLEEPER																																																																																																																																		
J	CAB - DASH (OUTSIDE)																																																																																																																																		
K	ENGINE / RADIATOR																																																																																																																																		
L	TRANSMISSION																																																																																																																																		
M	CHASSIS / FRONT END (CAB DASH PANEL FORWARD)																																																																																																																																		
N	CHASSIS - CENTER SECTION (CAB DASH PANEL TO CAB REAR CROSS MEMBER)																																																																																																																																		
P	CHASSIS - WHEEL BASE SECTION																																																																																																																																		
R	CHASSIS - SUSPENSION / REAR AXLE / AXLES																																																																																																																																		
S	CHASSIS - AF SECTION / STOP / TAIL / TURN LIGHTS																																																																																																																																		
T	TRAVEL DOORS																																																																																																																																		
U	HOOD MTD HEADLIGHTS / MARKER LIGHTS																																																																																																																																		
V	SLEEPER ROOF / BACK PANEL WIRING																																																																																																																																		
W	WARDROBE CABINET WIRING																																																																																																																																		
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME																																																																																																																													
RAW6	04DEC07	REVISED AND REDRAWN	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500																																																																																																																													
					RELEASE NO.	DATE	PART NO.																																																																																																																												
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						SHEET	006																																																																																																																												

**Figure 6 Circuit Number Identification and Color (Cont.)**



## 2.7. LAMP BULB CHART, P. 7

INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM		CHAPTER 2																																								
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				LAMP BULB CHART																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">BULB APPLICATION</th> <th style="text-align: center;">CANDLEPOWER OR WATT</th> <th style="text-align: center;">BULB TRADE NUMBER</th> </tr> </thead> <tbody> <tr><td>BACK - UP LIGHTS</td><td>32 CP</td><td>GE1156</td></tr> <tr><td>CLEARANCE &amp; IDENTIFICATION</td><td>3 CP</td><td>GE193</td></tr> <tr><td>COURTESY LIGHT</td><td>3CP</td><td>GE168</td></tr> <tr><td>FOG LIGHTS</td><td>55 WATTS</td><td>VH550</td></tr> <tr><td>LOW BEAMS</td><td>65 WATTS</td><td>GE9007</td></tr> <tr><td>HIGH BEAMS</td><td>65 WATTS</td><td>GE9007</td></tr> <tr><td>MAP LIGHT</td><td>3 CP</td><td>1816</td></tr> <tr><td>SIDE MARKER</td><td></td><td>2548</td></tr> <tr><td>STOP &amp; TURN / TAIL &amp; LICENSE PLATE</td><td>32/3 CP</td><td>1157</td></tr> <tr><td>TURN SIGNAL / MARKER (FENDER)</td><td></td><td>3157</td></tr> <tr><td>TURN SIGNAL &amp; MARKER LIGHT</td><td></td><td>2356</td></tr> <tr><td>WORK (TRAILER HOOK - UP)</td><td>35 WATTS</td><td>4411</td></tr> </tbody> </table>								BULB APPLICATION	CANDLEPOWER OR WATT	BULB TRADE NUMBER	BACK - UP LIGHTS	32 CP	GE1156	CLEARANCE & IDENTIFICATION	3 CP	GE193	COURTESY LIGHT	3CP	GE168	FOG LIGHTS	55 WATTS	VH550	LOW BEAMS	65 WATTS	GE9007	HIGH BEAMS	65 WATTS	GE9007	MAP LIGHT	3 CP	1816	SIDE MARKER		2548	STOP & TURN / TAIL & LICENSE PLATE	32/3 CP	1157	TURN SIGNAL / MARKER (FENDER)		3157	TURN SIGNAL & MARKER LIGHT		2356	WORK (TRAILER HOOK - UP)	35 WATTS	4411
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					U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS																																								
					RELEASE NO.	DATE	PART NO. SHEET																																							
					59974G	20APR06	AF08-56608 07																																							

Figure 7 Lamp Bulb Chart

2.8. RELAY FUNCTION AND WIRING GUIDE, P. 8

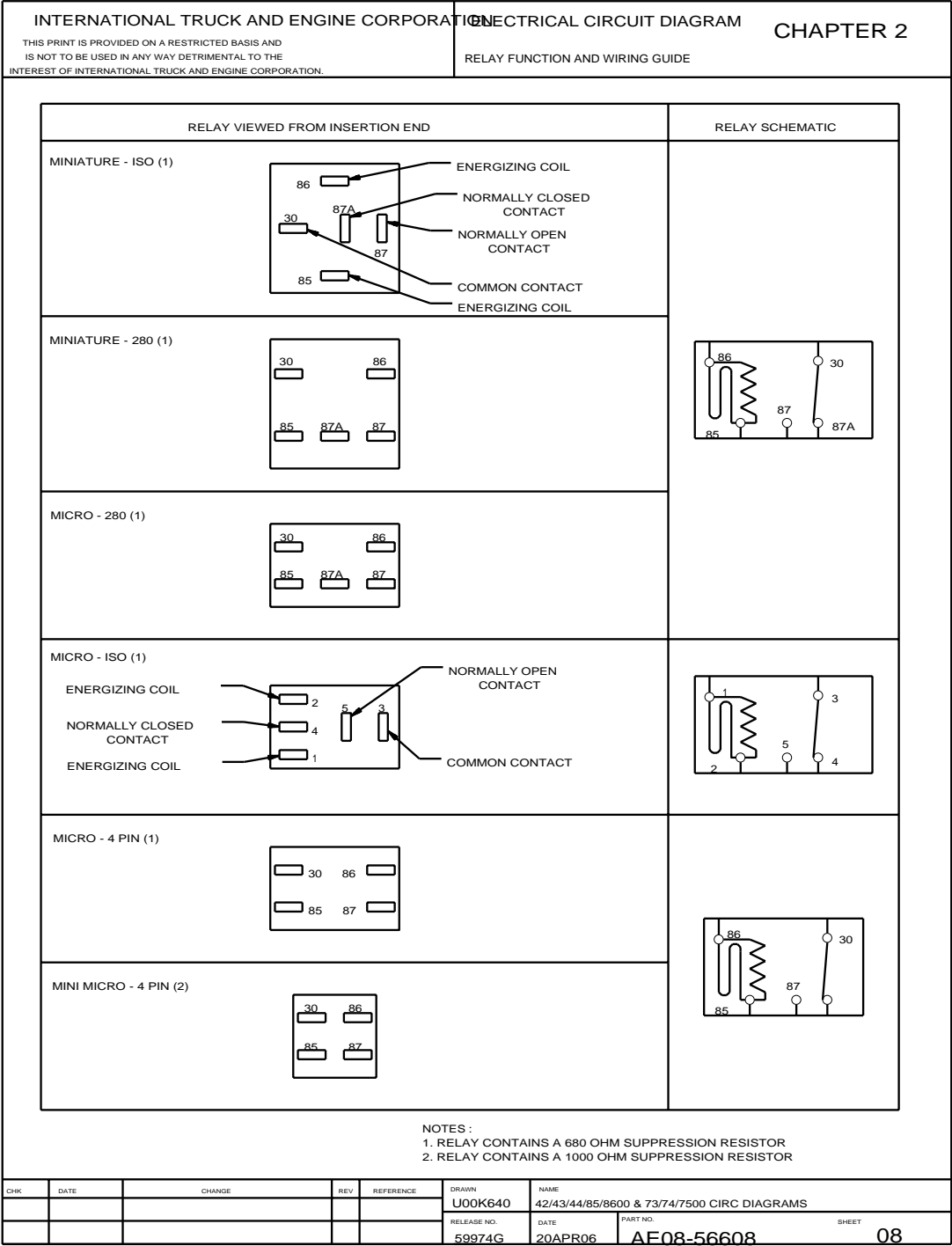


Figure 8 Relay Function and Wiring Guide

## 2.9. SCHEMATIC SYMBOL CHART, P. 9

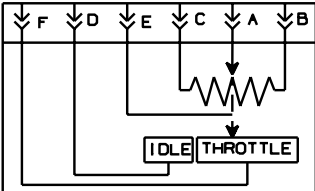
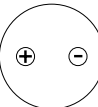
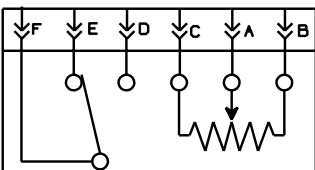
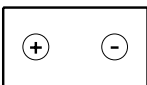
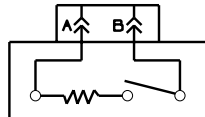
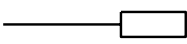
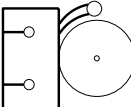
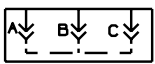
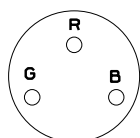
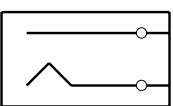


INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM				CHAPTER 2							
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				SCHEMATIC SYMBOL CHART											
SYMBOL				DESCRIPTION				SYMBOL				DESCRIPTION			
				ACCEL PEDAL POSN SENSOR								AMMETER			
				ACCEL PEDAL POSN SENSOR								BATTERY			
				AIR DRYER								BLUNT CUT CIRCUIT			
				ALARM								BUSBAR			
				ALTERNATOR								CIGAR LIGHTER			
				CIRCUIT BREAKER								DIODE			
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME		CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	
CNA	9MAY07	ADDED SYMBOL FOR	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS		CNA	9MAY07	ADDED SYMBOL FOR	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS	
		ACCEL PEDAL POSN SNSR			RELEASE NO. 59974G	DATE 12SEP06	PART NO. AE08-56608								

Figure 9 Schematic Symbol Chart

## 2.10. SCHEMATIC SYMBOL CHART, P. 10


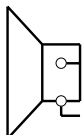
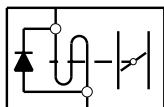
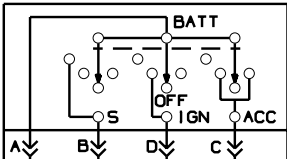

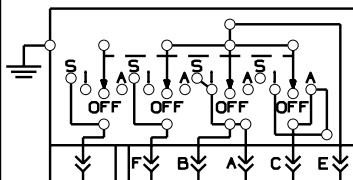

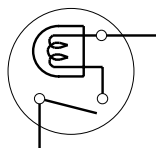

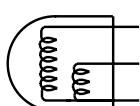
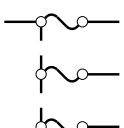


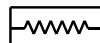
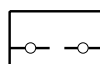


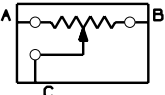
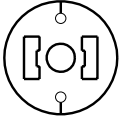
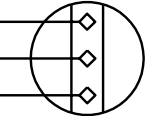
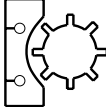

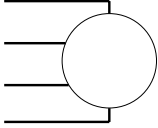
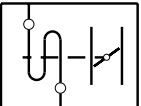

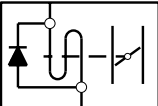
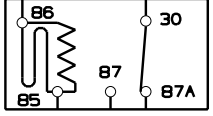
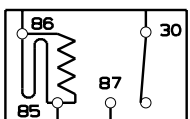
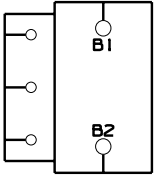
INTERNATIONAL TRUCK AND ENGINE CORPORATION					ELECTRICAL CIRCUIT DIAGRAM		CHAPTER 2	
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.					SCHEMATIC SYMBOL CHART (CONT)			
SYMBOL		DESCRIPTION		SYMBOL		DESCRIPTION		
		DIODE, LIGHT EMITTING				HORN		
		FAN SOLENOID				KEY SWITCH		
		FEMALE TERMINAL				KEY SWITCH, COMPLEX		
		FUSE				LIGHT W/ SWITCH		
		FUSIBLE LINK				LIGHT, DOUBLE FILAMENT		
		FUSES W/ BUSBAR				LIGHT, SINGLE FILAMENT		
		GROUND N/ STUD						
		HEATER						
		HOLDER, FUSE W/ BUSBAR						
CH#	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME		
CNA	9MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS		
					RELEASE NO.	DATE	PART NO.	
					59974G	12SEP06	AE08-56608	
							SHEET 10	

Figure 10 Schematic Symbol Chart (Cont.)

## 2.11. SCHEMATIC SYMBOL CHART, P. 11

INTERNATIONAL TRUCK AND ENGINE CORPORATION THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2 SCHEMATIC SYMBOL CHART (CONT.)	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	MALE TERMINAL		RESISTOR		SENDER - FUEL, OIL, TEMP, WATER
	MOTOR		SENSOR, PRESSURE, ABS 6		SENSOR, MAGNETIC
	PASS THRU CONNECTION		SENSOR, YAW		SOLENOID
	PRESSURE SWITCH		SOLENOID W/ DIODE		
	RELAY, FIVE TERMINAL				
	RELAY, FOUR TERMINAL				
	RELAY, LATCHING				

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
CNA	9MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS
					RELEASE NO.	PART NO.
					59974G	20APR06 AE08-56608
						SHEET 11

Figure 11 Schematic Symbol Chart (Cont.)

2.12. SCHEMATIC SYMBOL CHART, P.12

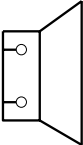


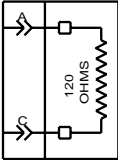


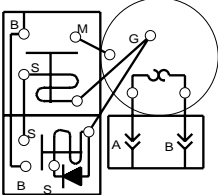
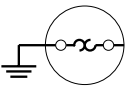

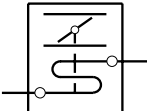

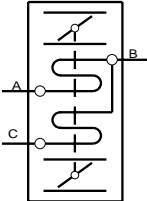
INTERNATIONAL TRUCK AND ENGINE CORPORATION					ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2				
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.					SCHEMATIC SYMBOL CHART (CONT)				
SYMBOL		DESCRIPTION			SYMBOL		DESCRIPTION		
		SPEAKER					SWITCH, PUSH BUTTON		
		SPLICE					TERMINATING RESISTOR		
		STUD					THERMISTOR		
		START MOTOR W/ TOCP					THERMOSTAT		
		SWITCH, MECHANICAL (NORMALLY OPEN)					VALVE, ETHER BOTTLE		
		SWITCH, MECHANICAL (NORMALLY CLOSED)					VALVE, MODULATOR		
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME			
RAW6	04DEC07	REVISED START MOTOR	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500			
					RELEASE NO.	DATE	PART NO.	SHEET	
					59974G	20APR06	AE08056608	012	

Figure 12 Schematic Symbol Chart (Cont.)

### 3.1. BATTERY FEED, P. 1



### 3.2. BATTERY FEED, P. 2

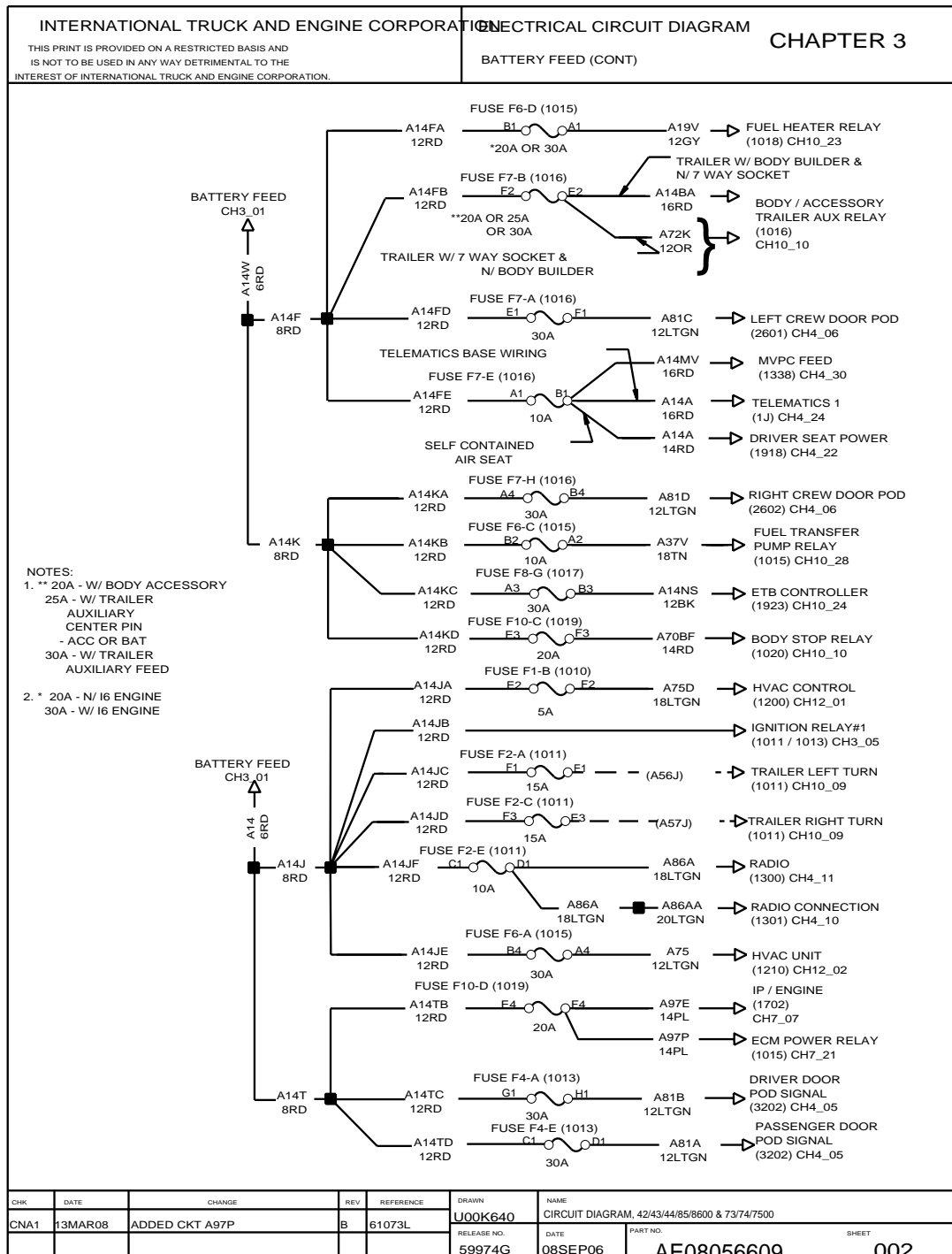


Figure 14 Battery Feeds (Cont.)



### 3.3. BATTERY FEED, P. 3

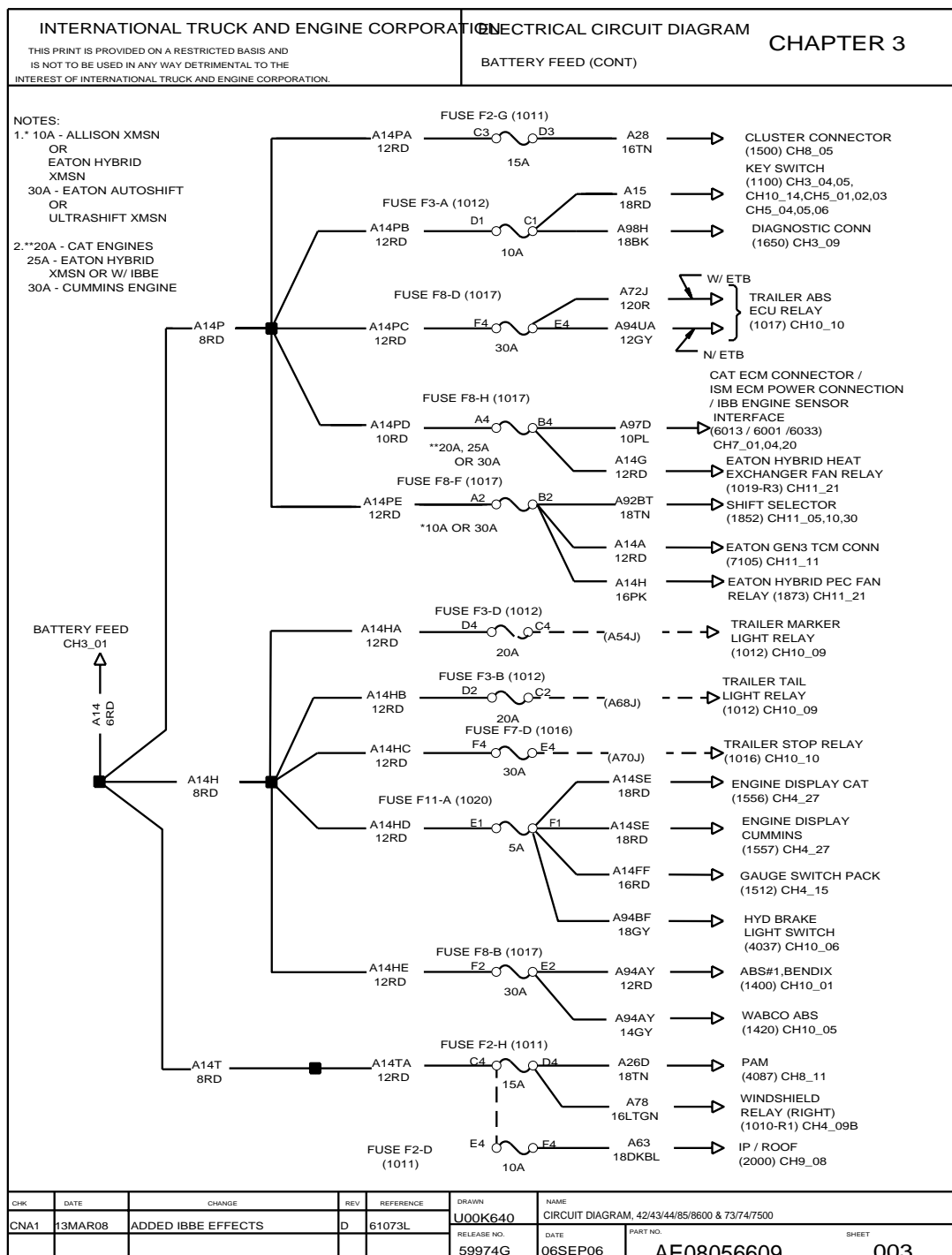


Figure 15 Battery Feed (Cont.)

# INTERNATIONAL TRUCK AND ENGINE CORPORATION

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# ELECTRICAL CIRCUIT DIAGRAM

# CHAPTER 3

## ACCESSORY FEED

**KEY SWITCH (1100)**

**BATTERY FEED CH3\_01**

**BODY CONTROLLER#J3 (1600)**

**ACCESSORY SWITCH INPUT DINI**

**ACCESSORY RELAY#1 (1013 / 1011)**

**GROUND ADAPTER (1006)**

**RIGHT SIDE DASH MTD DUAL POST GND PLATE**

**W/ BODY BUILDER EFFECTS**

**BODY / ACCESSORY TRAILER AUX RELAY (1016) CH10\_10**

**FUSE F3-A (1012)**

**FUSE F4-J (1013)**

**FUSE F4-K (1013)**

**FUSE F4-F (1013)**

**FUSE F4-B (1013)**

**FUSE F9-B (1018)**

**WHEELCHAIR LIFT RELAY (1019) CH10\_33**

**IP MTD ROOF AUX LOAD SWITCH (1106) CH4\_16**

**SWITCH PACK (1101) CH4\_15**

**RADIO CONNECTION (1301) CH4\_10**

**CB RADIO POWER CONNECTOR (2303) CH4\_03**

**RADIO (1300) CH4\_11**

**MIRROR SWITCH / DRIVER POWER MIRROR (3000) CH4\_09**

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	PART NO.	SHEET
CNA	9MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/B600 & 73/74/7500 CIRC DIAGRAMS	AE08-56609	04
					RELEASE NO. 59974G	DATE 07AUG06		

### Figure 16 Accessory Feed

### 3.5. IGNITION FEED — STANDARD, THEFT DETERRENT, REMOTE START/STOP, P. 5

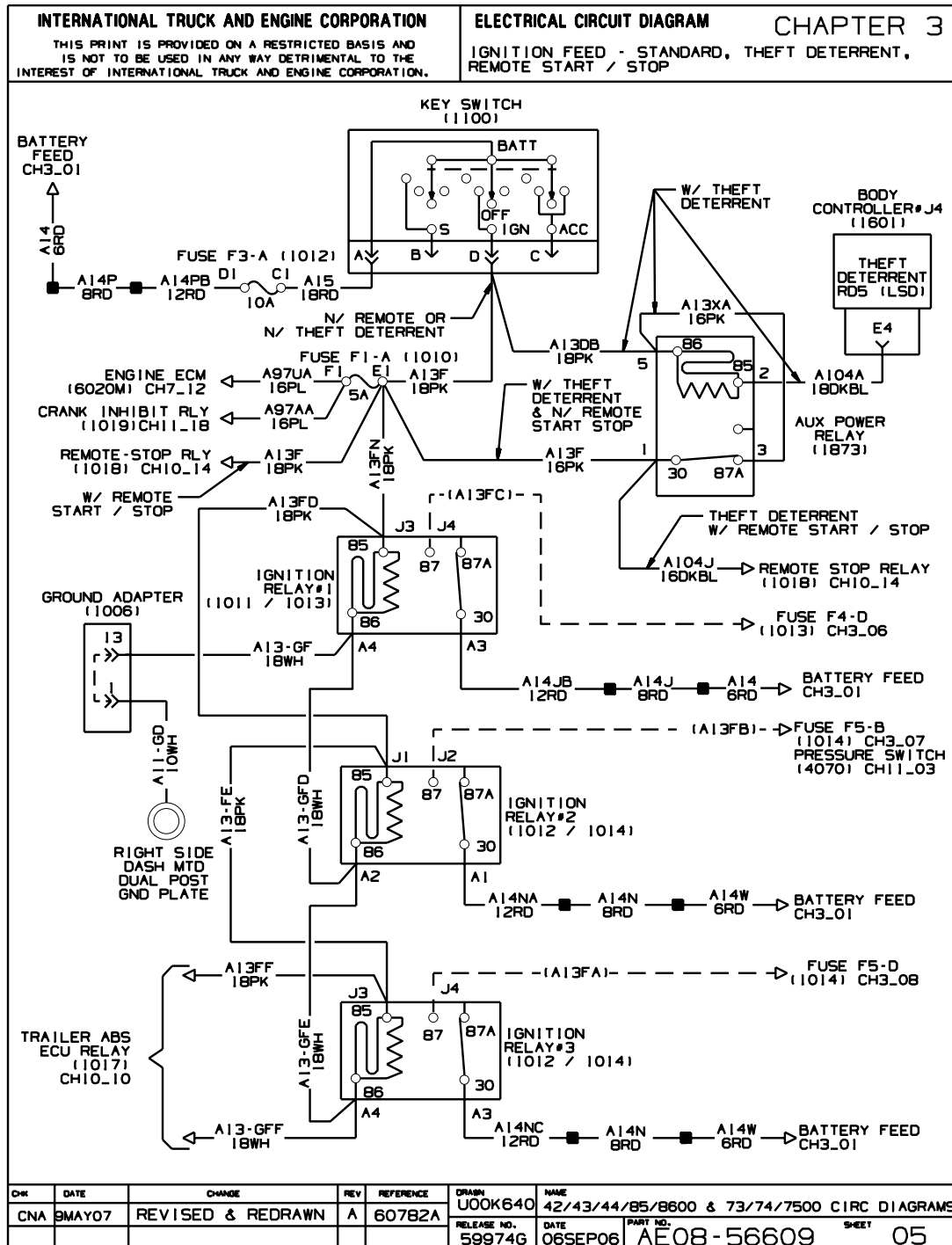
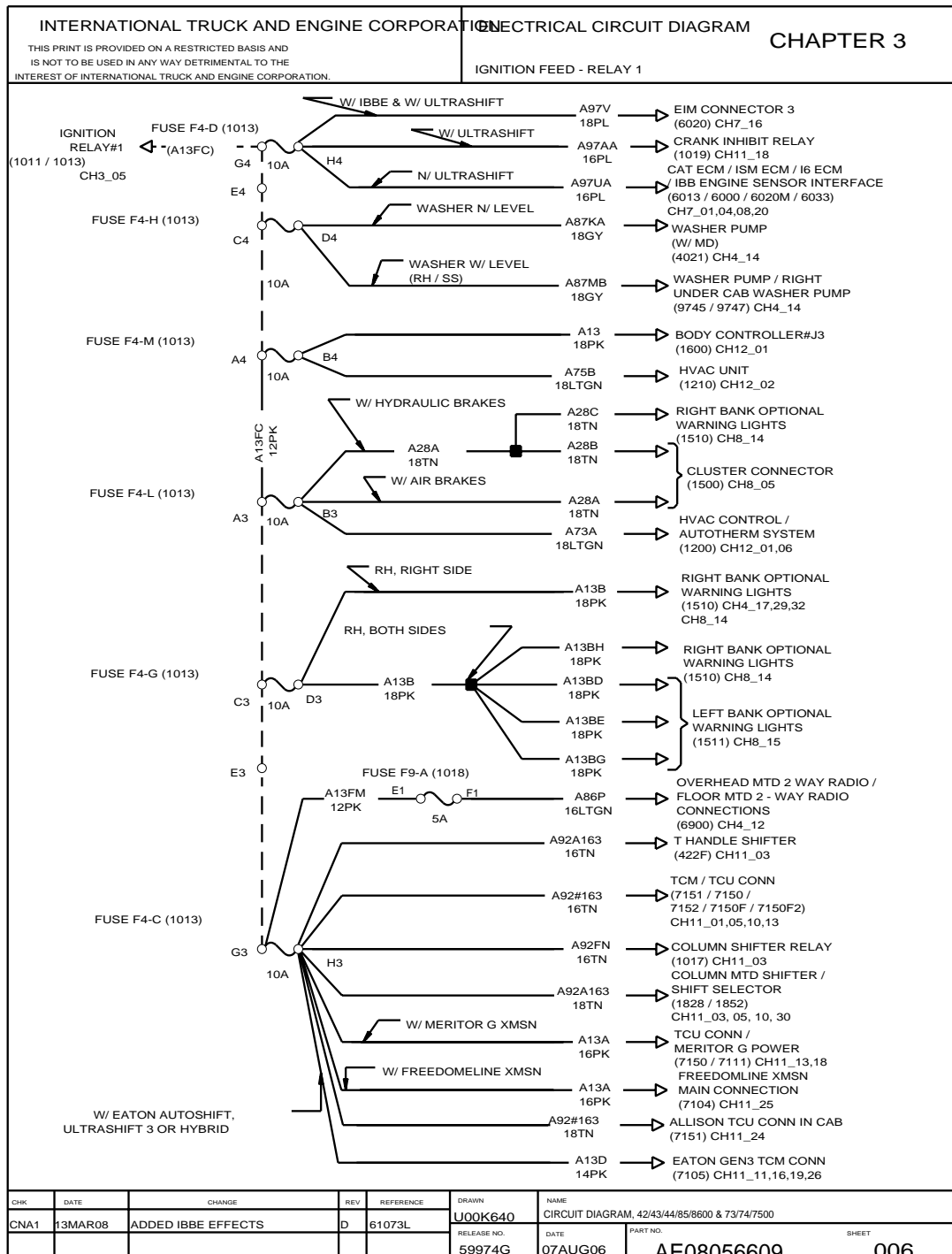


Figure 17 Ignition Feed — Standard, Theft Deterrent, Remote Start/Stop

### 3.6. IGNITION FEED RELAY 1, P. 6



**Figure 18 Ignition Feed Relay 1**

### 3.7. IGNITION FEED RELAY 2, P. 7

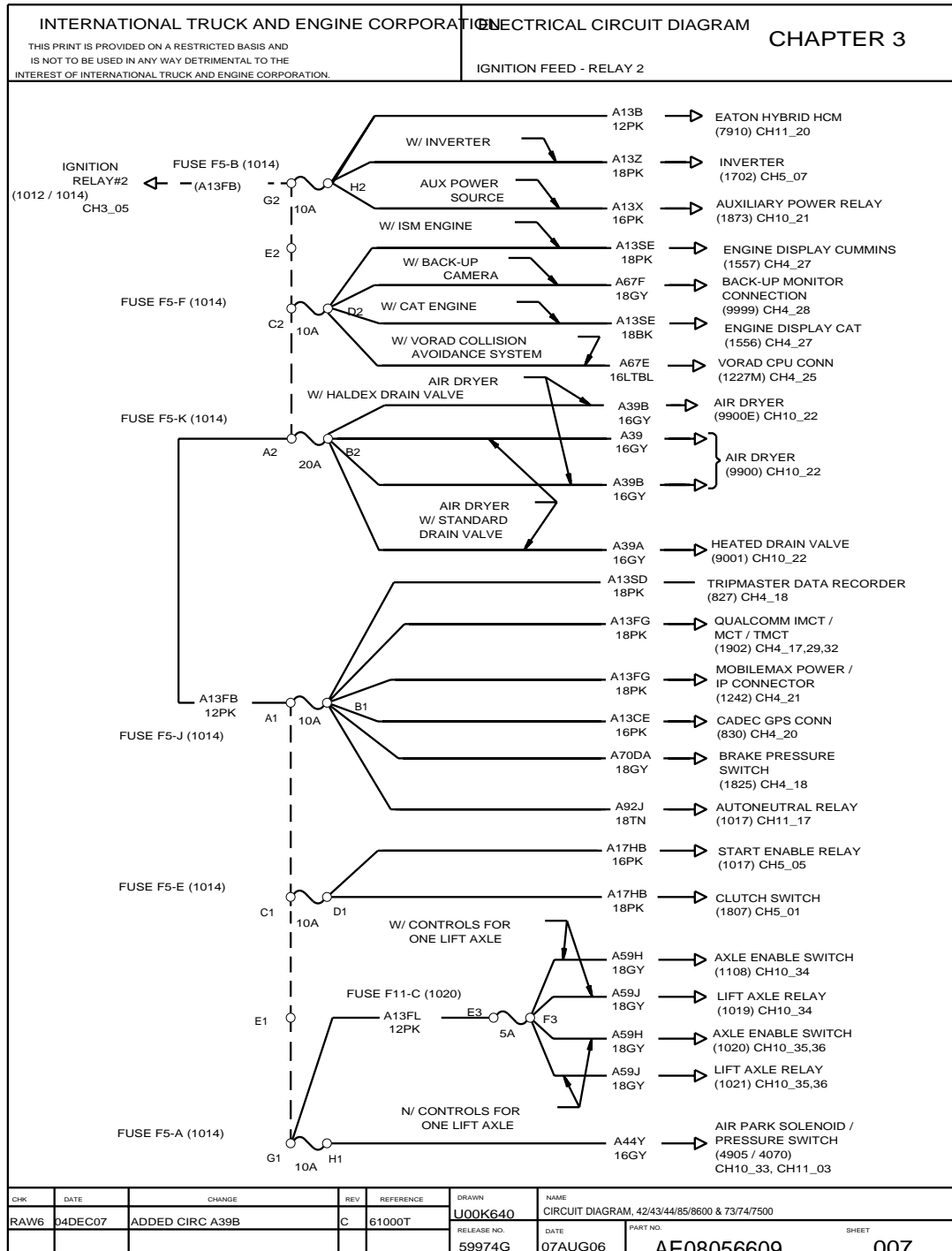
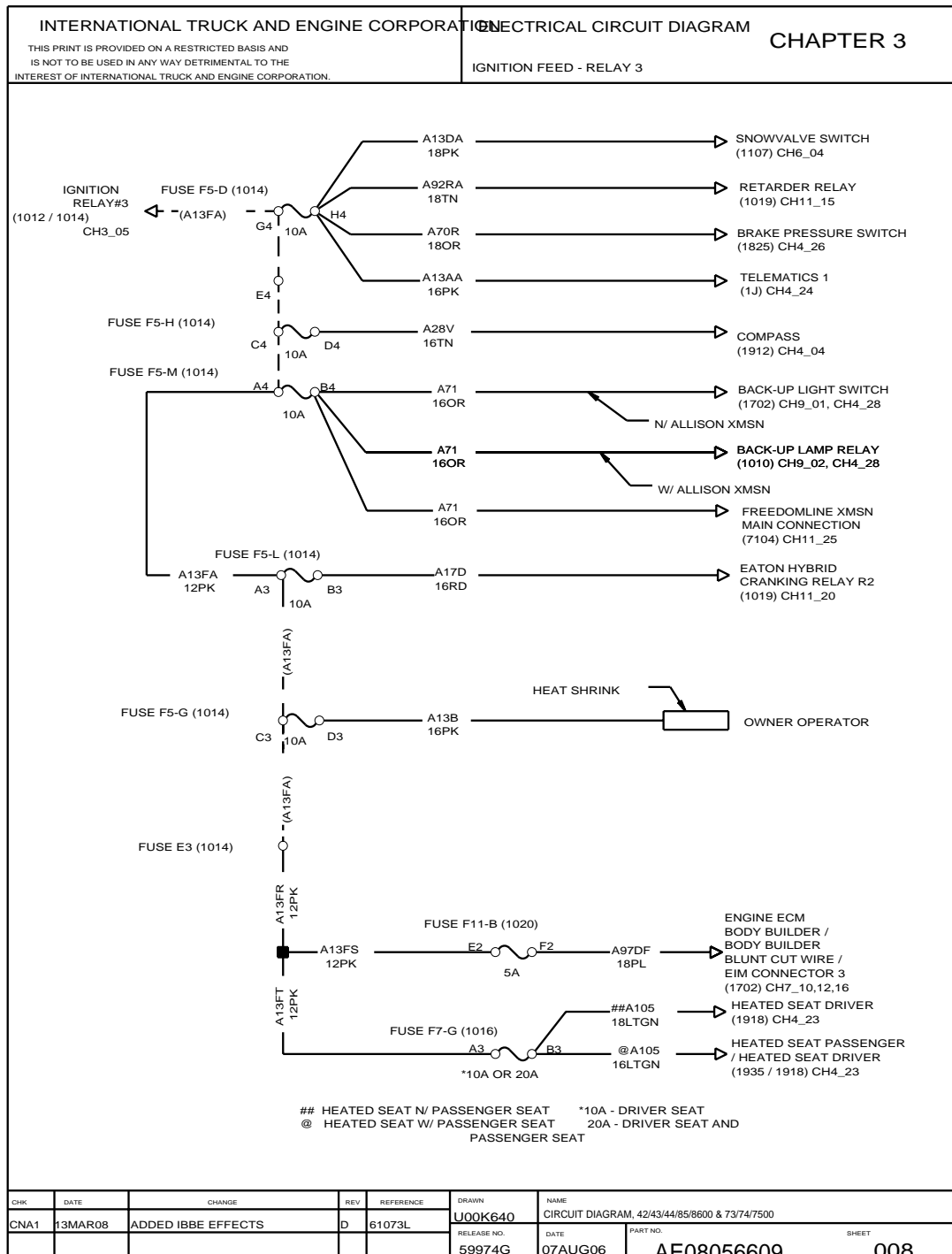


Figure 19 Ignition Feed Relay 2

### 3.8. IGNITION FEED RELAY 3, P. 8



**Figure 20 Ignition Feed Relay 3**

### 3.9. J1708 DATA LINK — PUBLIC EFFECTS, P. 9

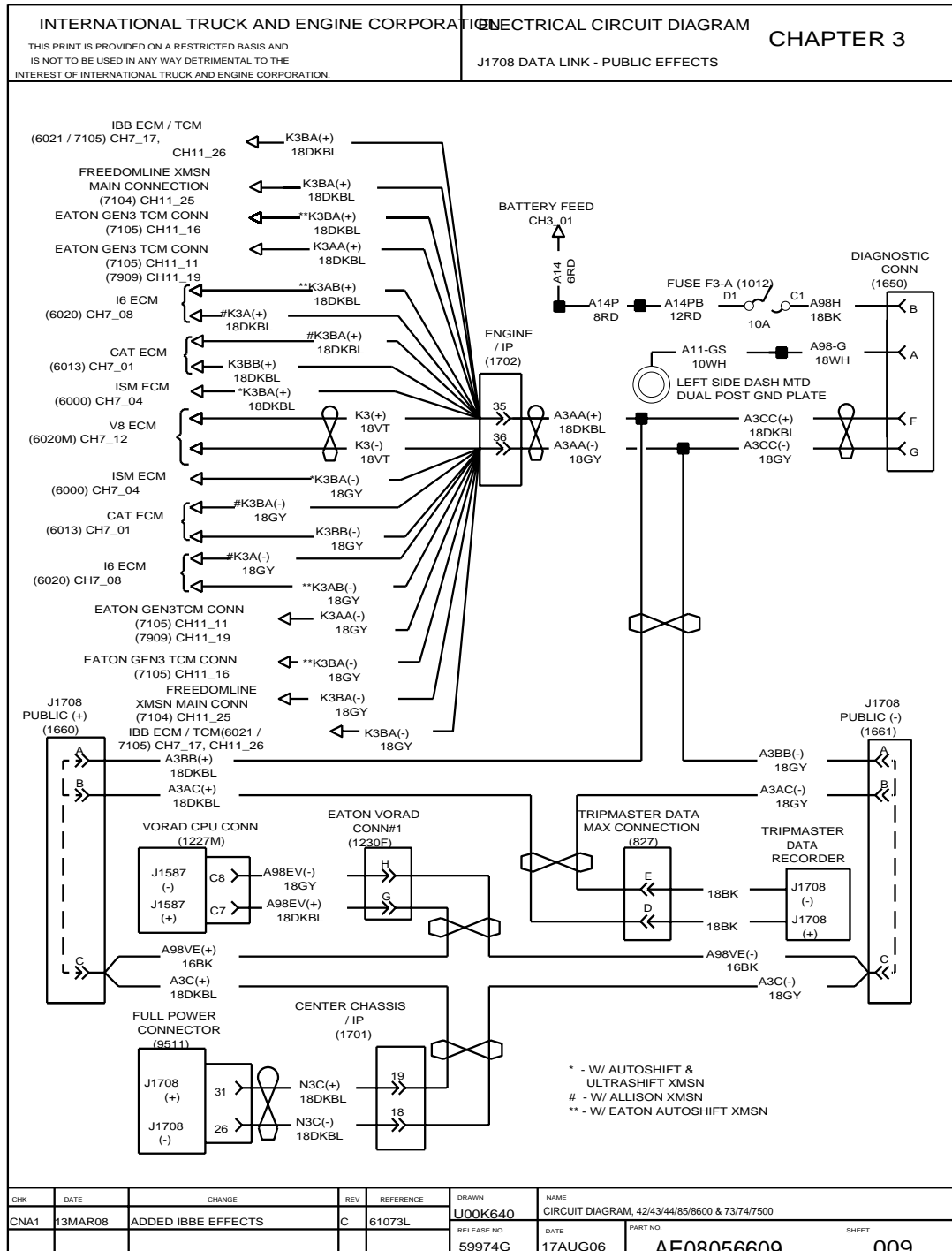


Figure 21 J1708 Data Link — Public Effects

### 3.10. J1708 DATA LINK — PUBLIC EFFECTS, P. 10

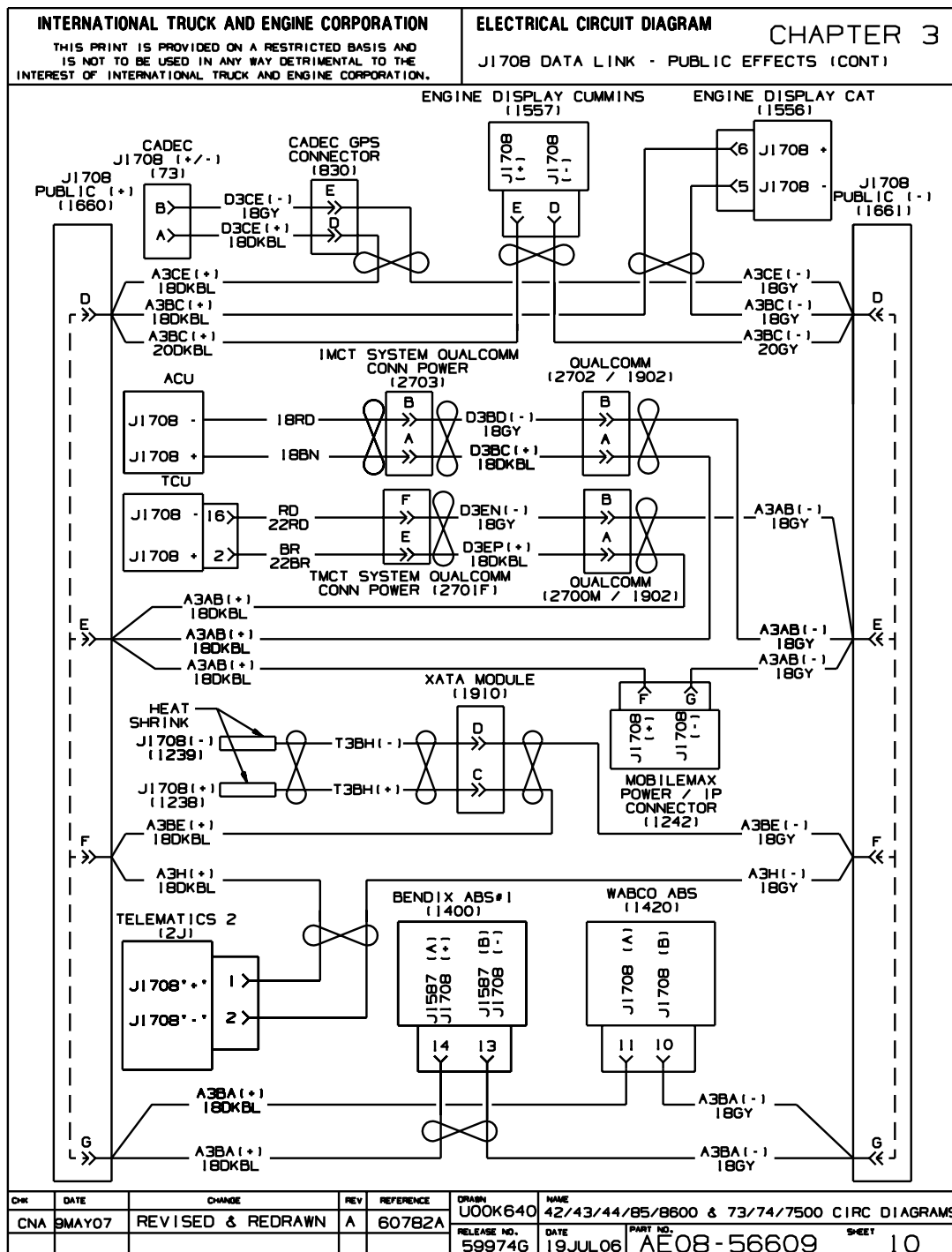


Figure 22 J1708 Data Link — Public Effects (Cont.)



### 3.11. J1708 DATA LINK — PRIVATE WITH POWER WINDOW AND LOCK, P. 11

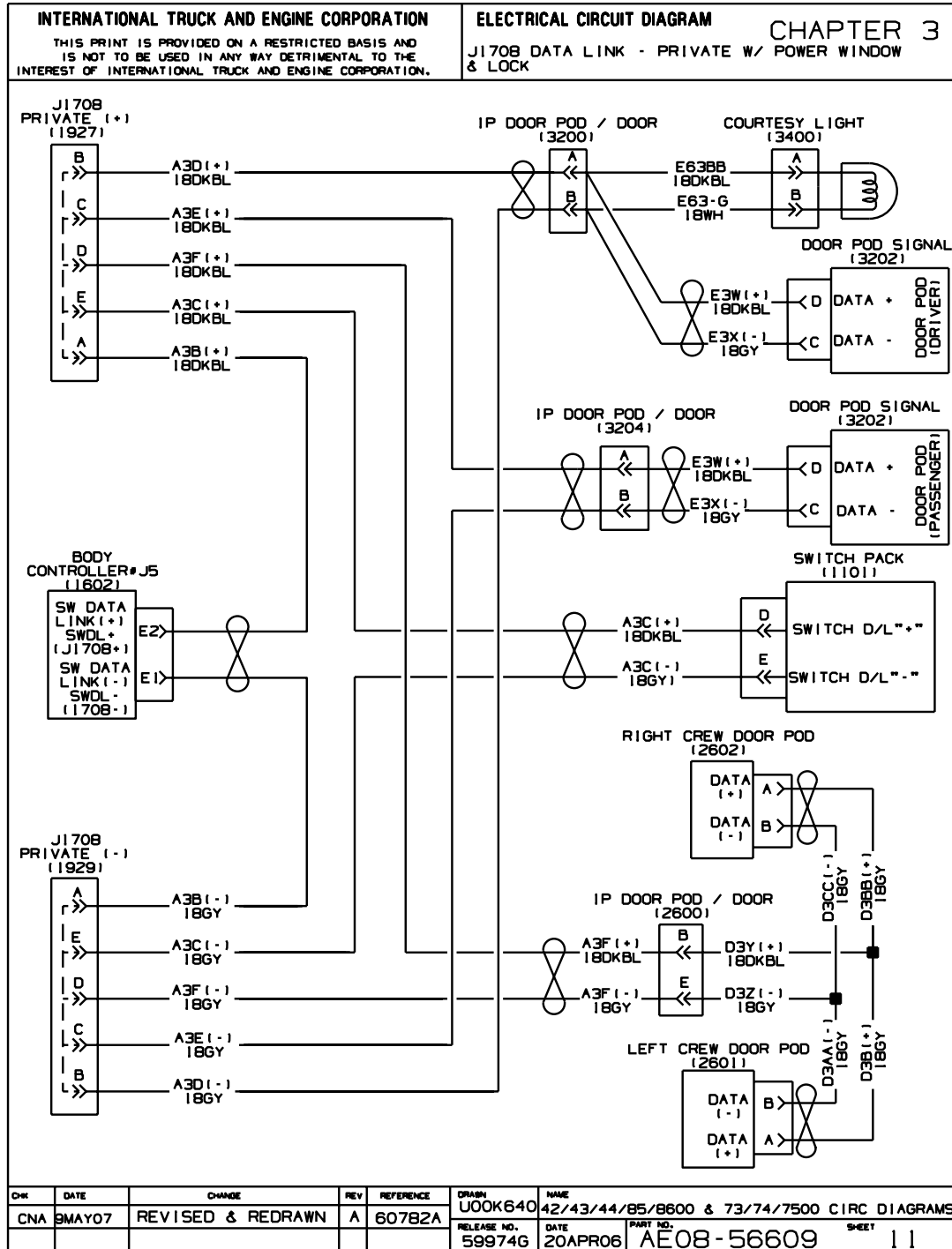


Figure 23 J1708 Data Link — Private with Power Window and Lock

### 3.12. J1939 DATA LINK, P. 12

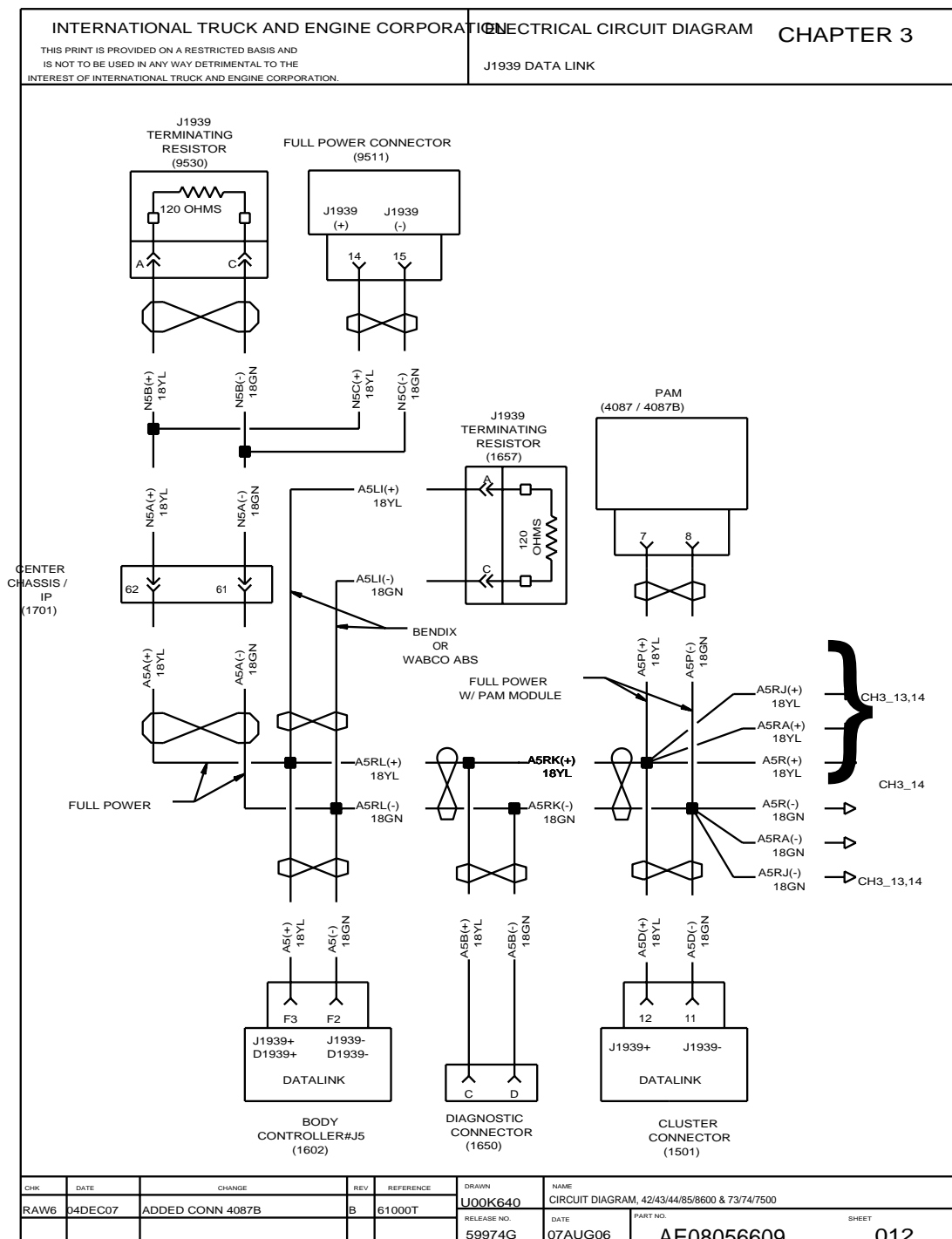


Figure 24 J1939 Data Link

### 3.13. J1939 DATA LINK WITH OPTIONS, P. 13

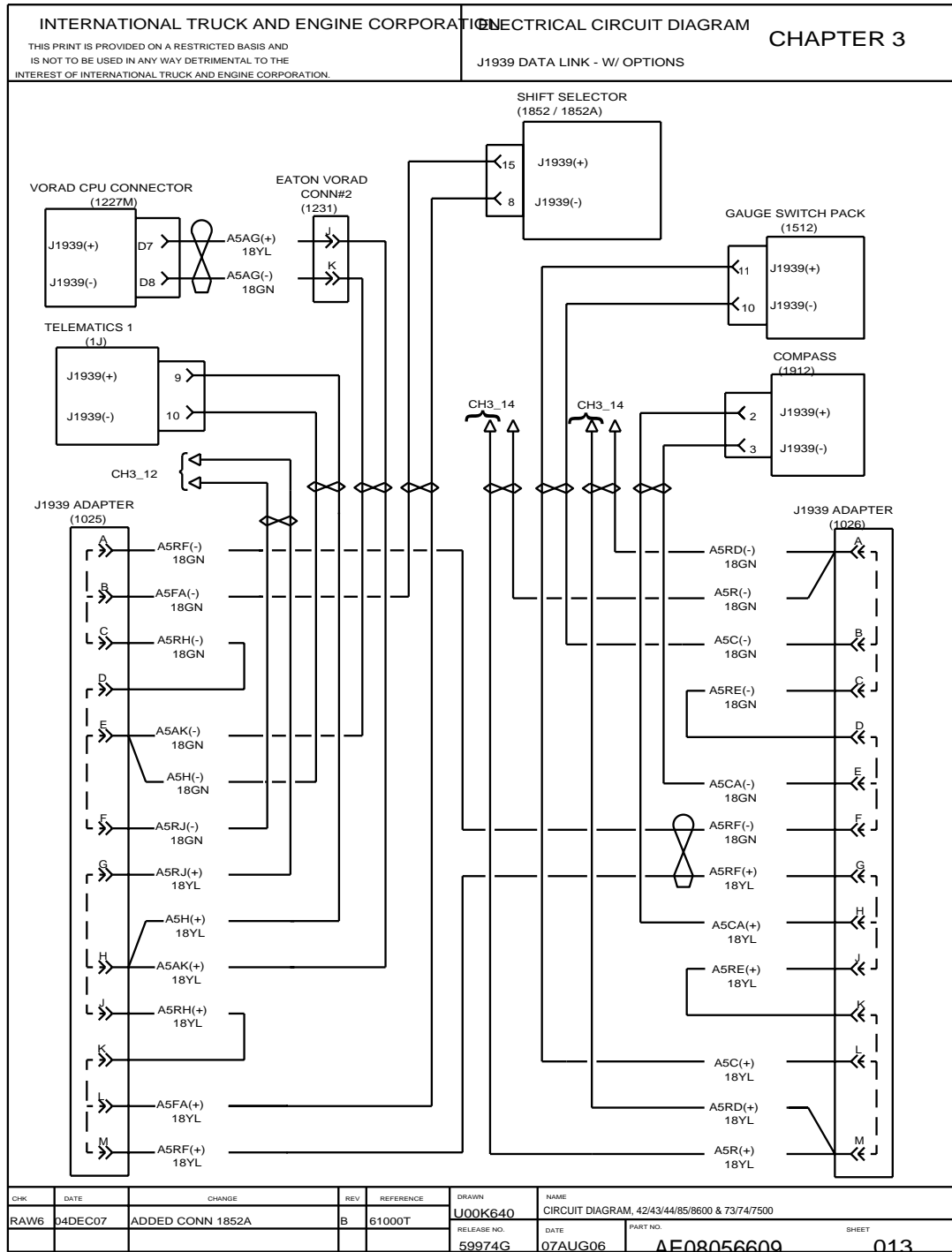
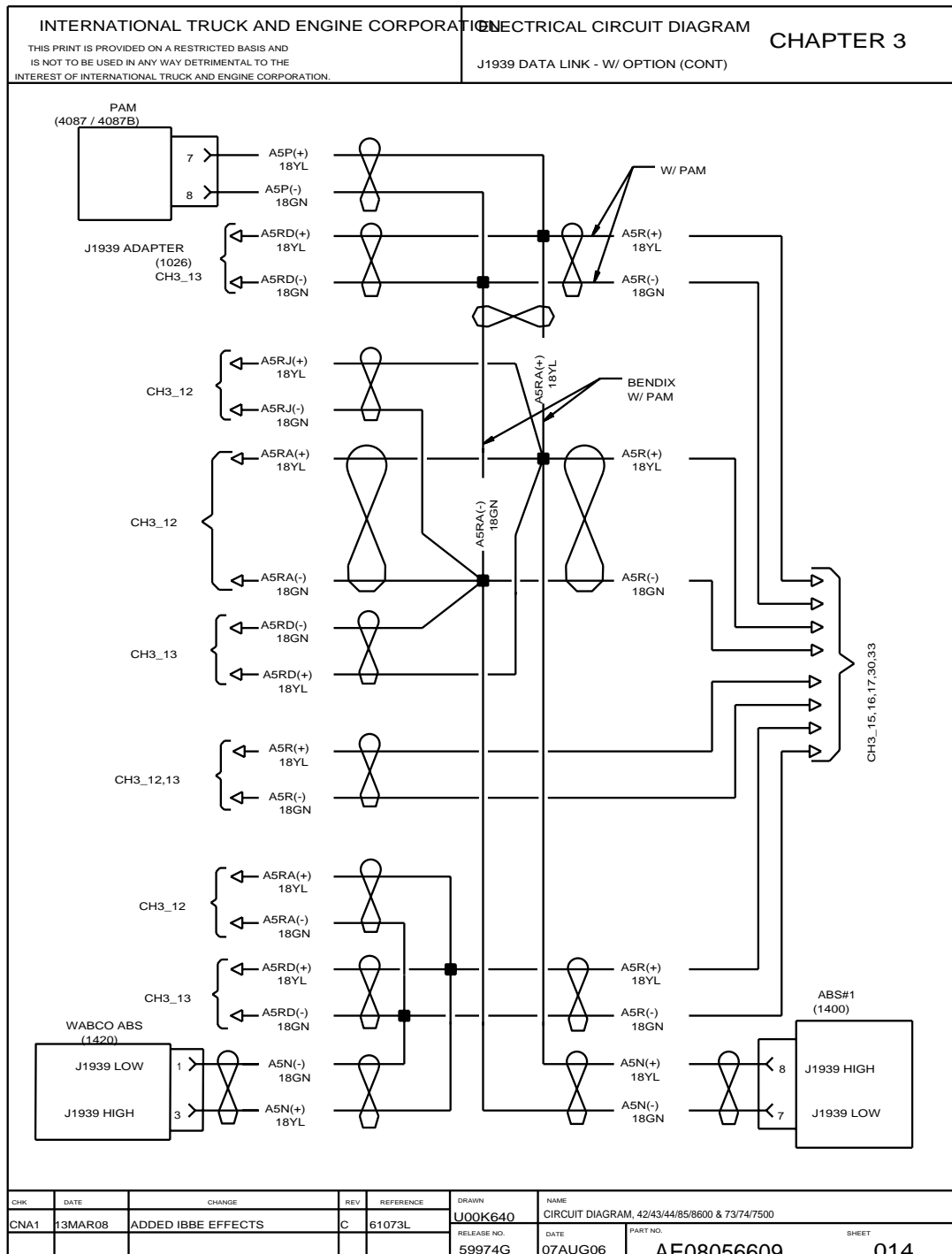


Figure 25 J1939 Data Link with Options

### 3.14. J1939 DATA LINK WITH OPTIONS, P. 14



**Figure 26 J1939 Data Link with Options**

[illegible]

### Figure 27 J1939 Data Link — ISM 2007 Engine

[illegible]

### Figure 28 J1939 Data Link — I6 2007 Engine

### 3.17. J1939 DATA LINK — C11/C13 2007 ENGINE, P. 17

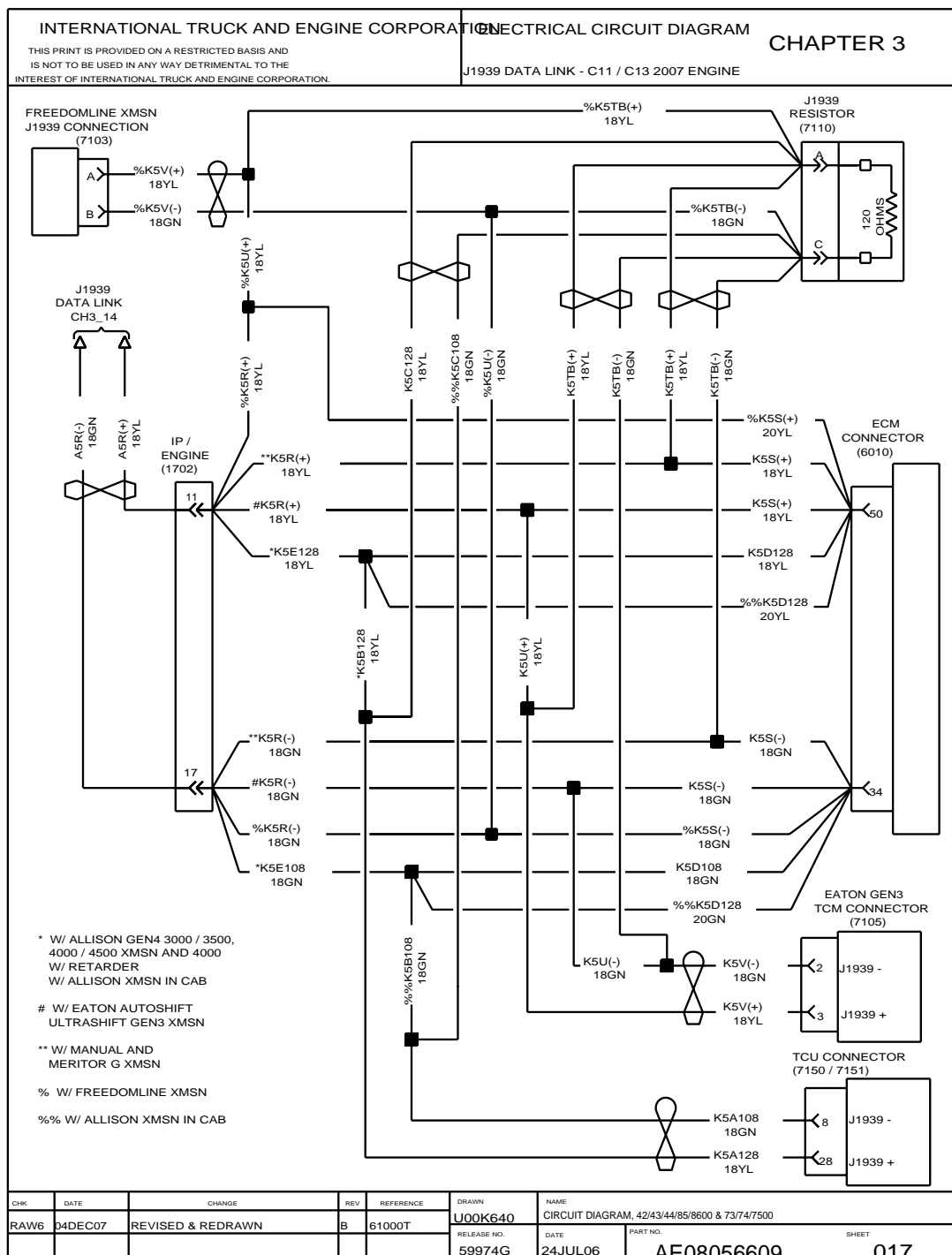


Figure 29 J1939 Data Link — C11/C13 2007 Engine

### 3.18. GROUND — IP, P. 18

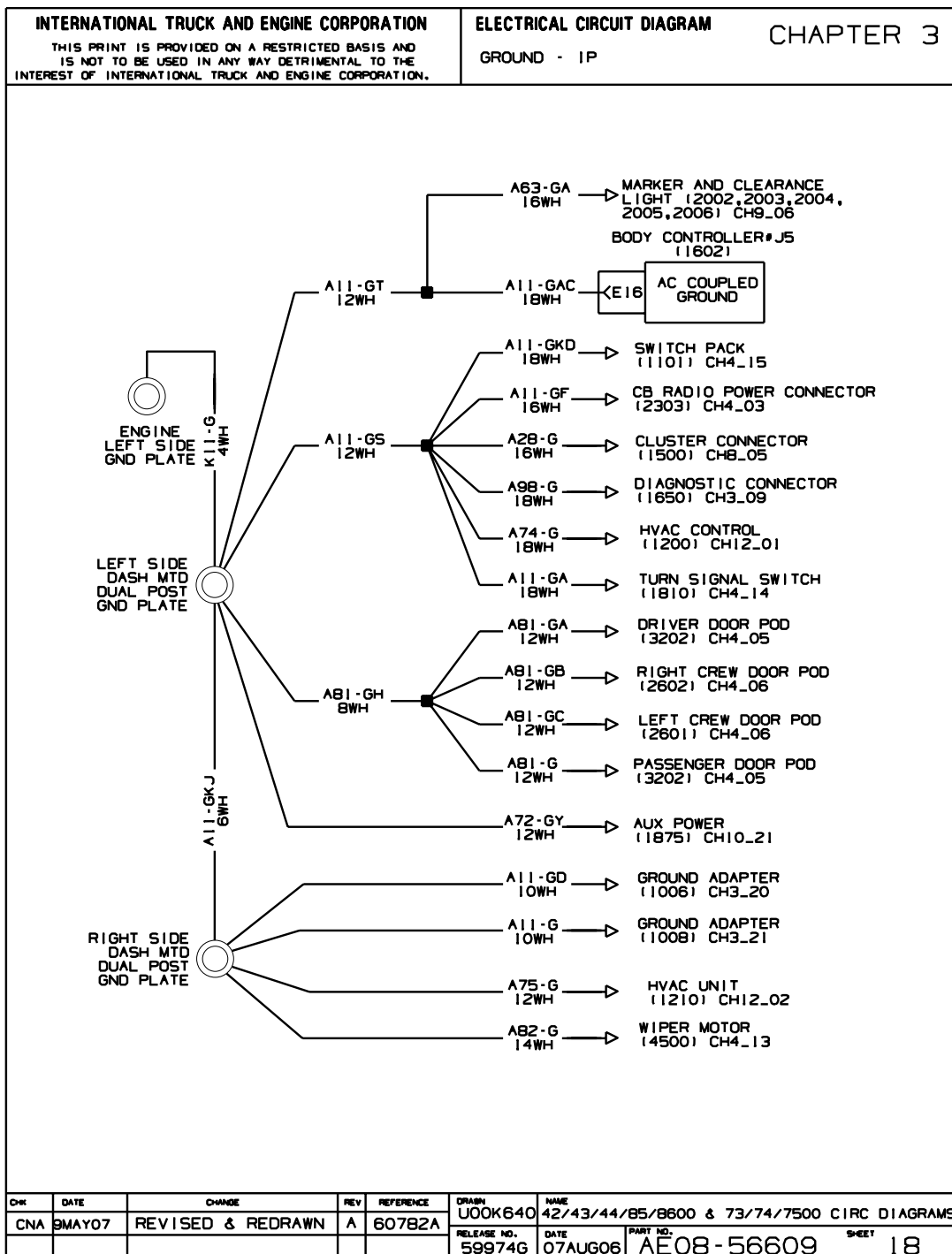


Figure 30 Ground — IP



### 3.19. GROUND — IP, P. 19

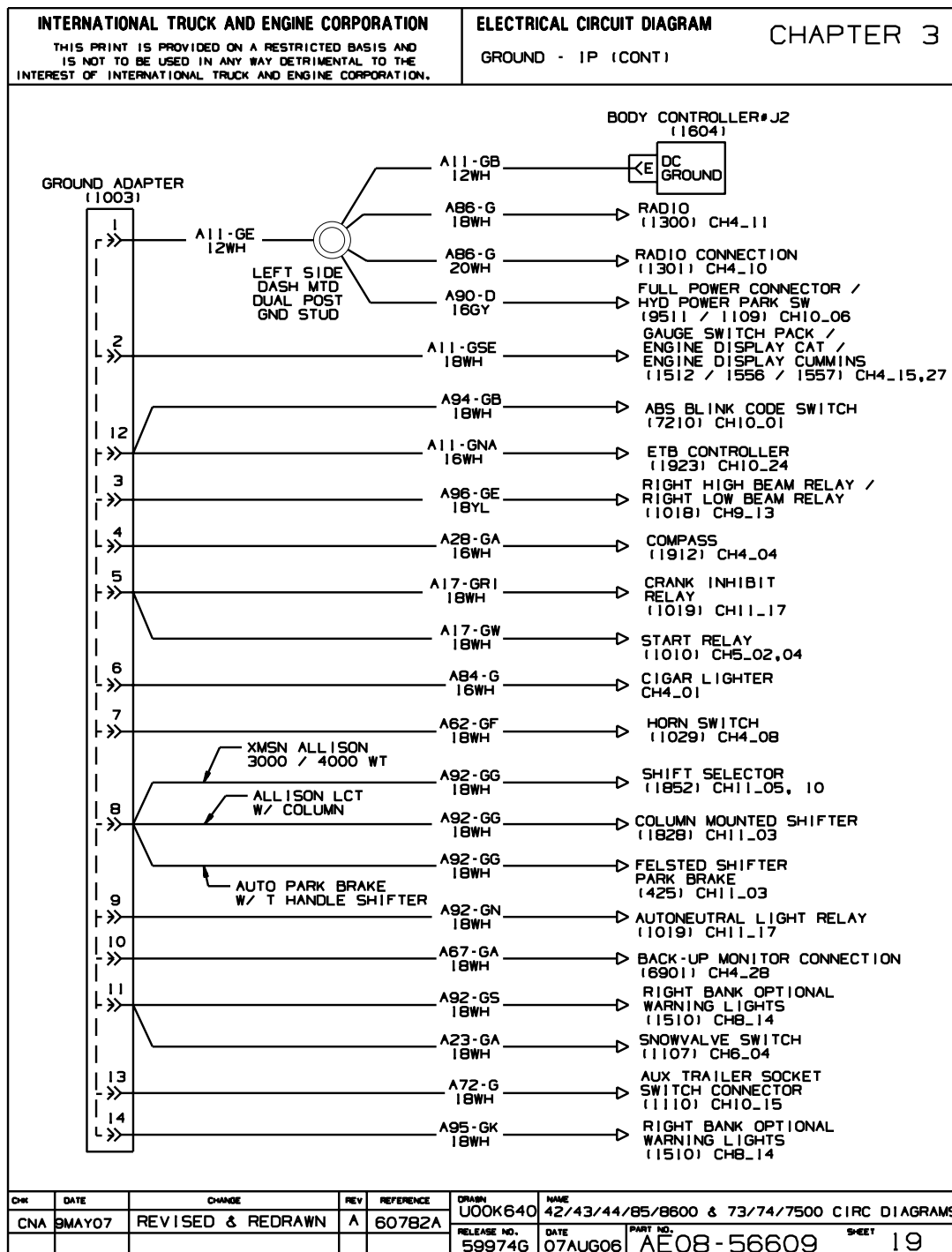


Figure 31 Ground — IP (Cont.)

### 3.20. GROUND — IP, P. 20

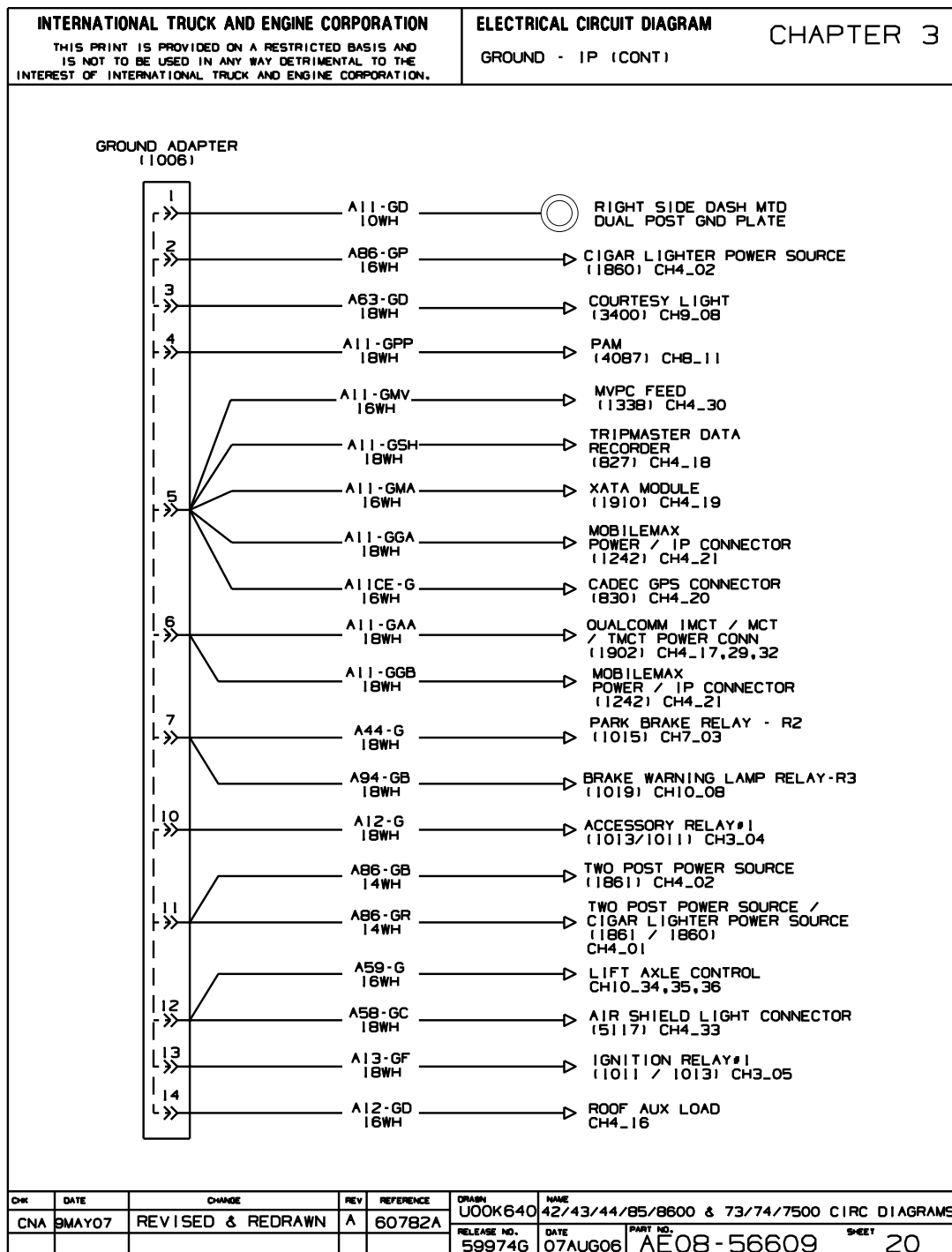


Figure 32 Ground — IP (Cont.)

### 3.21. GROUND — IP, P. 21

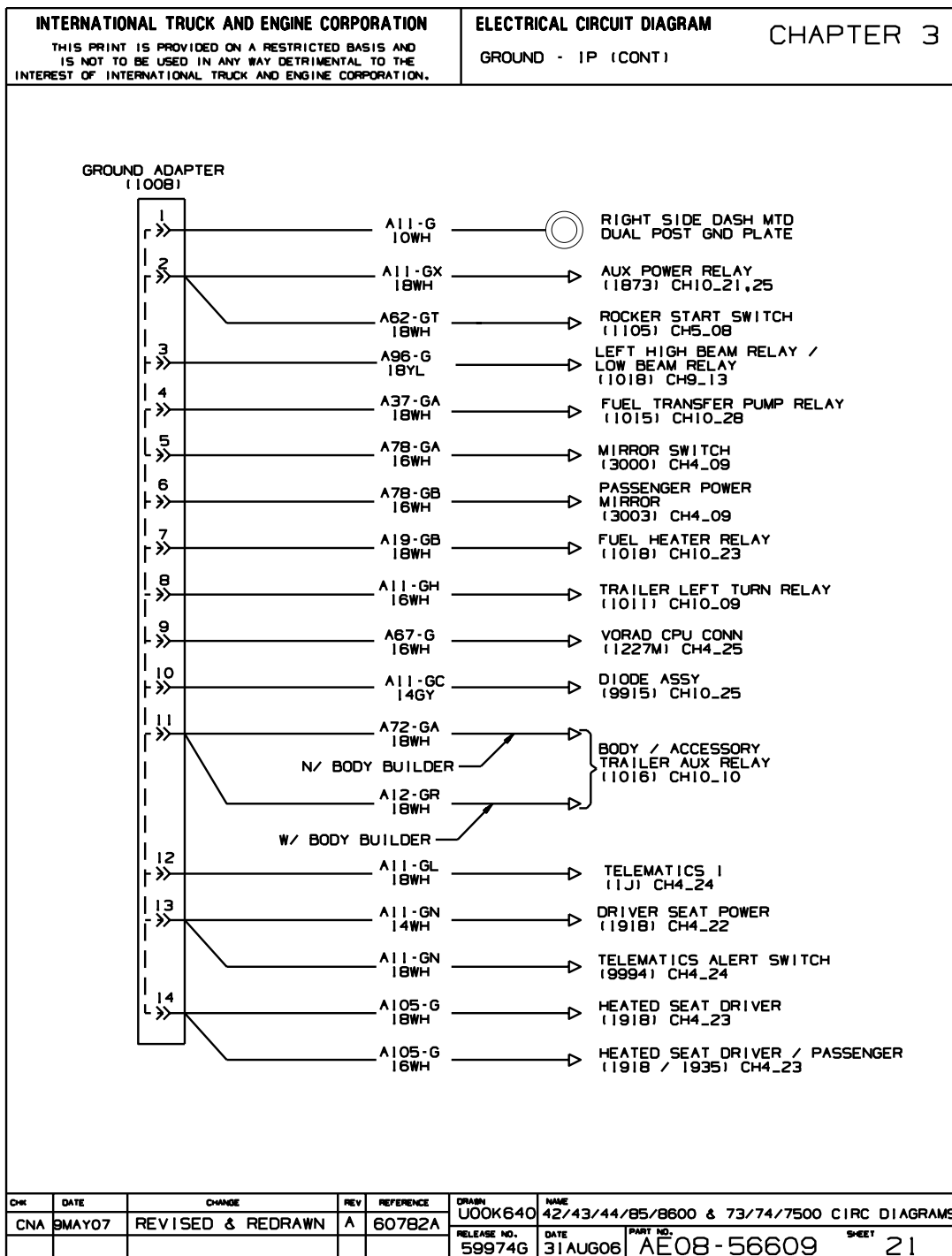
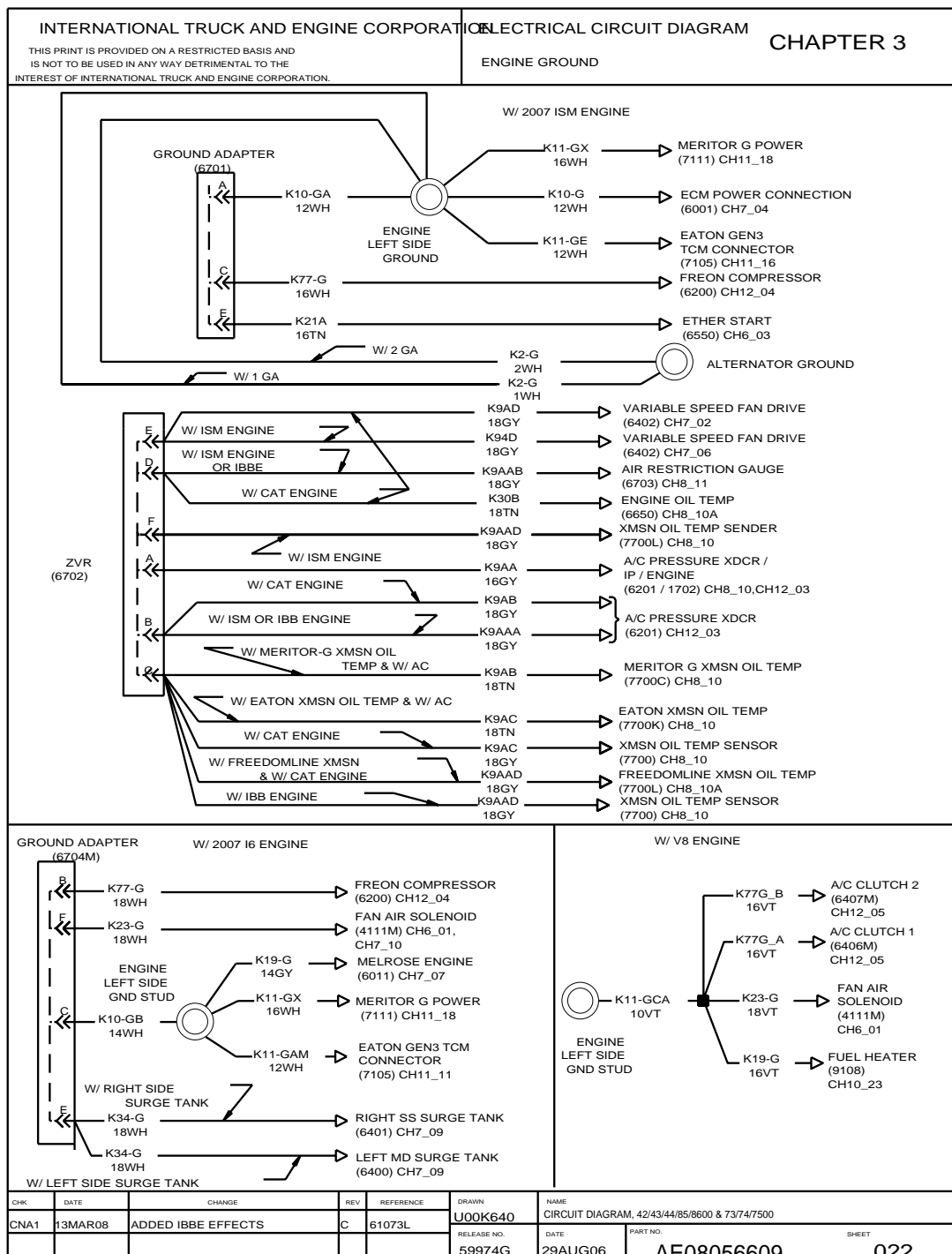


Figure 33 Ground — IP (Cont.)

### 3.22. ENGINE GROUND, P. 22



**Figure 34 Engine Ground**

### 3.23. ENGINE GROUND, P. 23

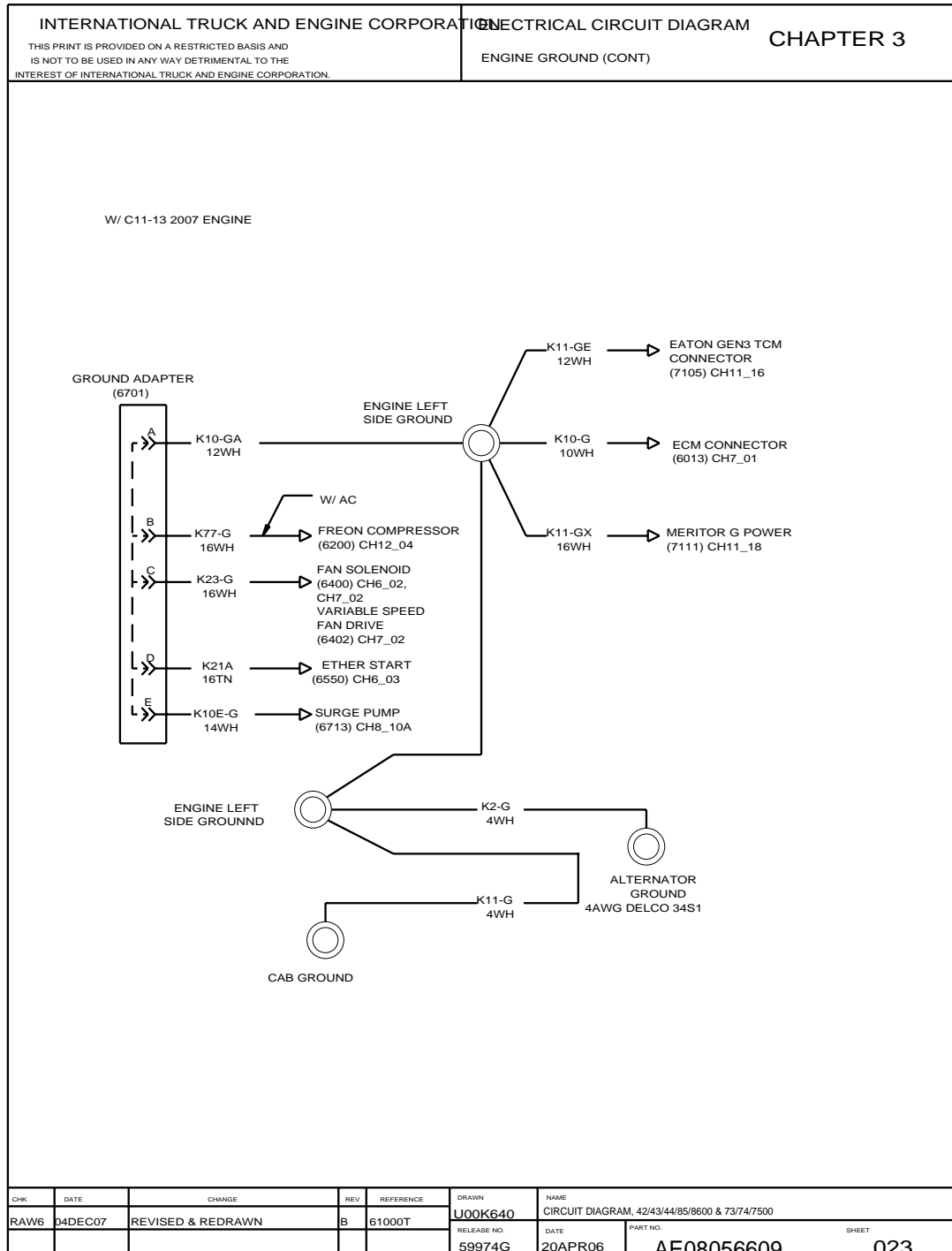


Figure 35 Engine Ground (Cont.)

### 3.24. GROUND — CHASSIS, P. 24

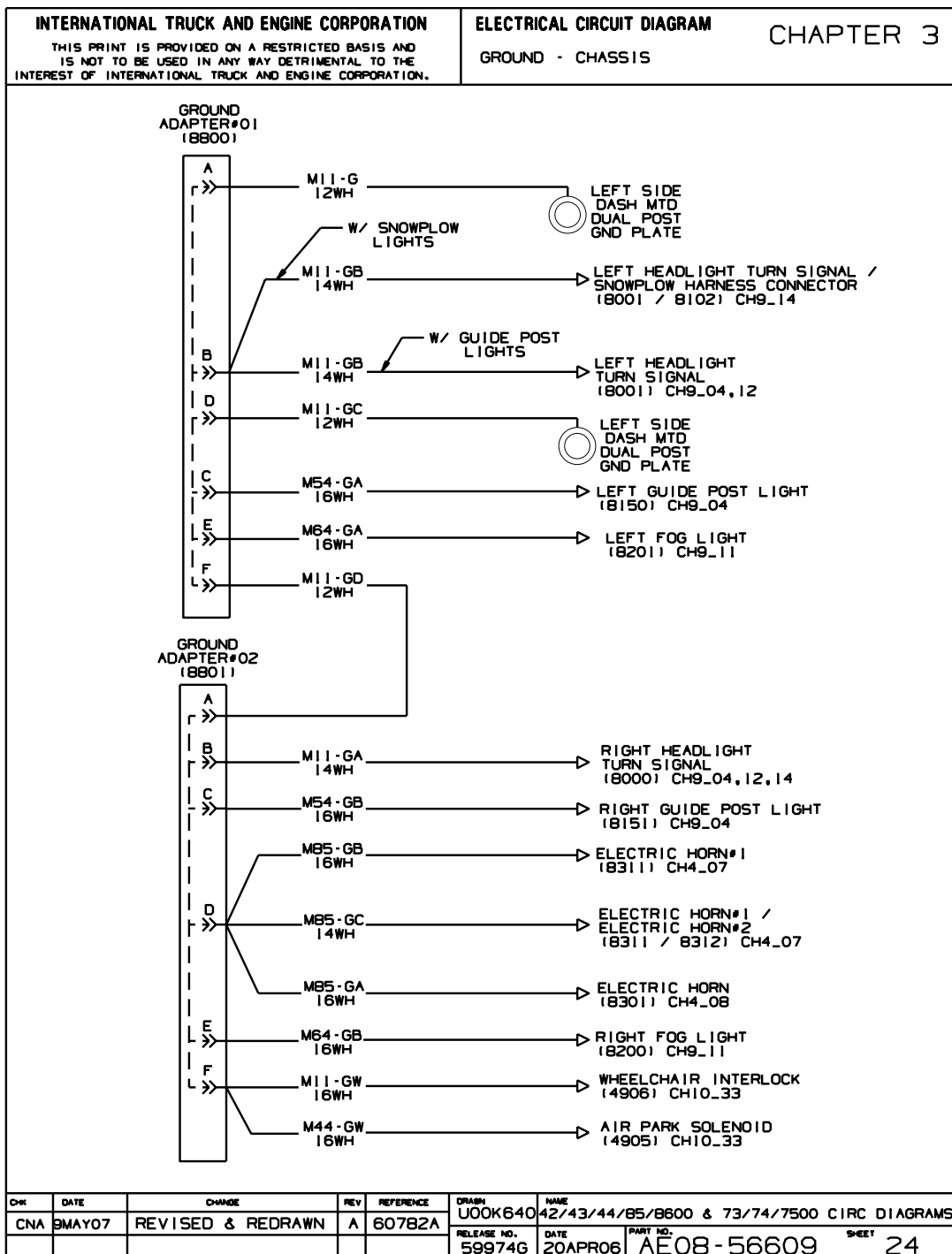


Figure 36 Ground — Chassis

### 3.25. GROUND — CHASSIS WITH HEAVY DUTY DIESEL, P. 25

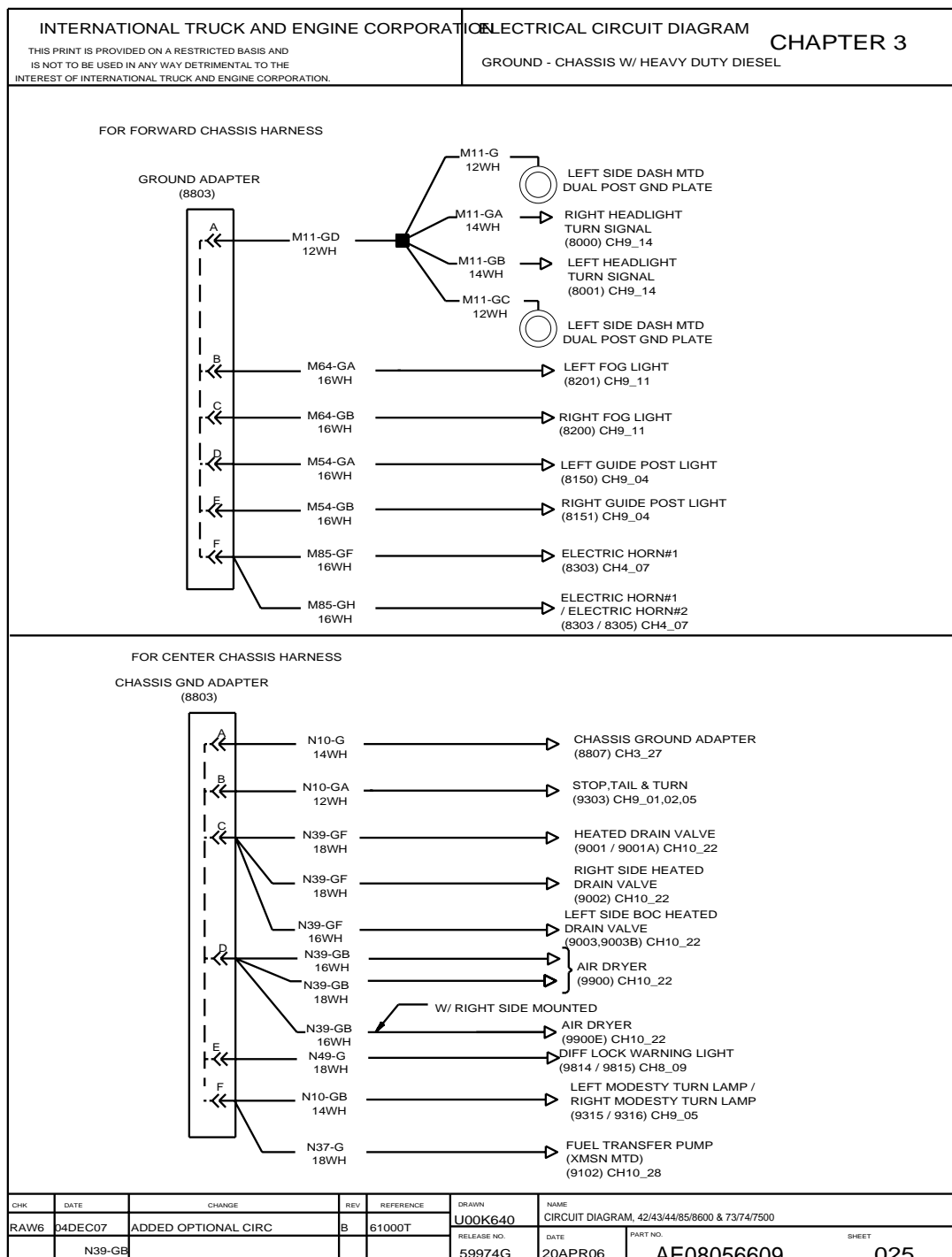


Figure 37 Ground — Chassis with Heavy Duty Diesel

### 3.26. GROUND — CHASSIS, P. 26

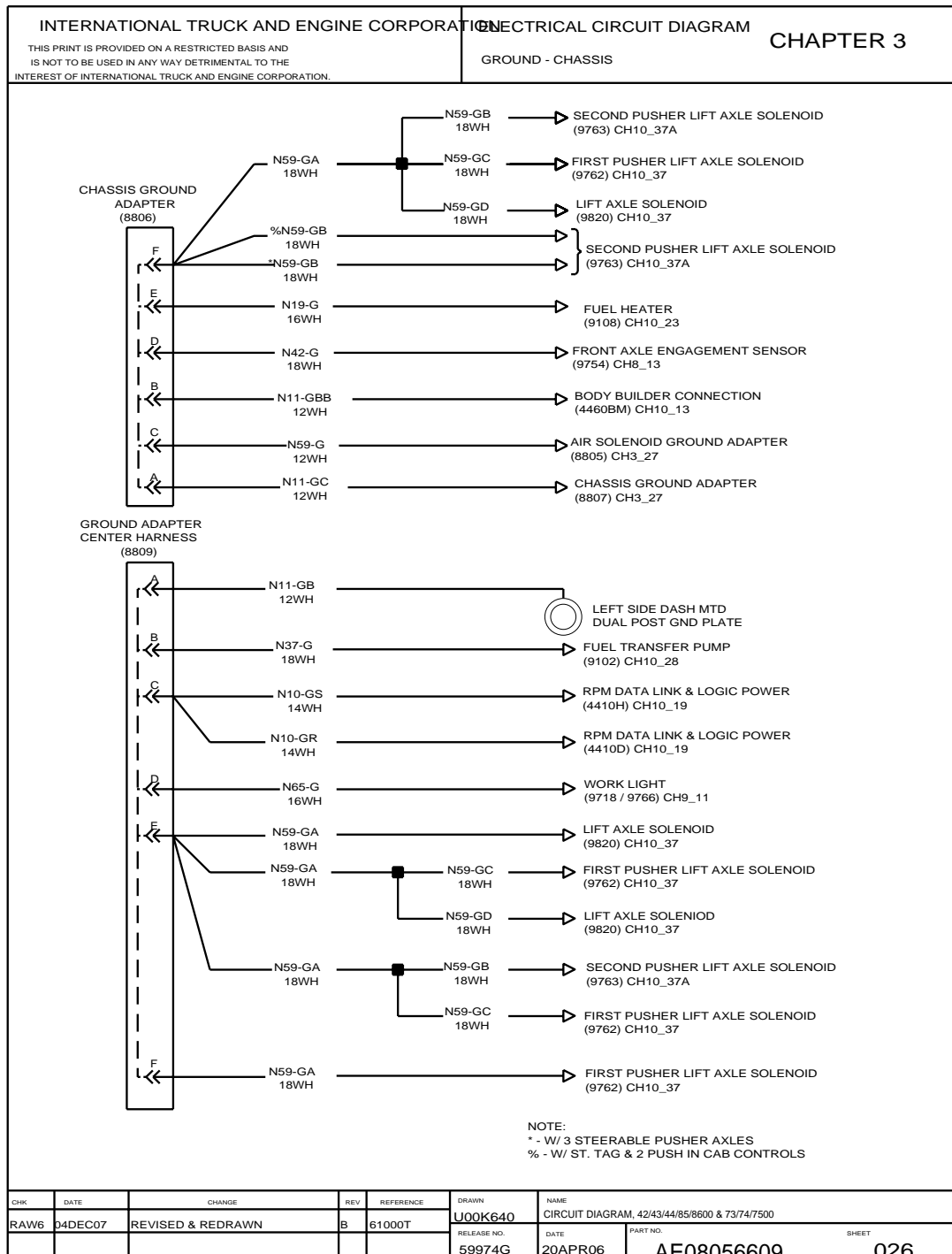


Figure 38 Ground — Chassis



### 3.27. ZERO VOLT REFERENCE, P. 27

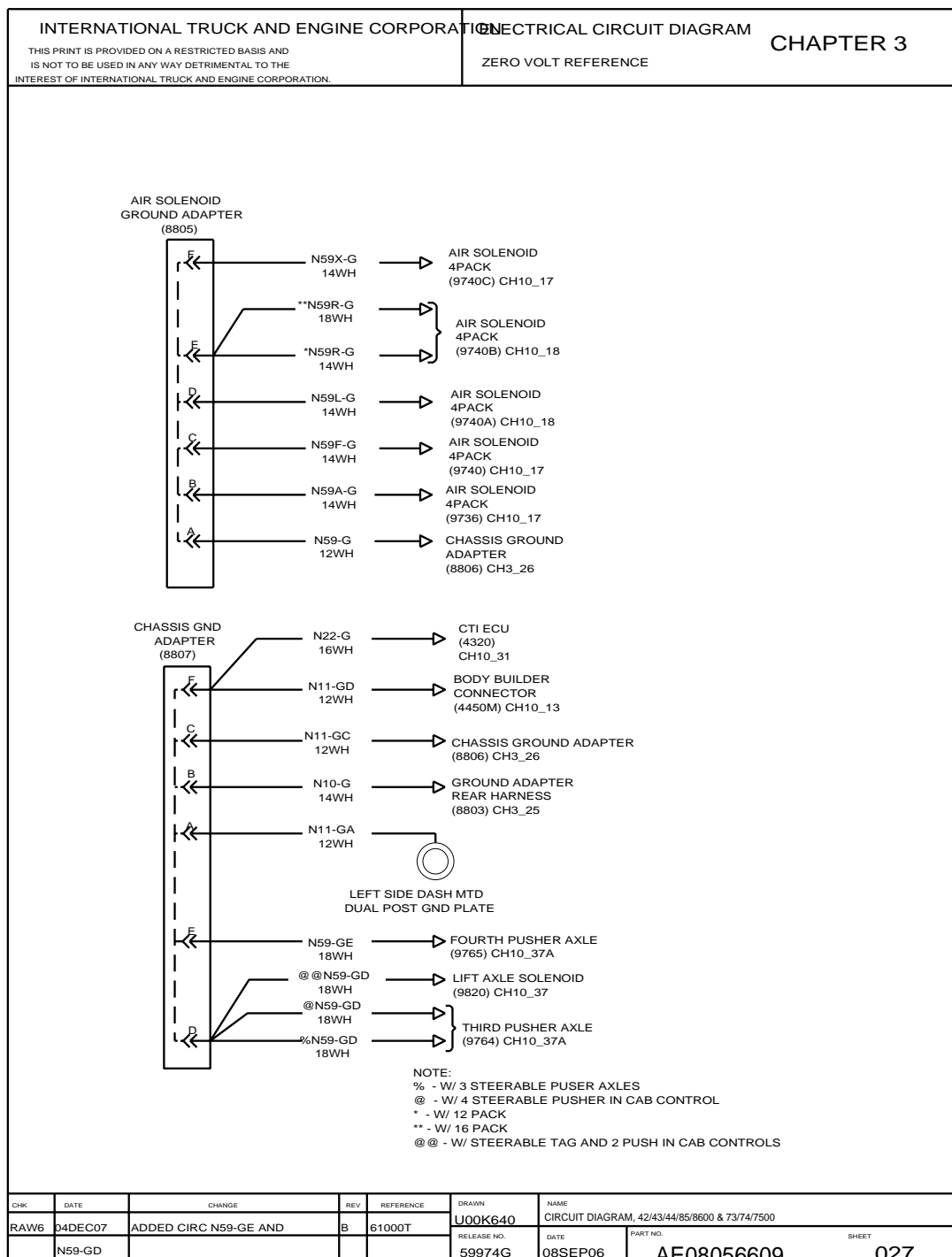


Figure 39 Zero Volt Reference

3.28. ZERO VOLT REFERENCE, P. 28

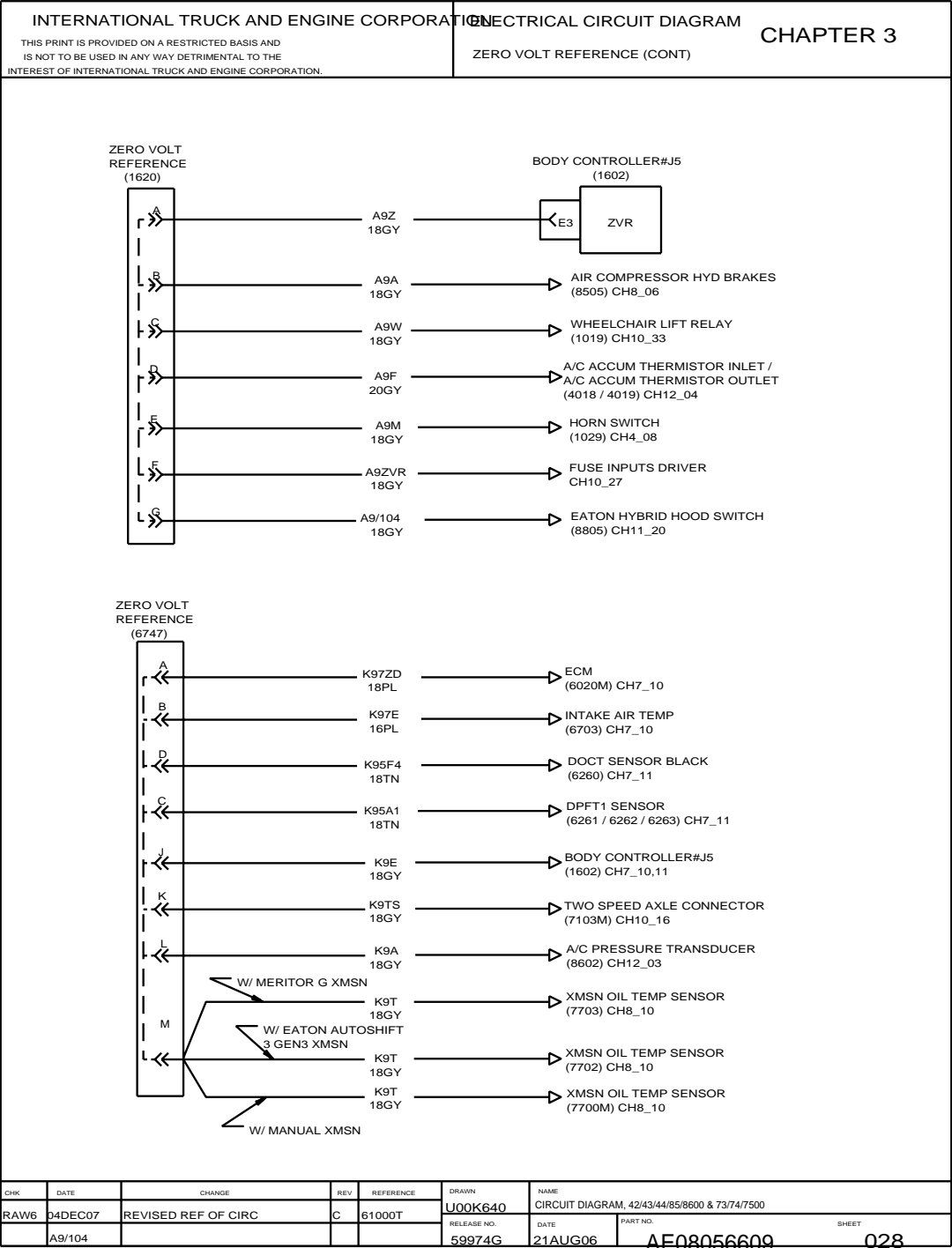


Figure 40 Zero Volt Reference

### 3.29. GROUND — CHASSIS, P. 29

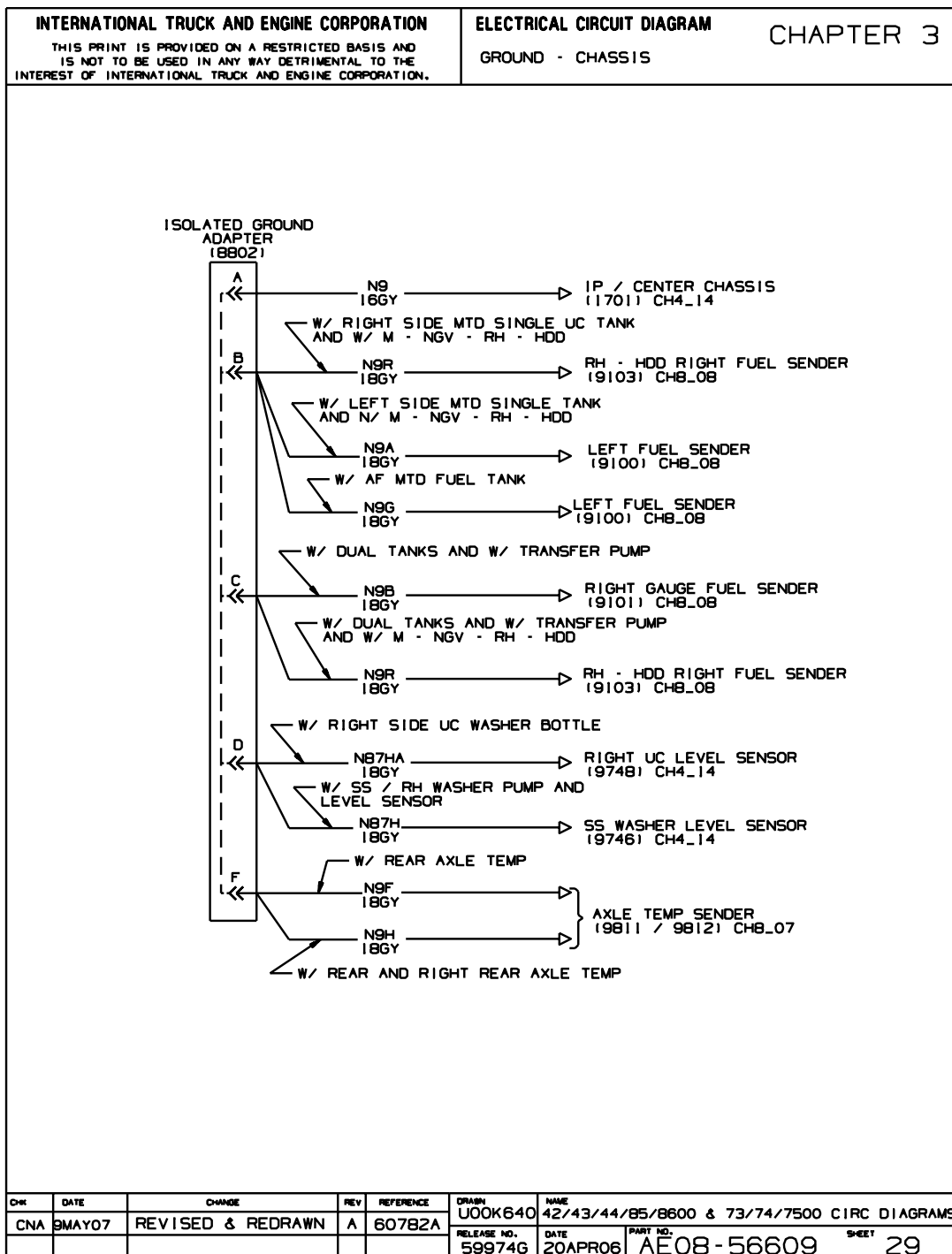


Figure 41 Ground — Chassis

### 3.30. J1939 DATA LINK WITH V8 ENGINE, P. 30

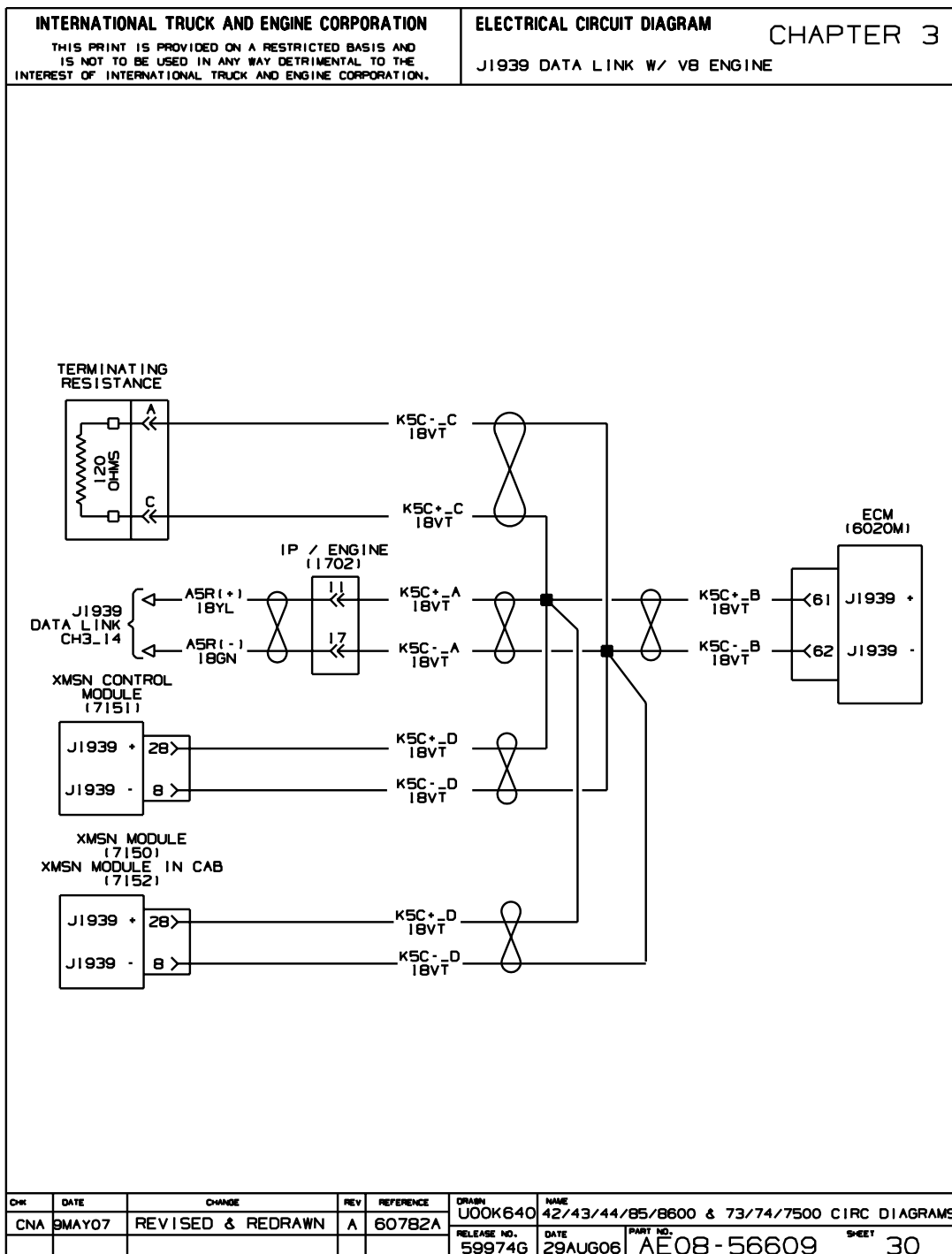
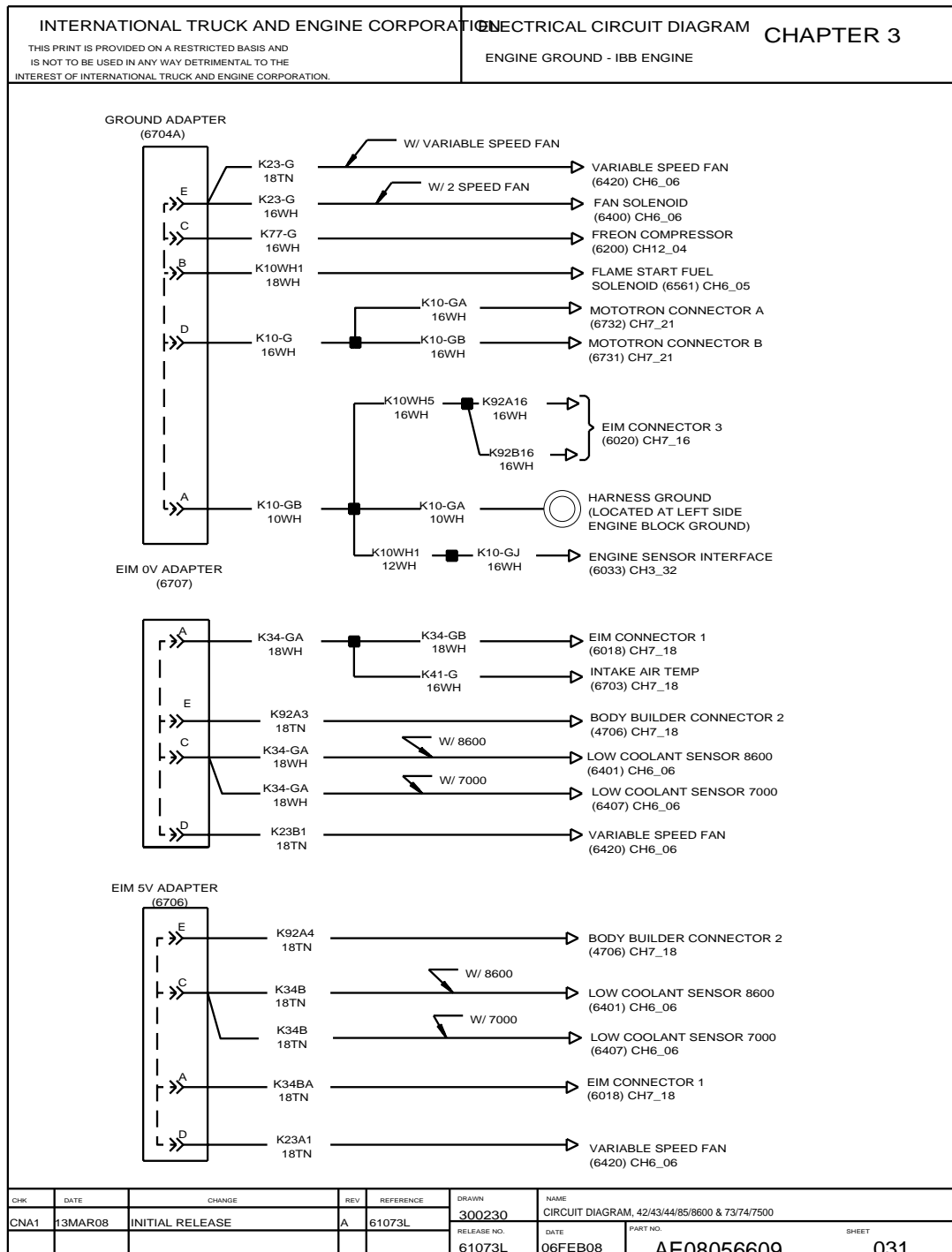


Figure 42 J1939 Data Link with V8 Engine

### 3.31. ENGINE GROUND — IBB ENGINE, P. 31



**Figure 43 Engine Ground — IBB Engine**

### 3.32. J1939 DATA LINK — IBB ENGINE, P. 32

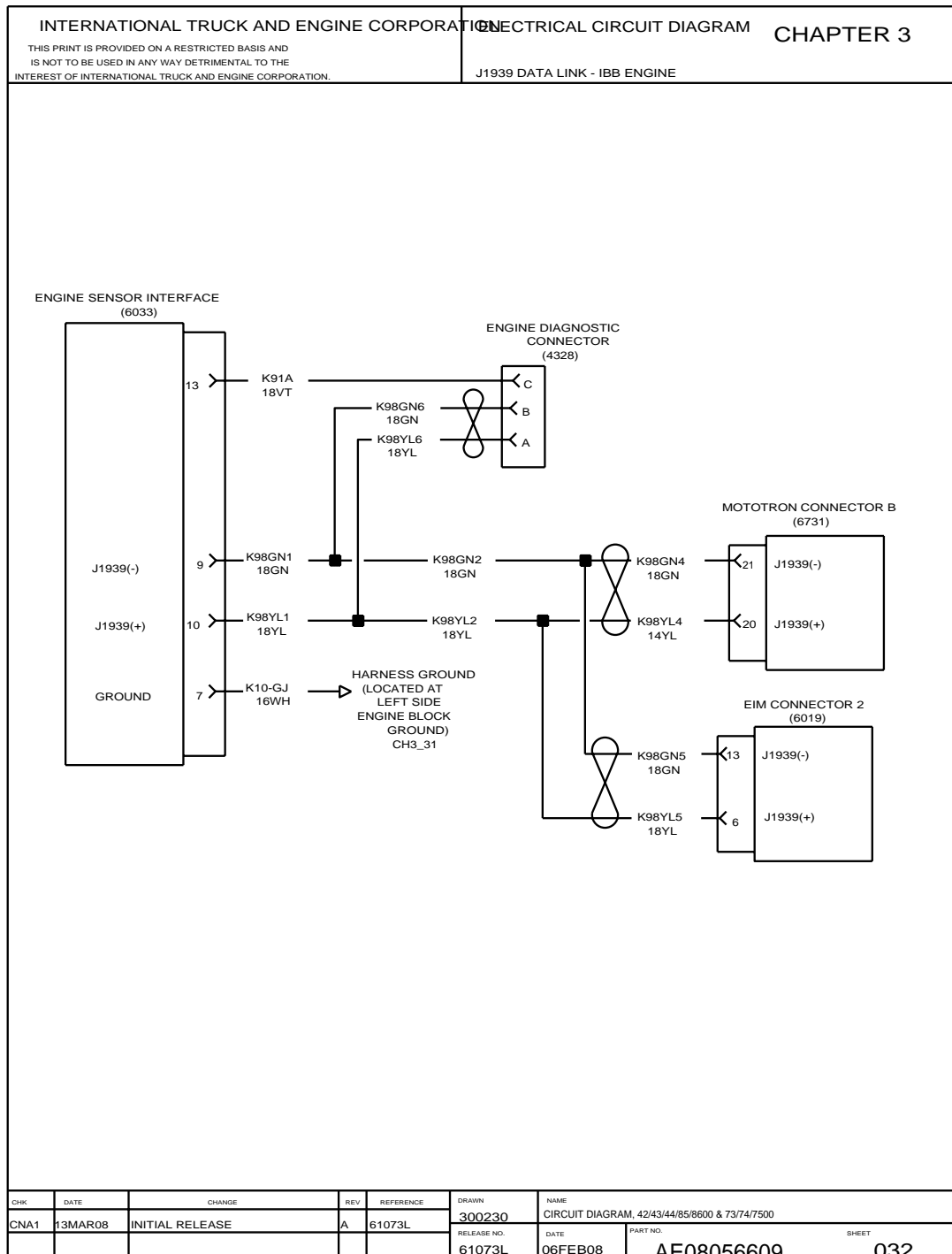


Figure 44 J1939 Data Link — IBB Engine

### 3.33. J1939 DATA LINK — IBB ENGINE, P. 33

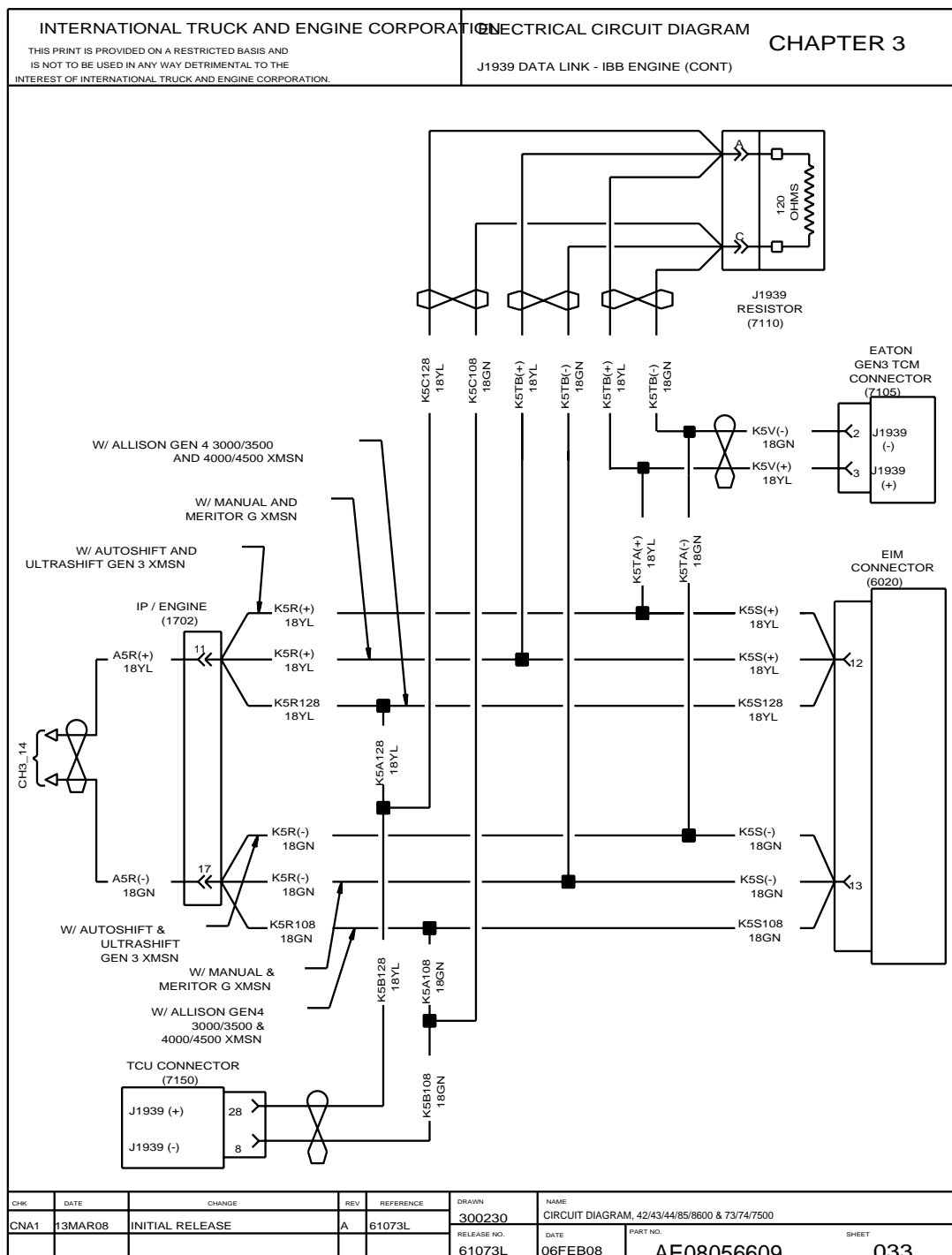


Figure 45 J1939 Data Link — IBB Engine

## 4. CAB ACCESSORIES (CHAPTER 4)

### 4.1. CIGAR LIGHTER AND POWER FEED, P. 1

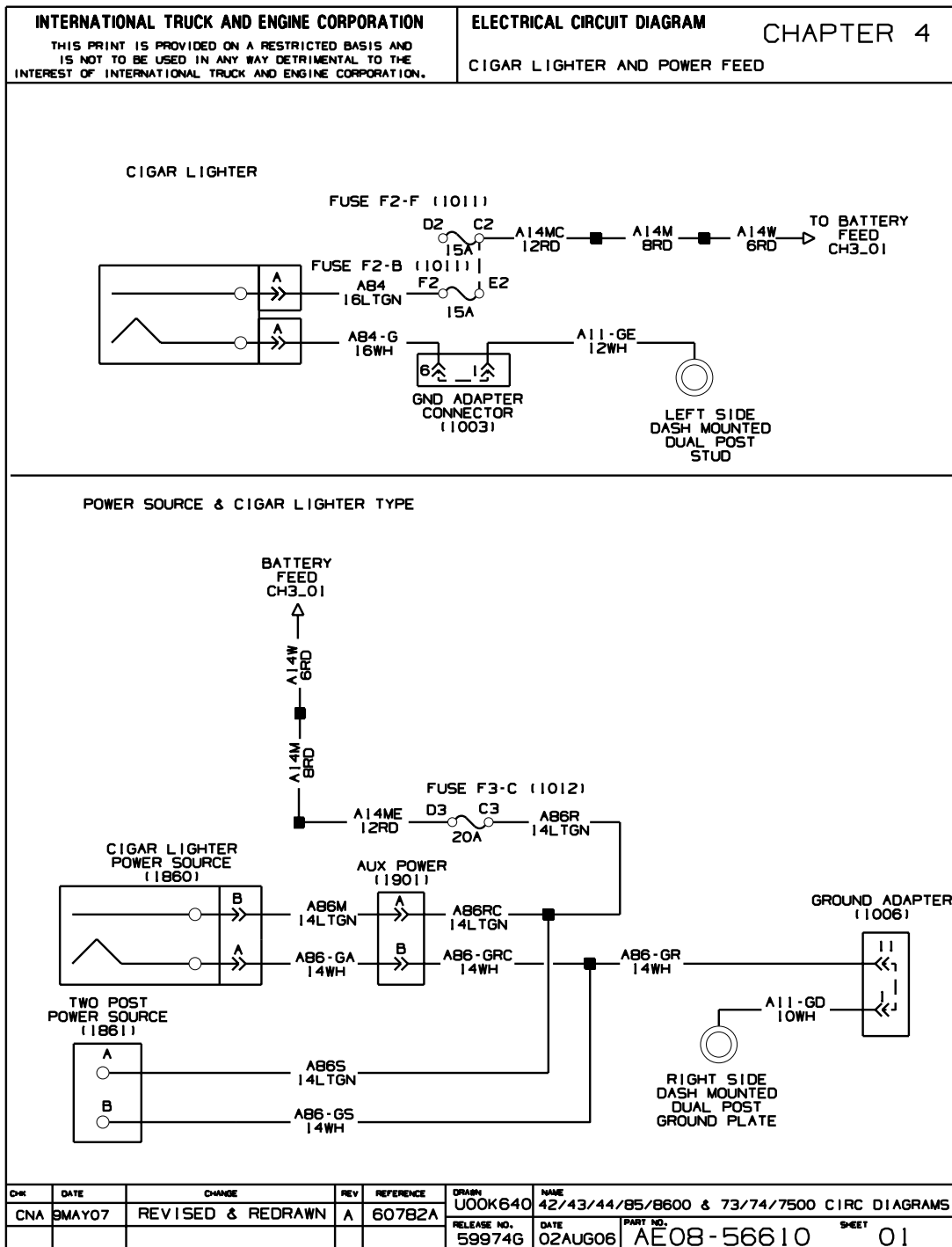


Figure 46 Cigar Lighter and Power Feed



## 4.2. CIGAR LIGHTER AND POWER FEED, P. 2

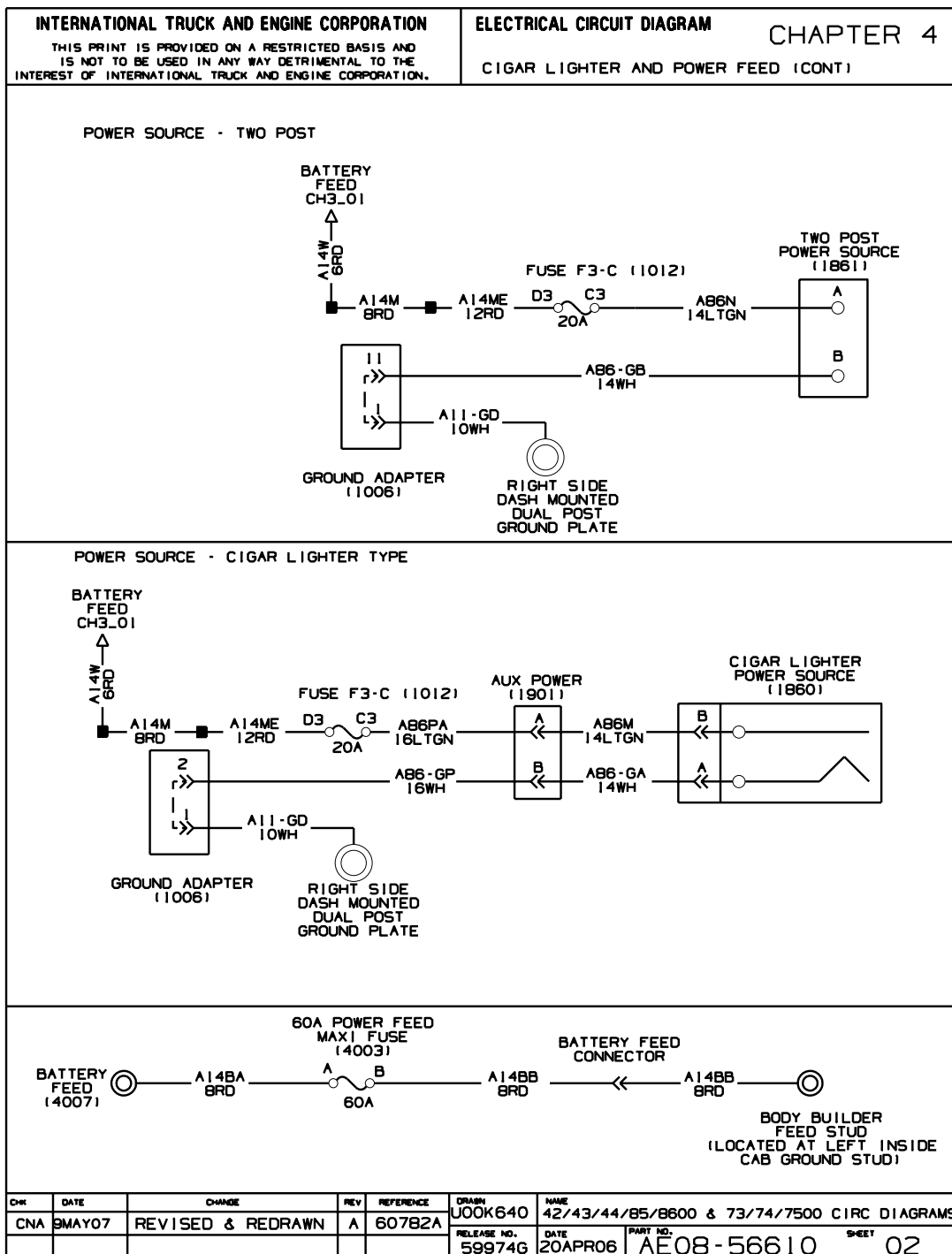


Figure 47 Cigar Lighter and Power Feed

### 4.3. CB POWER RADIO, P. 3

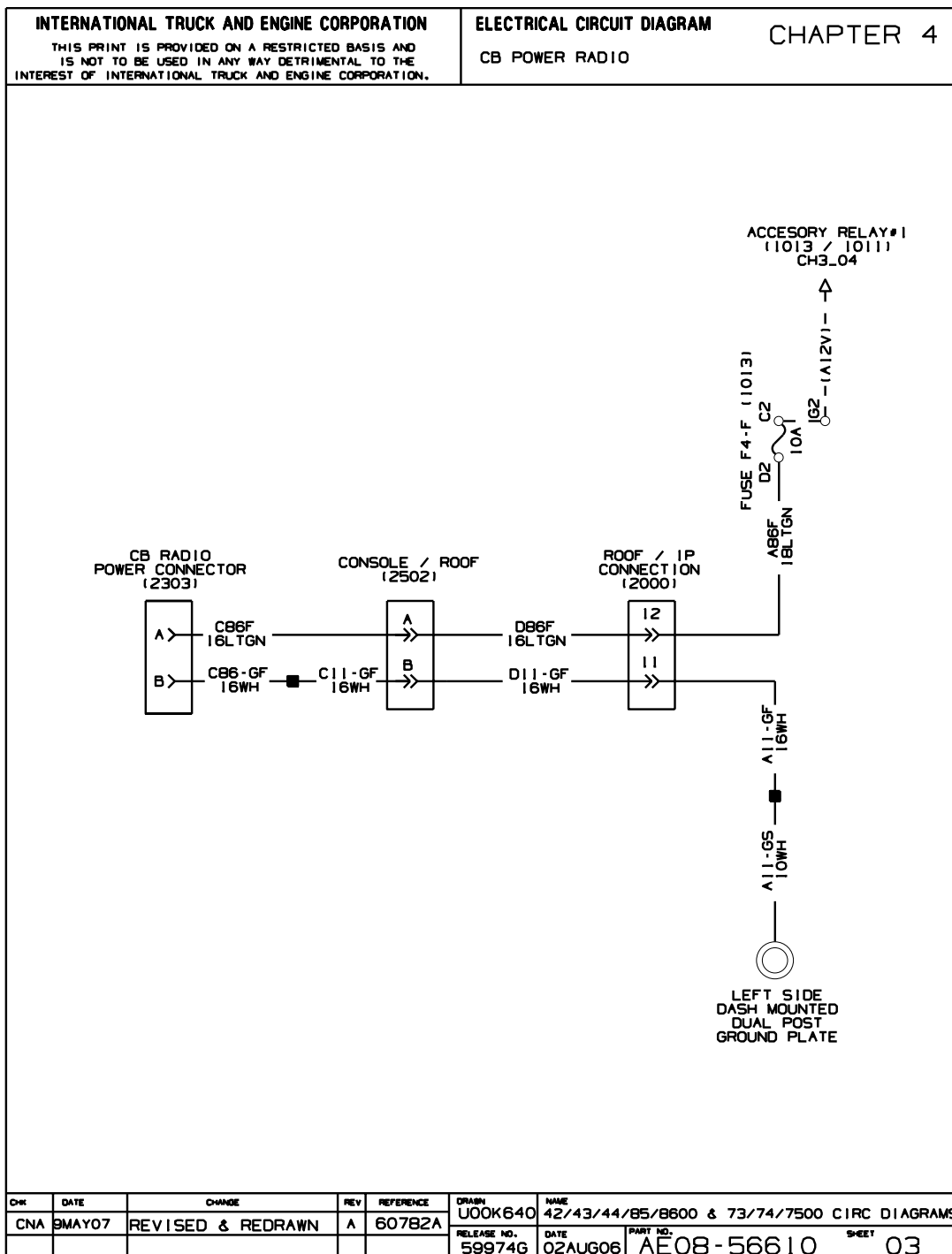


Figure 48 CB Power Radio

## 4.4. COMPASS AND TEMPERATURE DISPLAY, P. 4

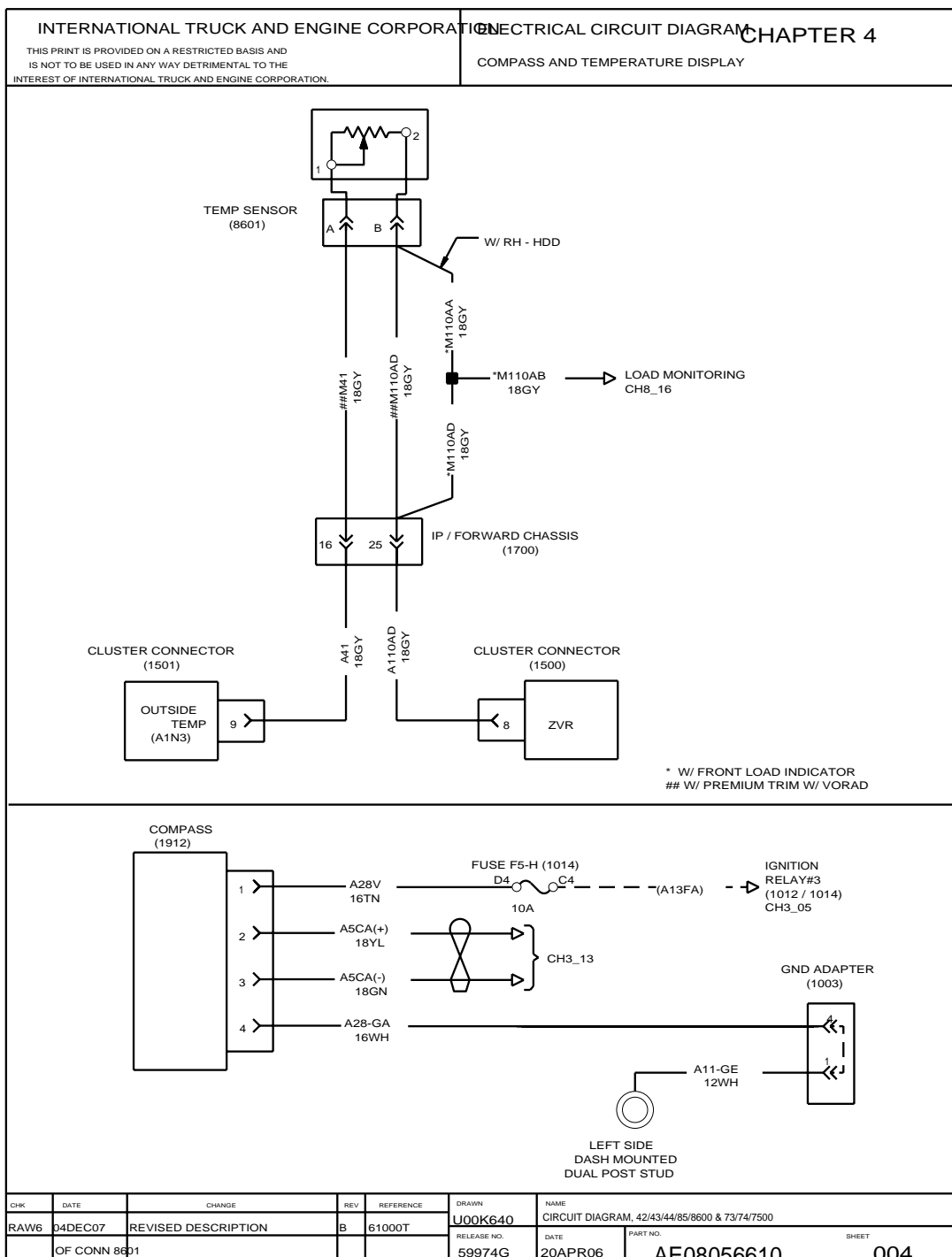


Figure 49 Compass and Temperature Display

## 4.5. FRONT DOOR WINDOWS AND LOCKS (POWER), P. 5

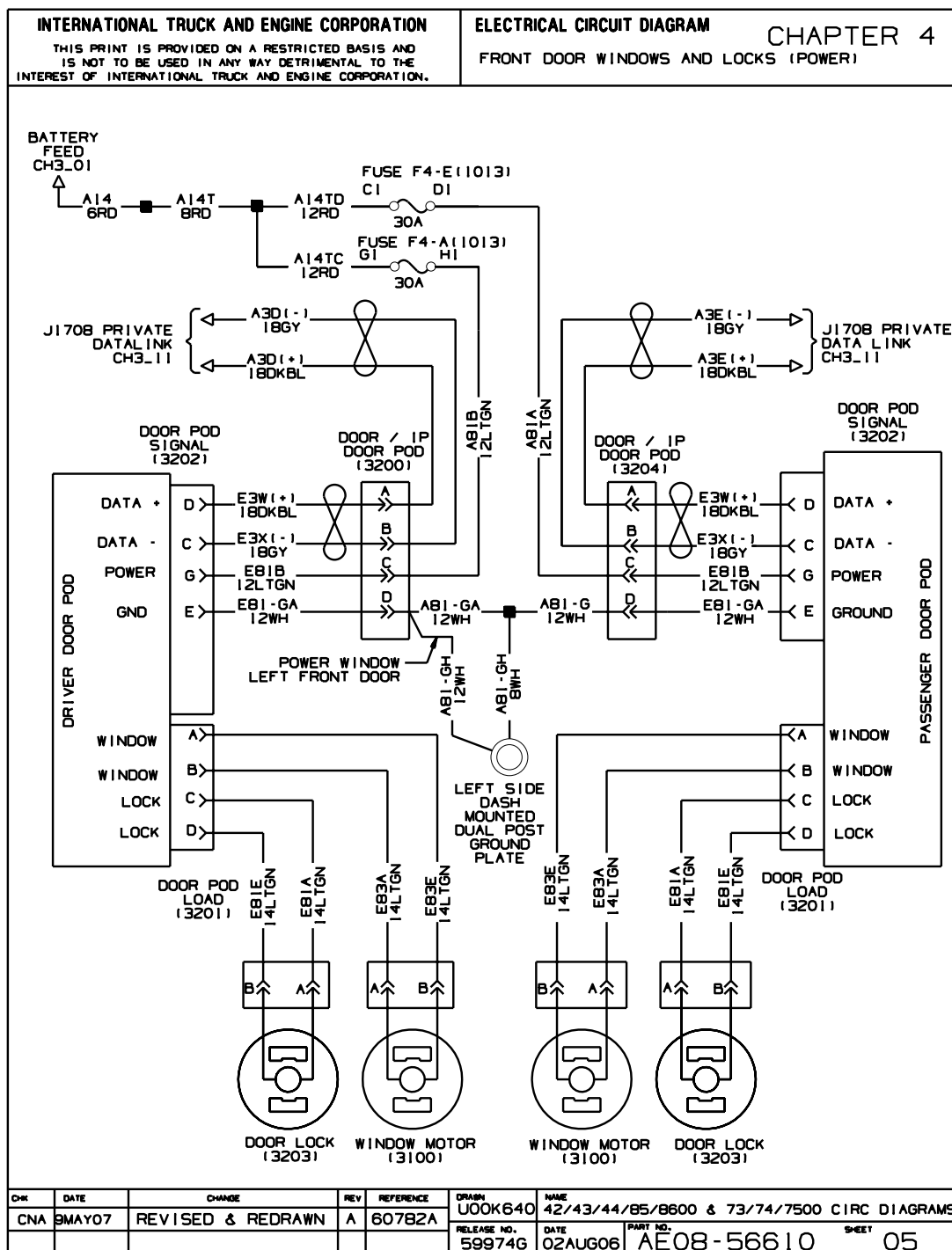


Figure 50 Front Door Windows and Locks (Power)

## 4.6. FRONT DOOR WINDOWS AND LOCKS (POWER) FOR CREW, P. 6

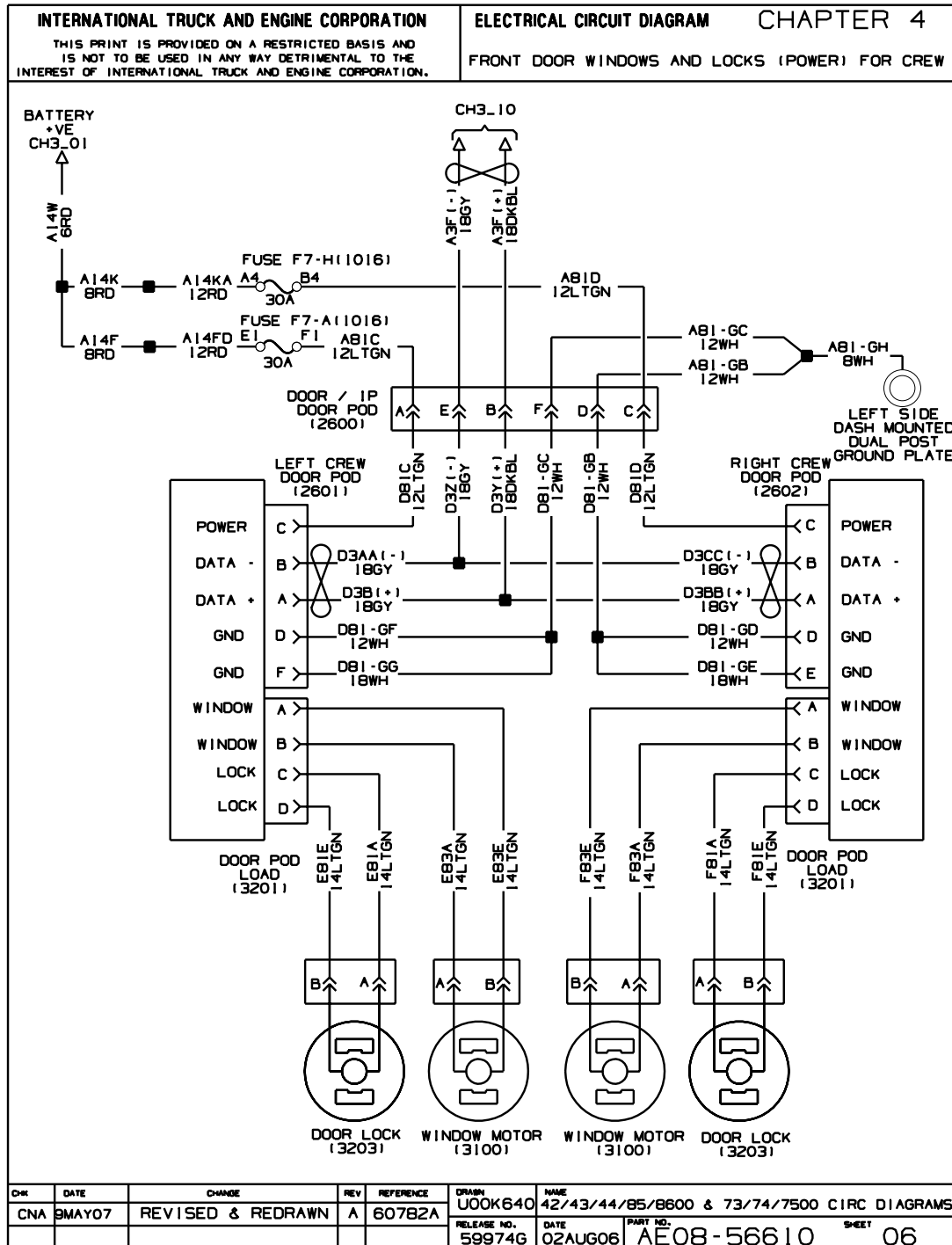


Figure 51 Front Door Windows and Locks (Power) for Crew

## 4.7. HORN, ELECTRIC AND AIR, P. 7

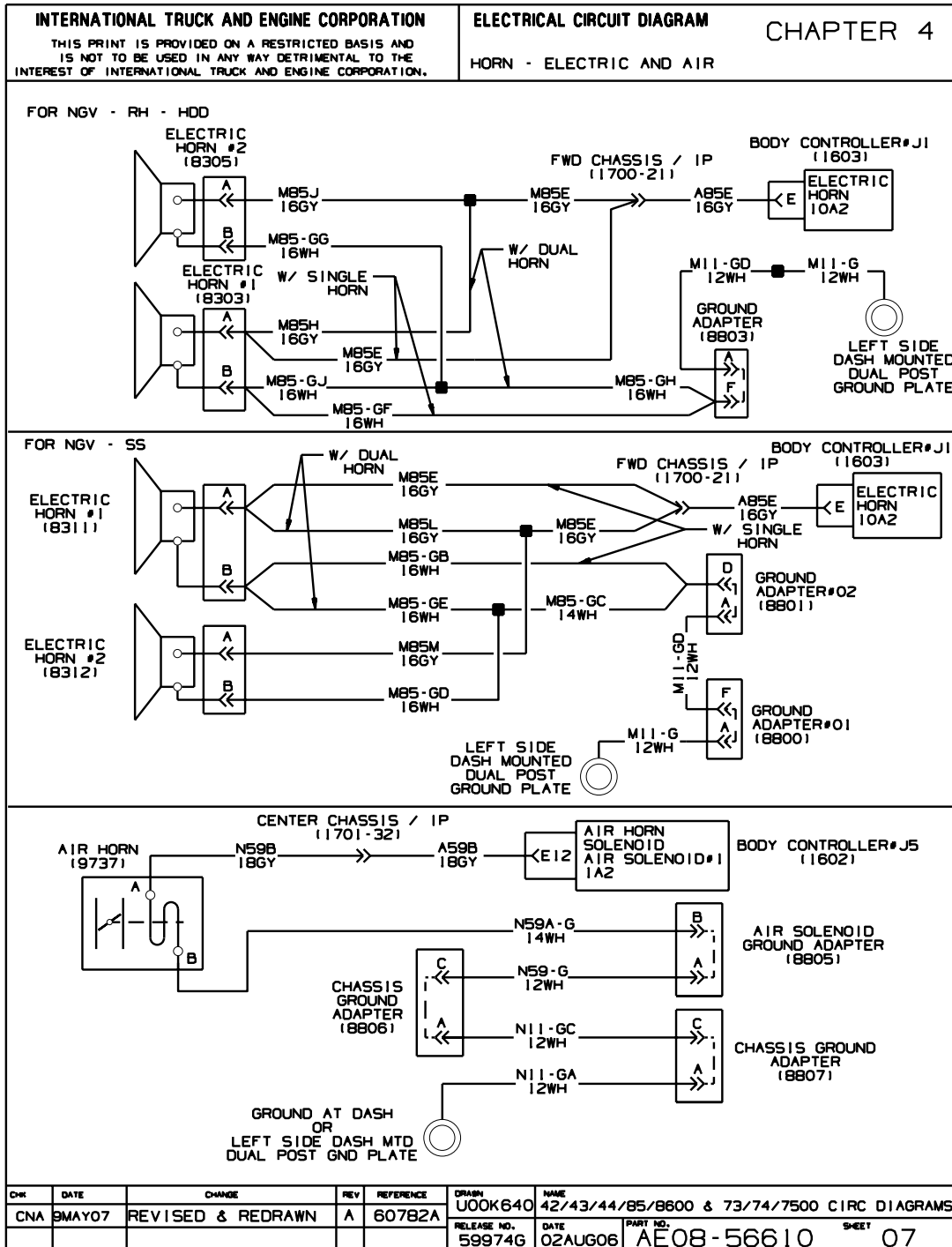


Figure 52 Horn, Electric and Air

## 4.8. HORN, ELECTRIC AND AIR, P. 8

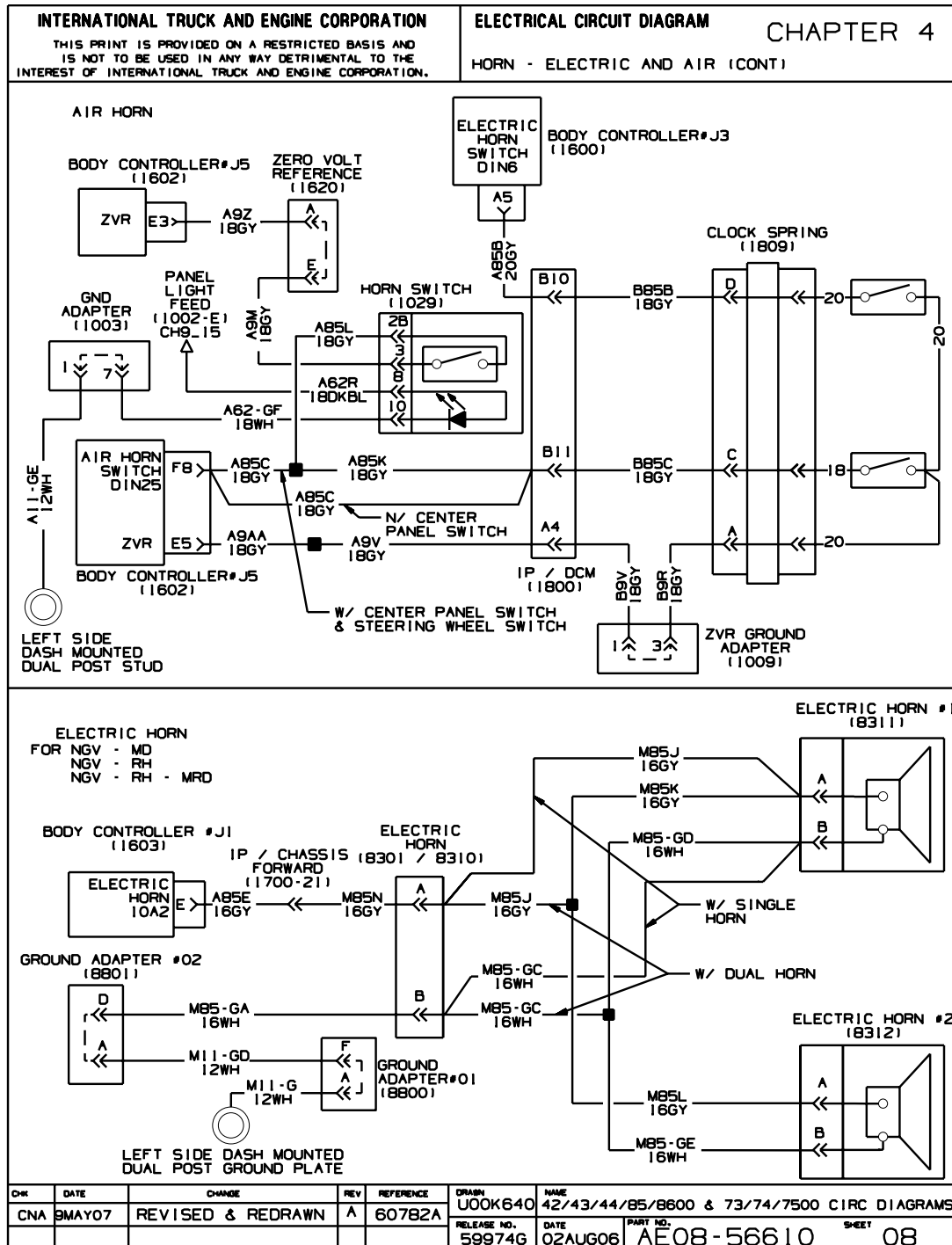


Figure 53 Horn, Electric and Air

## 4.9. MIRRORS (HEATED, LIGHTED AND POWER), P. 9

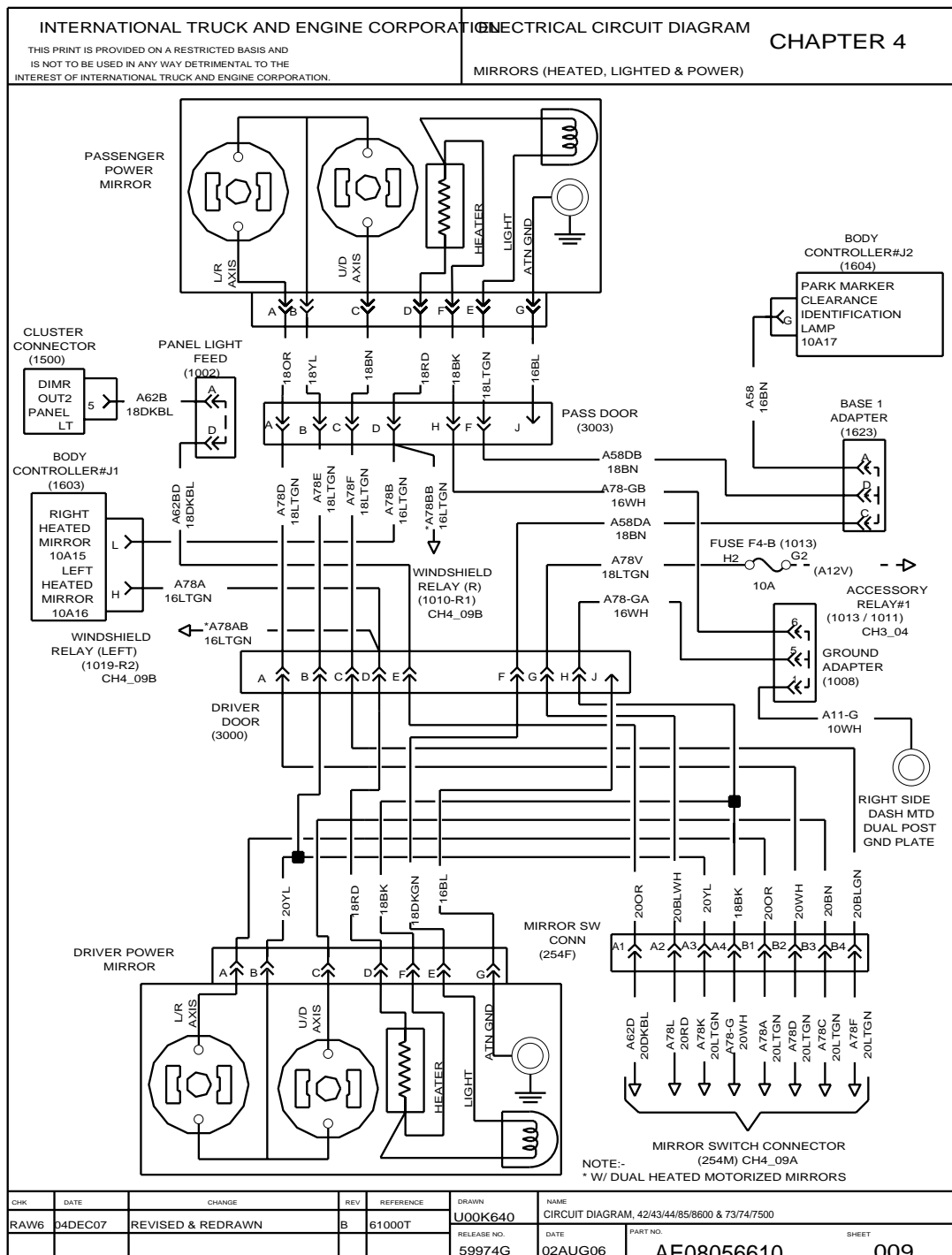


Figure 54 Mirrors (Heated, Lighted and Power)



## 4.10. MIRRORS (HEATED, LIGHTED AND POWER), P. 9A

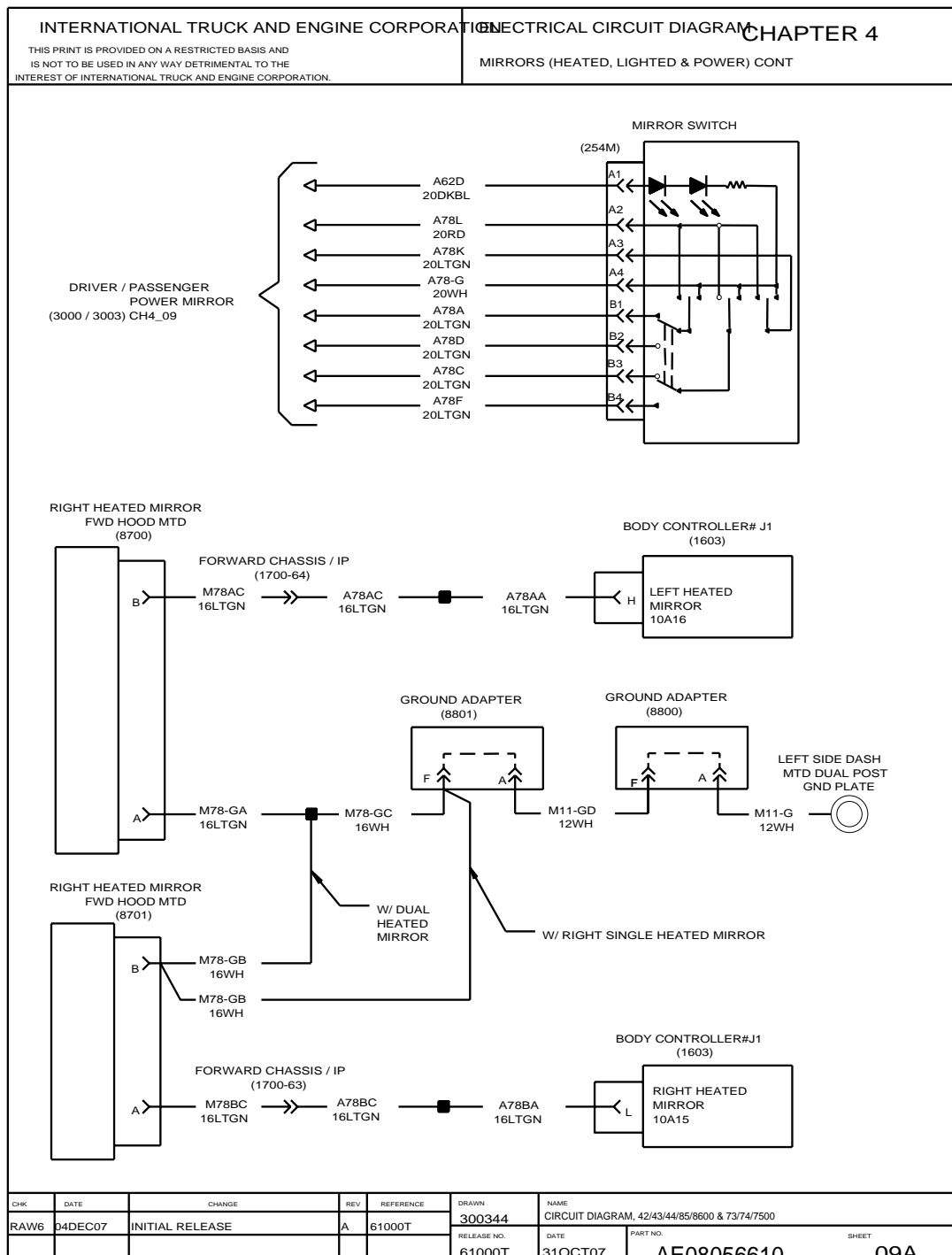


Figure 55 Mirrors (Heated, Lighted and Power)

#### 4.11. DUAL HEATED MOTORIZED MIRRORS WITH HEATED WINDSHIELD, P. 9B

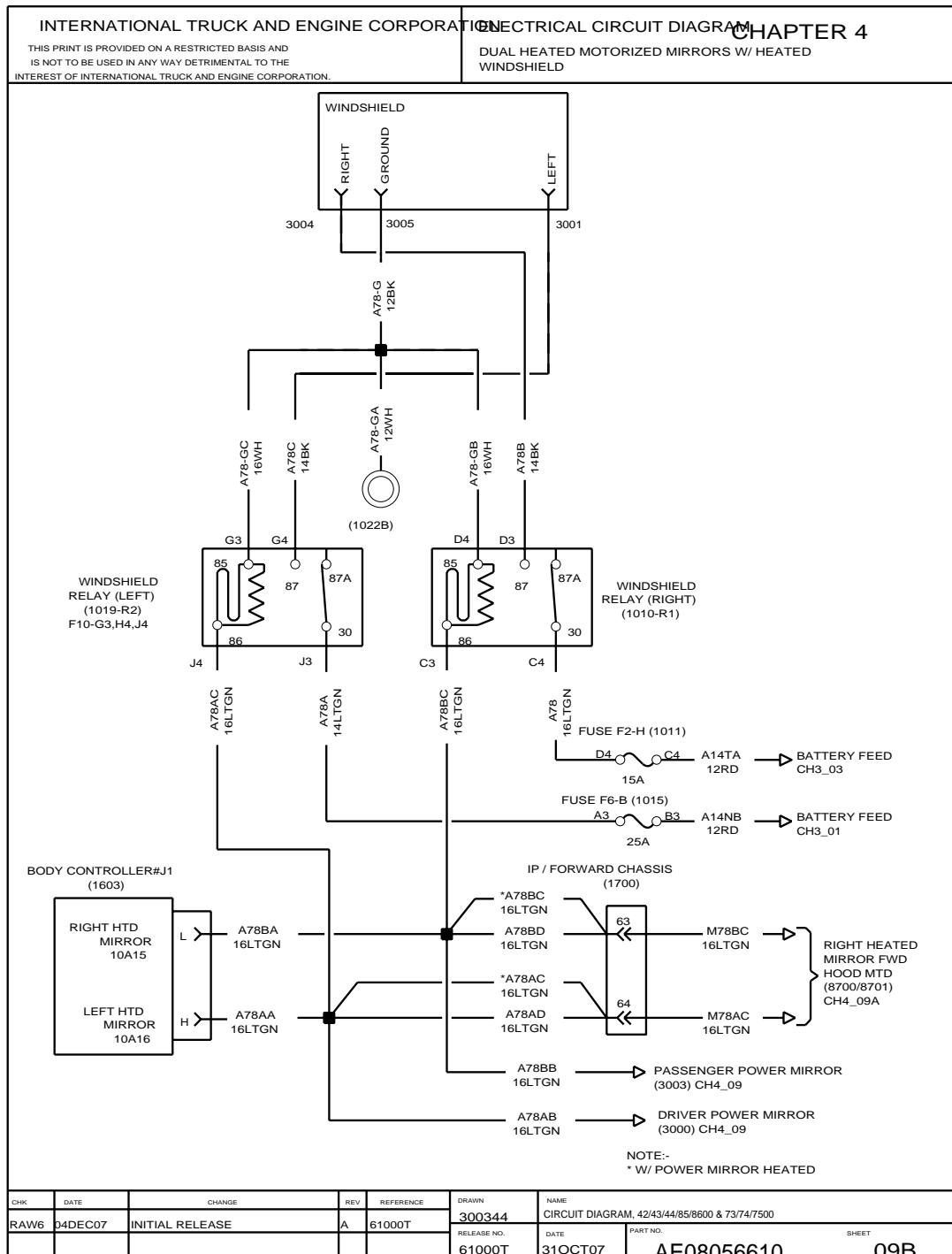


Figure 56 Dual Heated Motorized Mirrors with Heated Windshield

## 4.12. RADIO (ENTERTAINMENT), SPEAKERS WITH 12 WAY CONN, P. 10

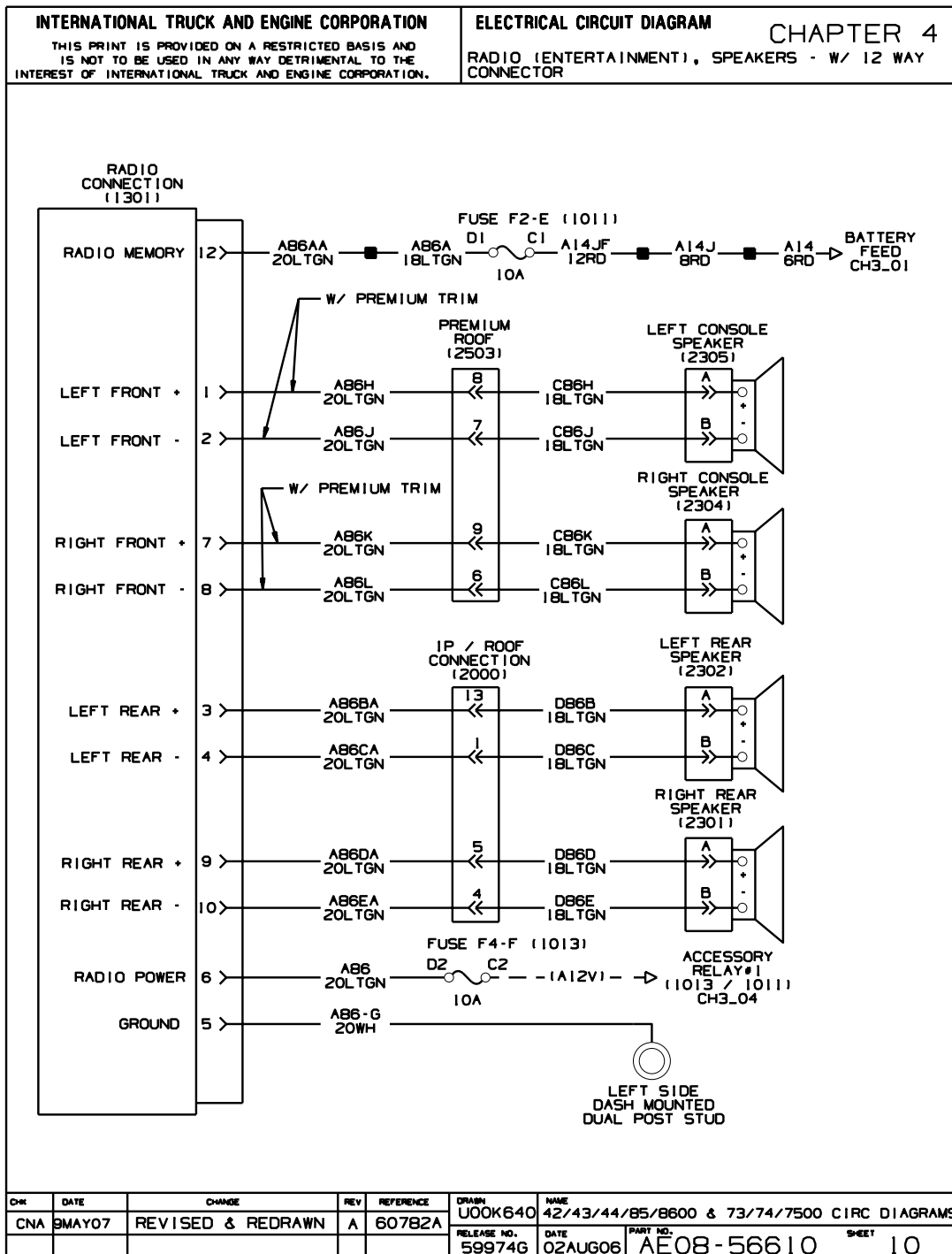


Figure 57 Radio (Entertainment), Speakers with 12 Way Conn

### 4.13. RADIO (ENTERTAINMENT), SPEAKERS WITH 16 WAY CONN, P. 11

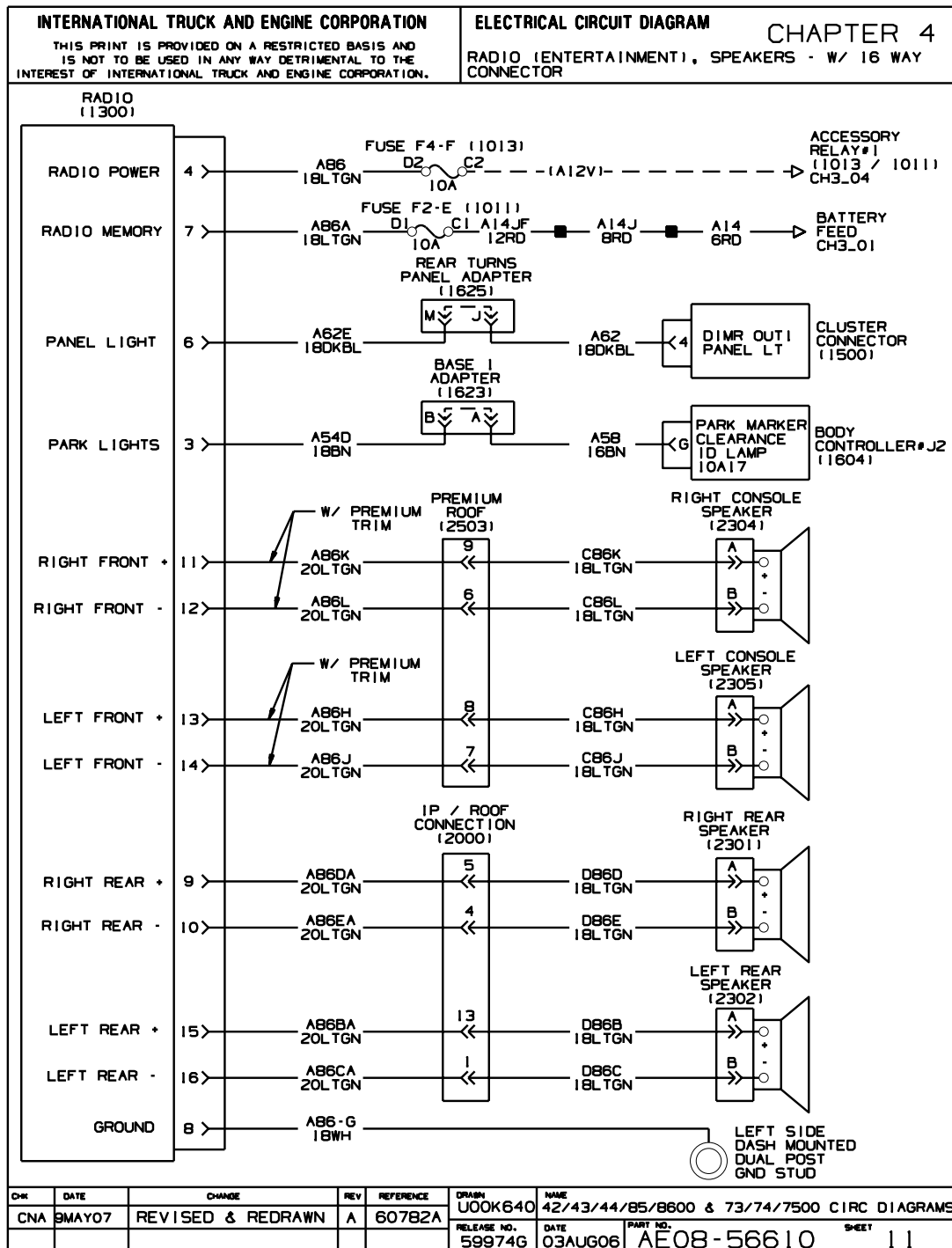


Figure 58 Radio (Entertainment), Speakers with 16 Way Connector

#### 4.14. 2-WAY RADIO, P. 12

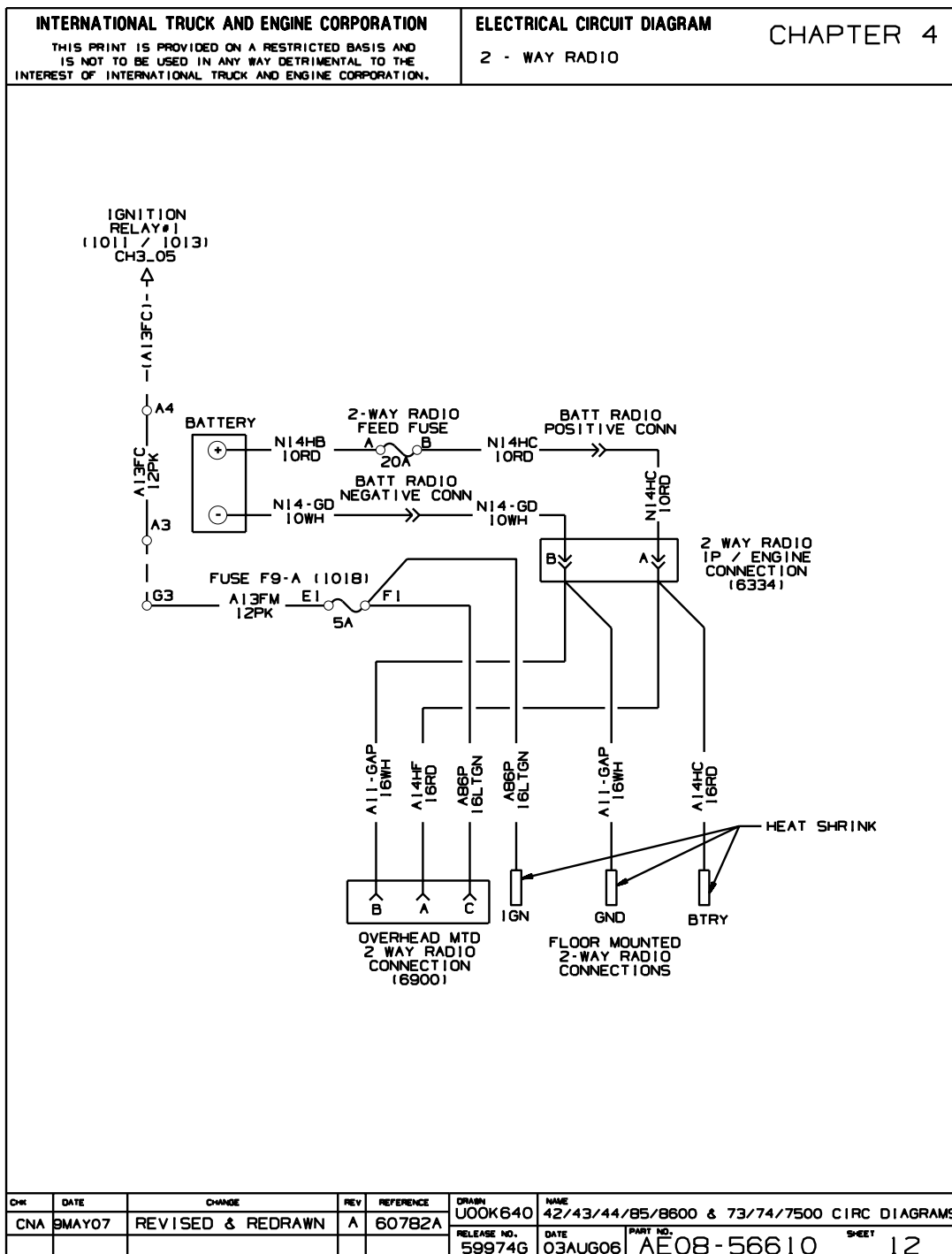


Figure 59 2-Way Radio

#### 4.15. WINDSHIELD WIPER, P. 13

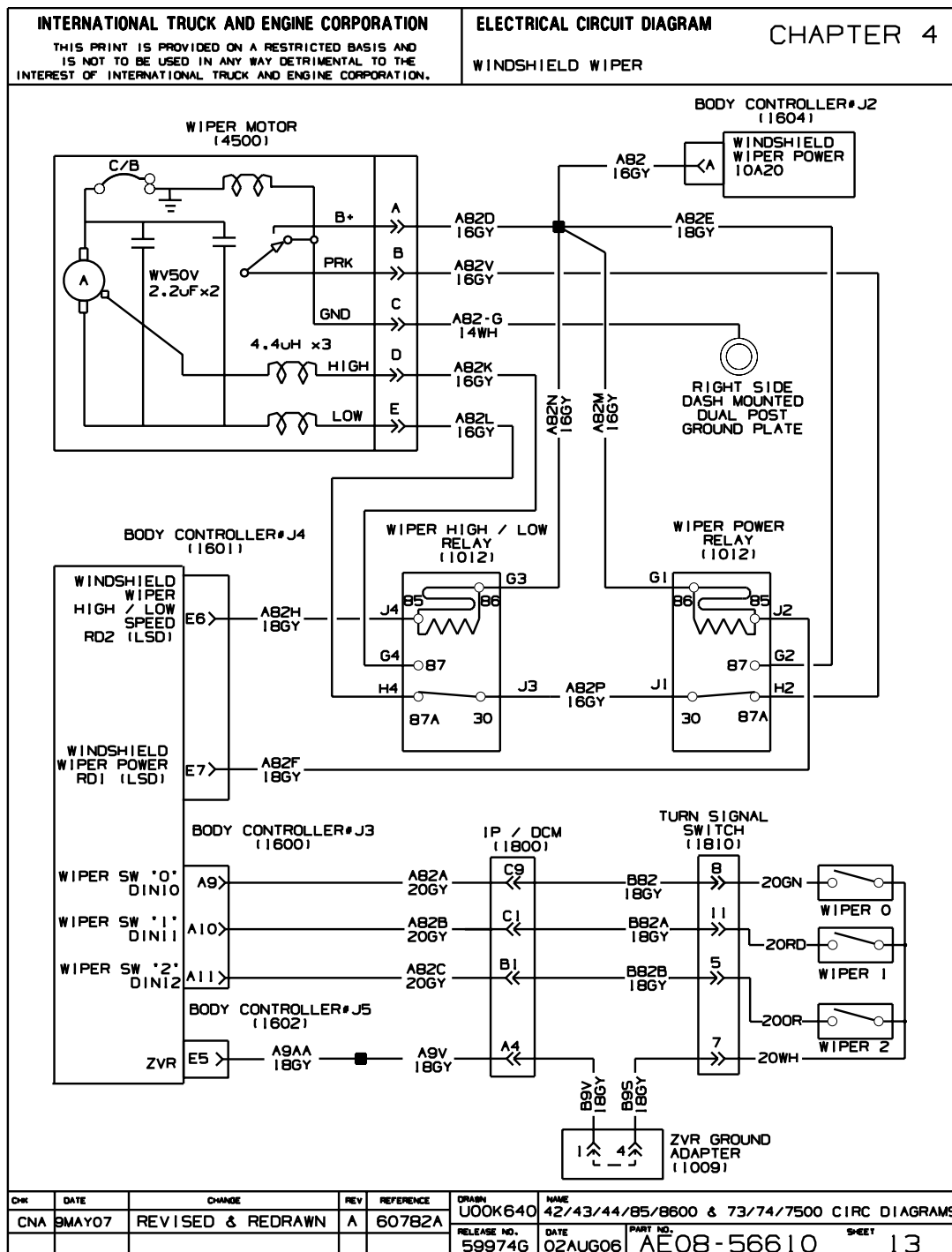


Figure 60 Windshield Wiper

## 4.16. WASHER PUMP, P. 14

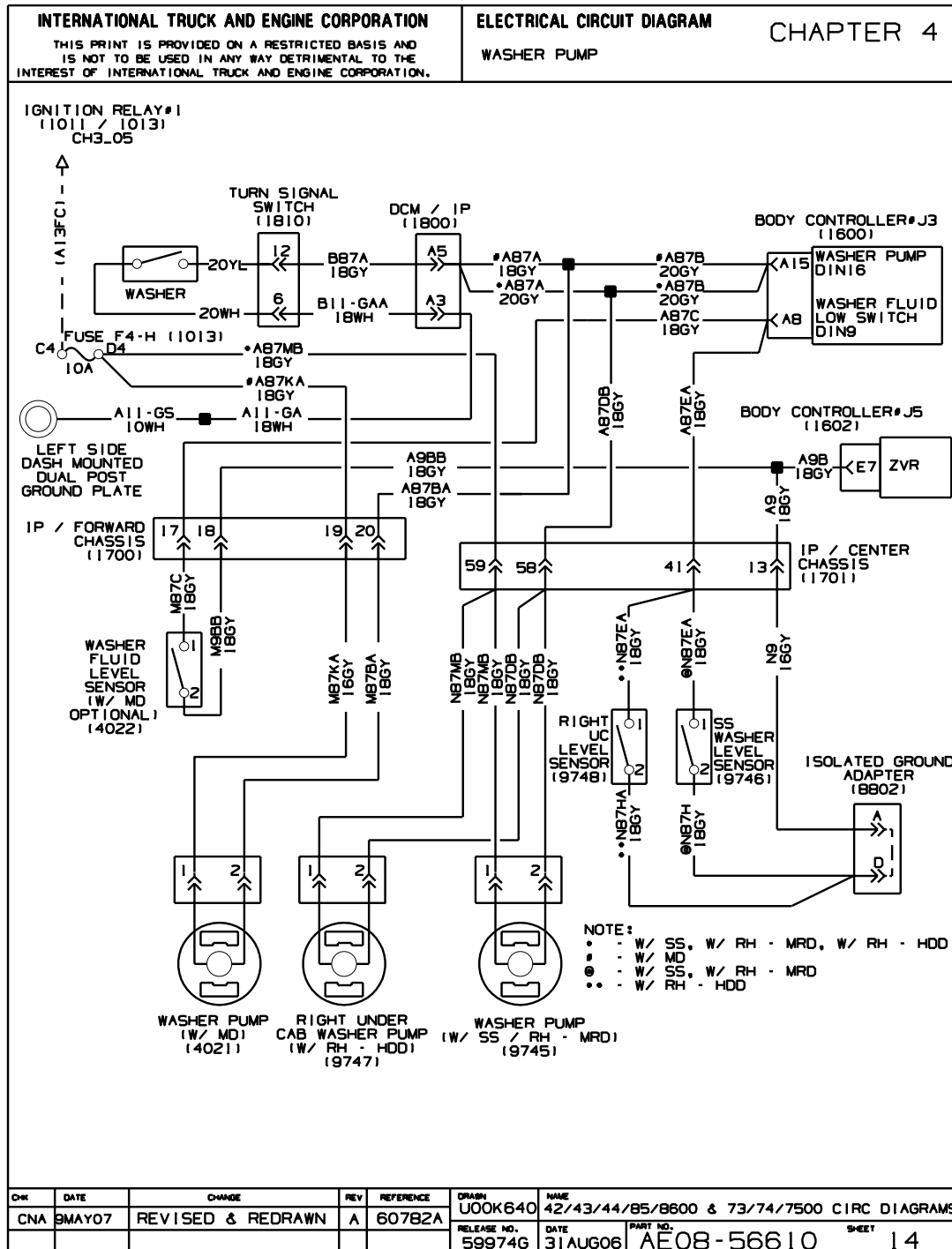


Figure 61 Washer Pump

#### 4.17. SWITCH PACK OPTIONAL GAUGE PACK, P. 15

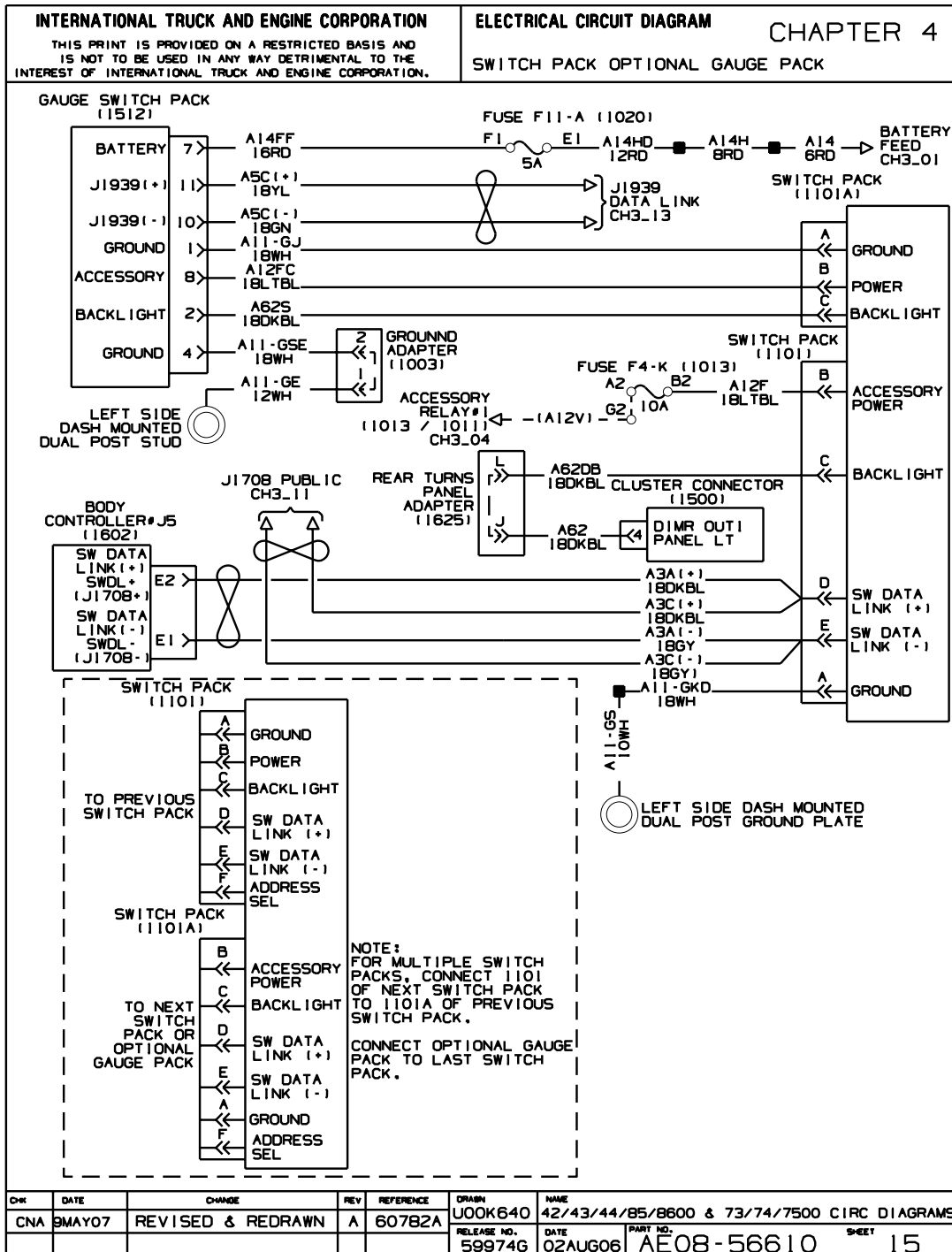


Figure 62 Switch Pack Optional Gauge Pack



### Figure 63 Roof Auxiliary Load



#### 4.19. SATELLITE COMMUNICATION — QUALCOMM IMCT, P. 17

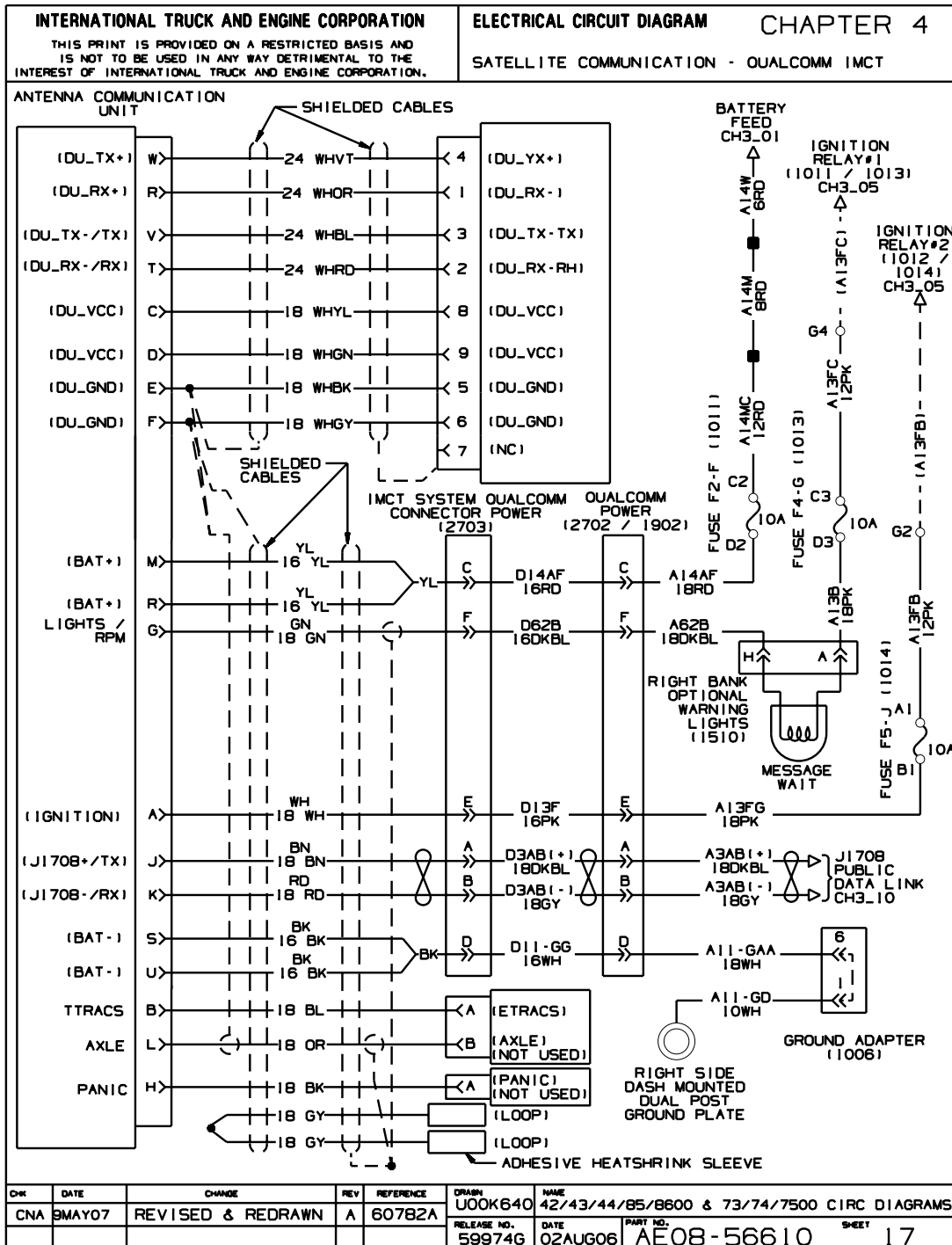


Figure 64 Satellite Communication — Qualcomm IMCT

## 4.20. SATELLITE COMMUNICATION — TRIPMASTER, P. 18

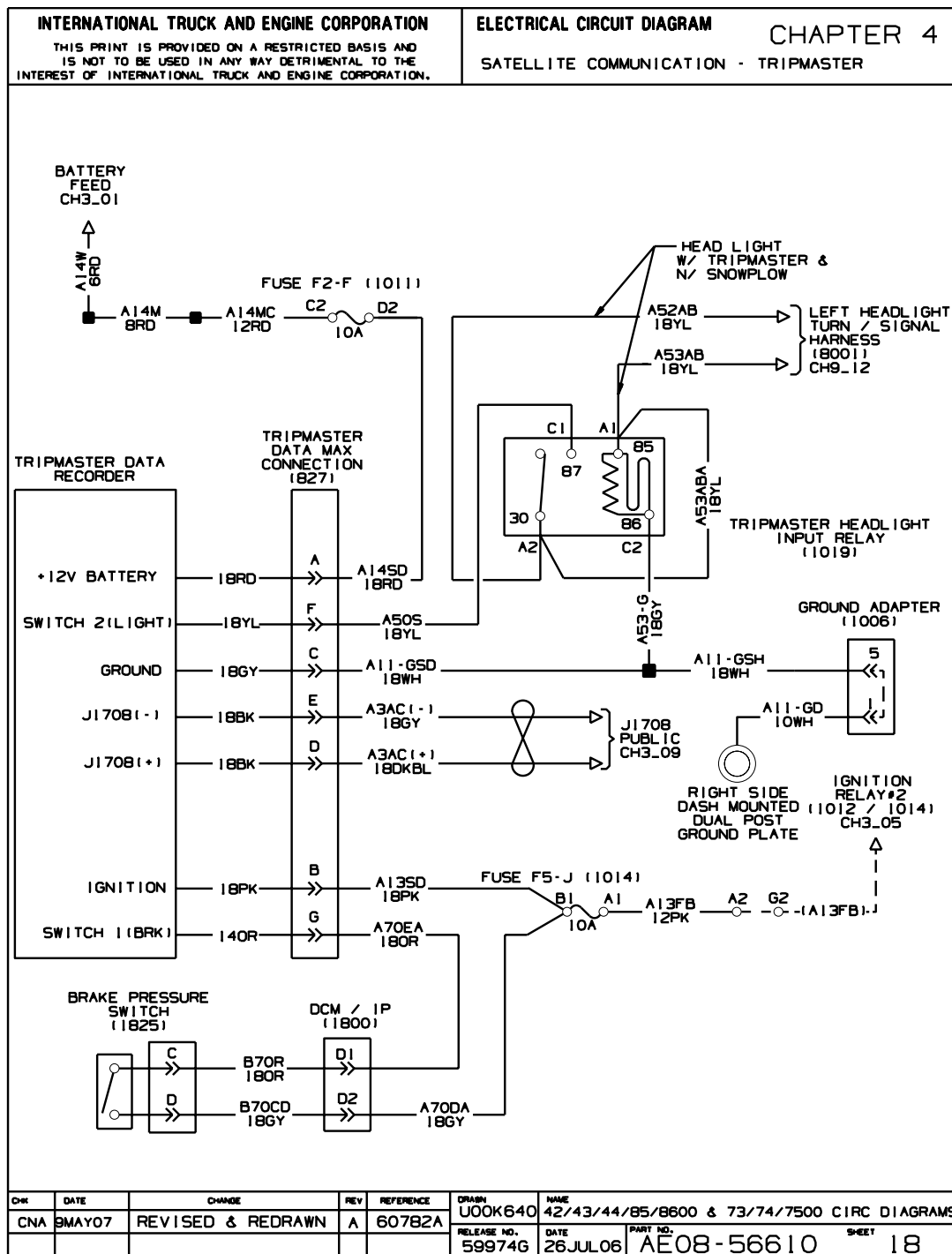


Figure 65 Satellite Communication — Tripmaster

## 4.21. COMPUTER PREWIRED — XATA SYSTEM, P. 19

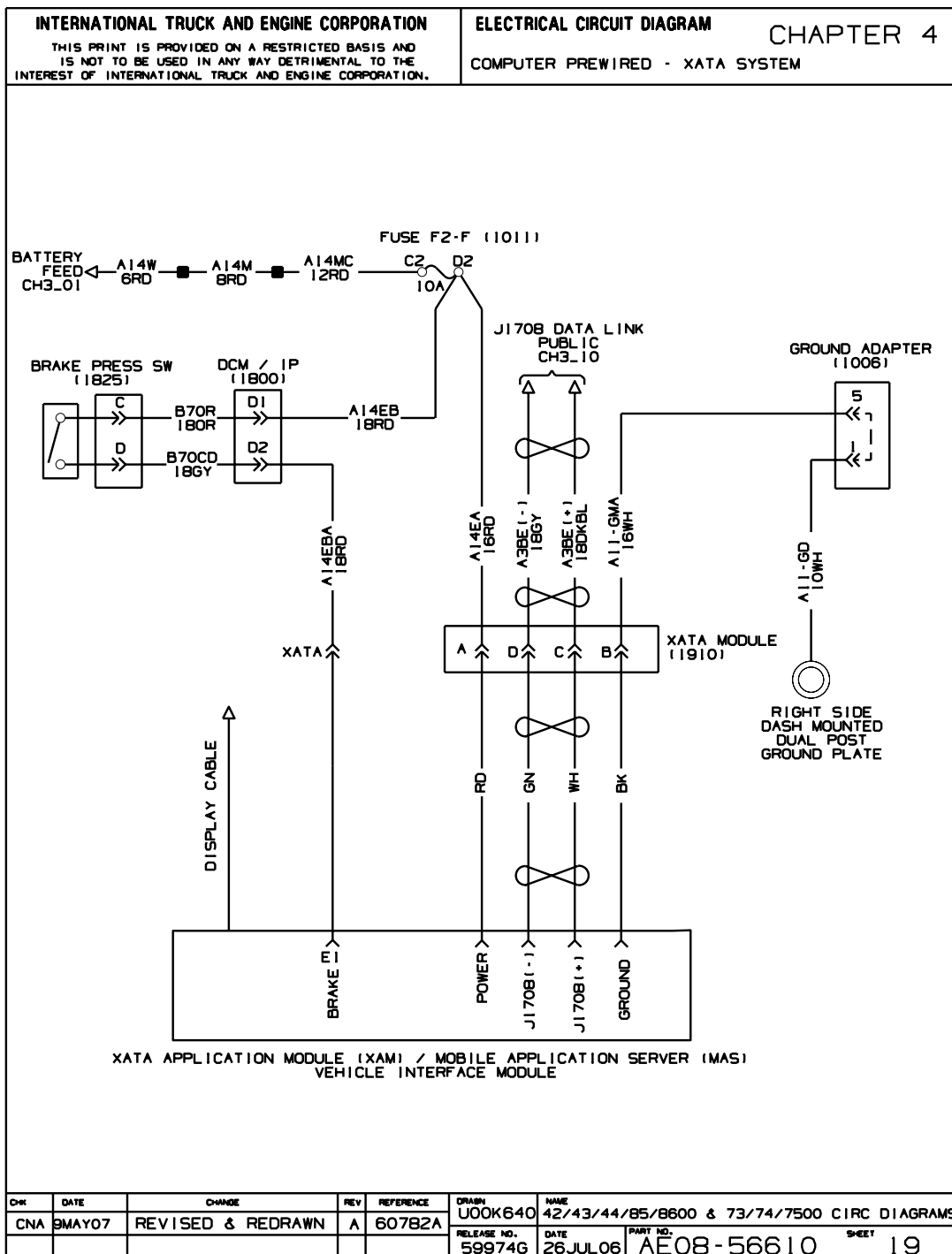


Figure 66 Computer Prewired — XATA System

## 4.22. CADEC GPS SYSTEM, P. 20

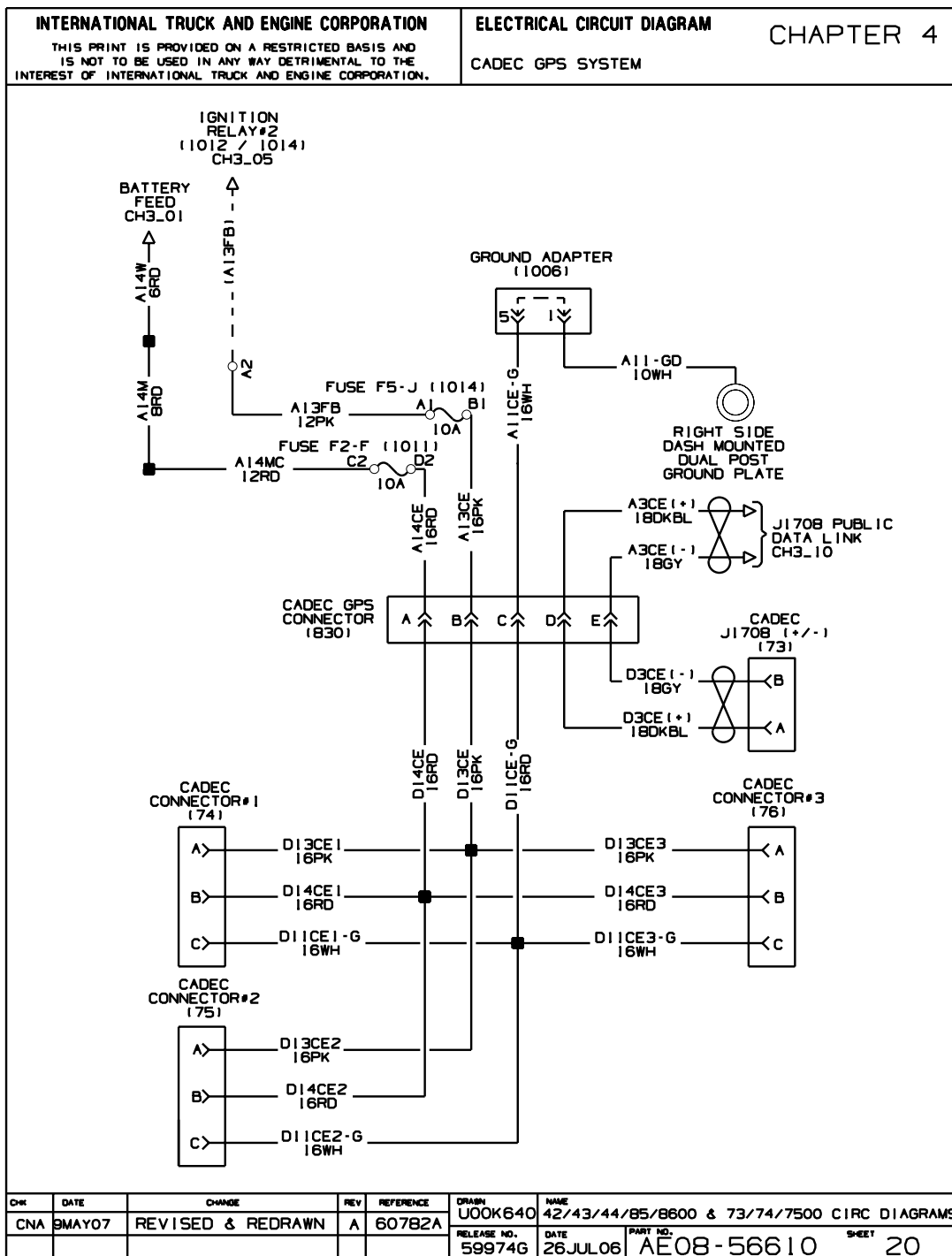


Figure 67 Cadec GPS System

[illegible]

### Figure 68 Satellite Communication — MobileMax

## 4.24. SELF CONTAINED AIR SEAT, P. 22

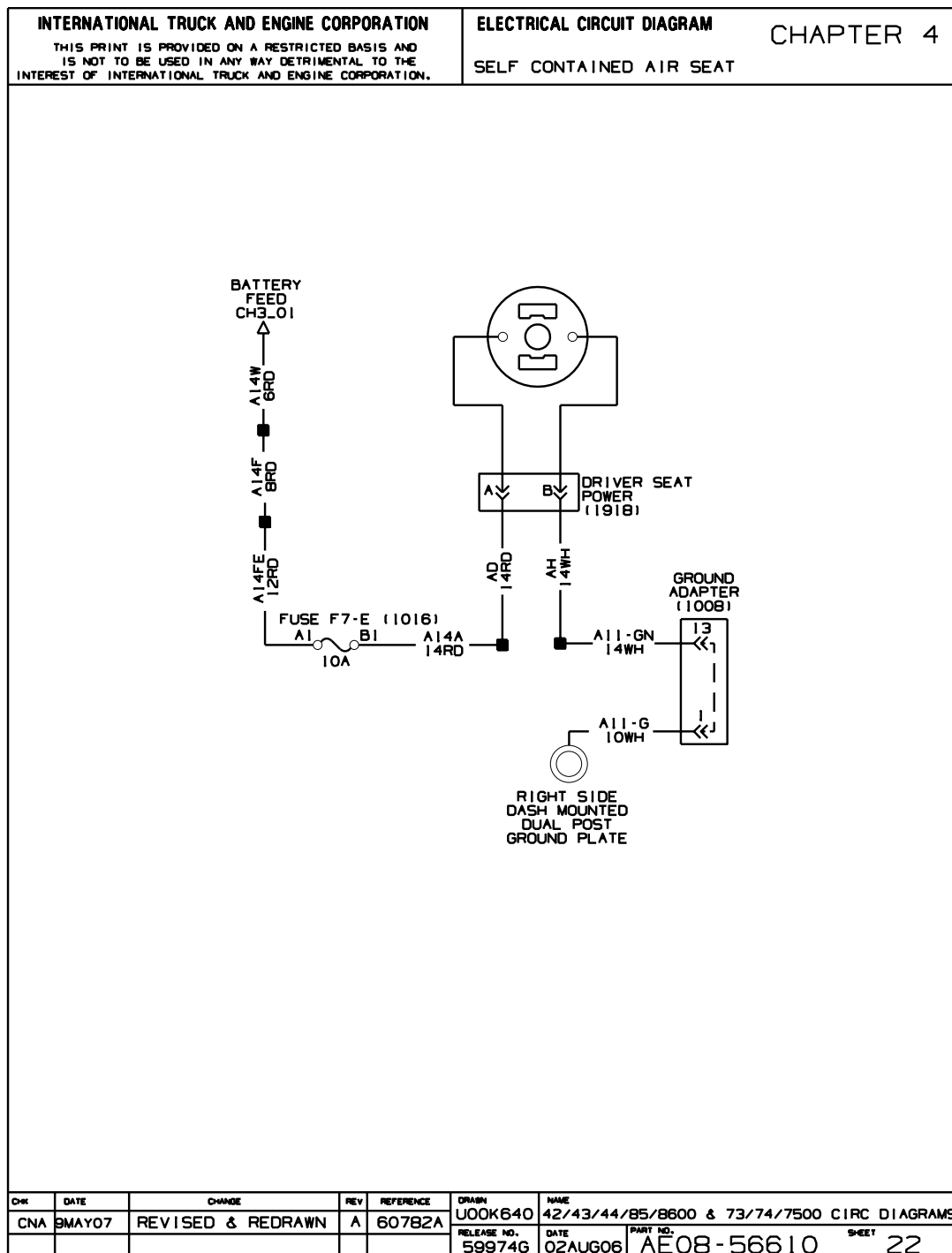


Figure 69 Self Contained Air Seat

## 4.25. HEATED SEATS, P. 23

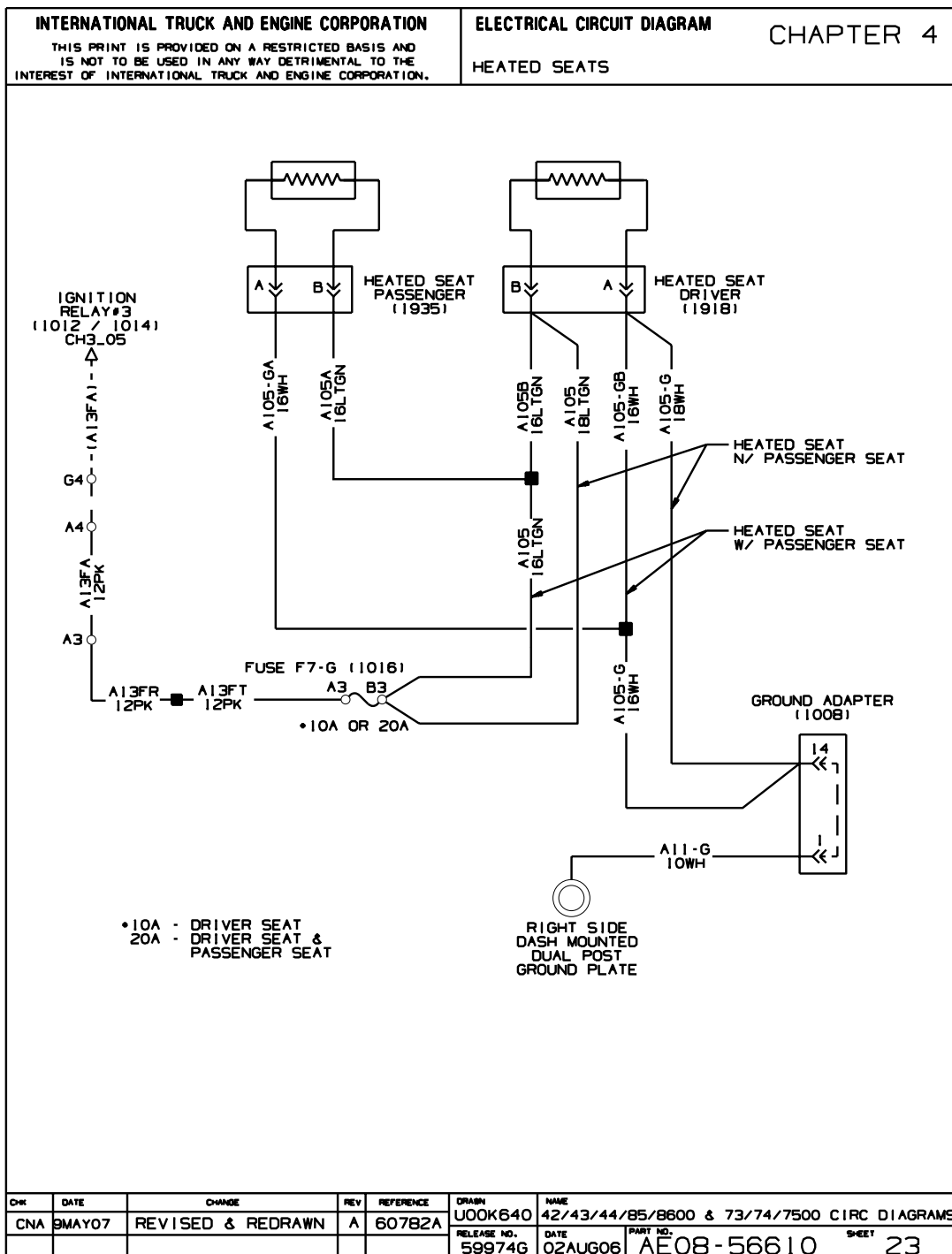


Figure 70 Heated Seats



## 4.26. TELEMATICS SYSTEM, P. 24

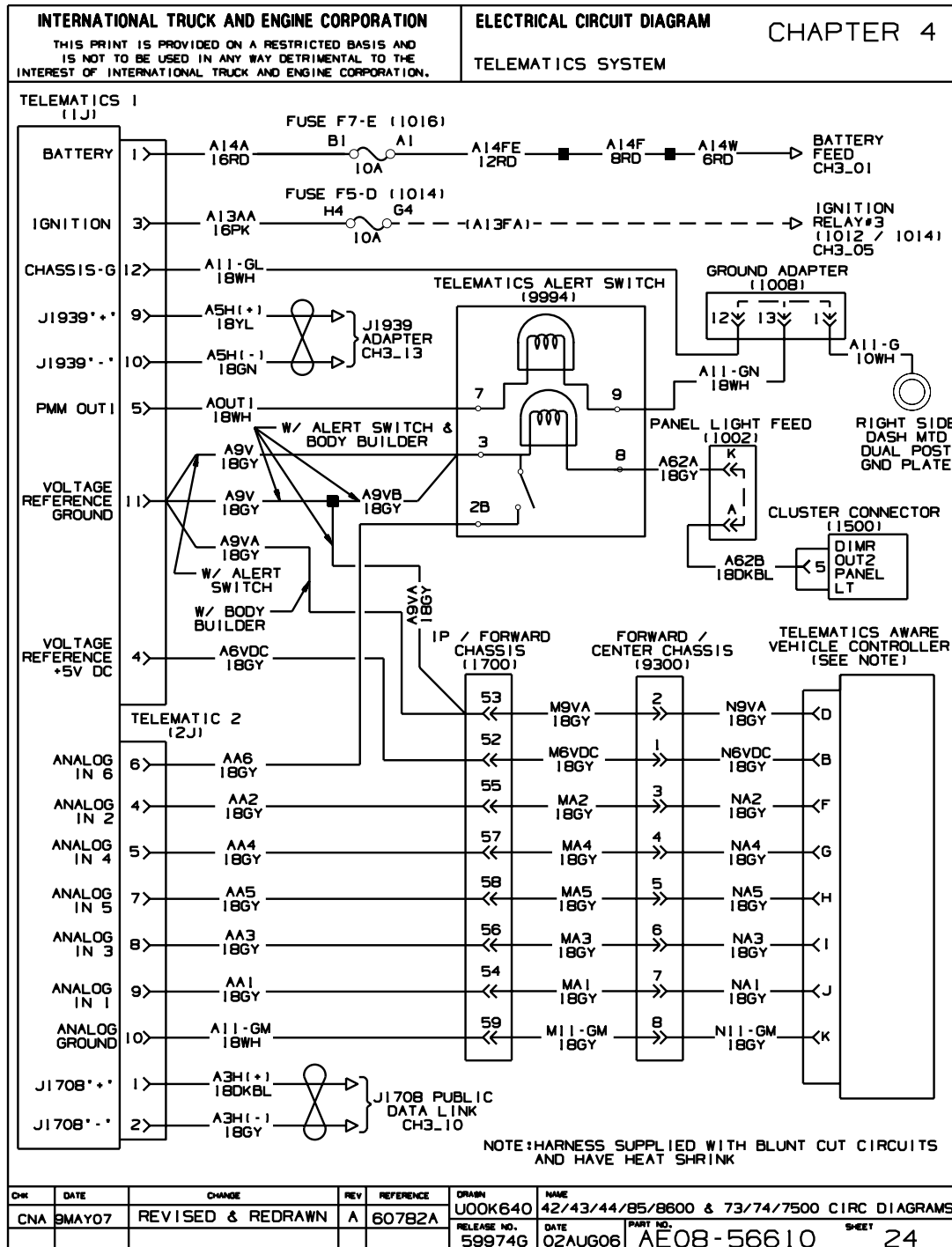


Figure 71 Telematics System

#### 4.27. EATON VORAD COLLISION AVOIDANCE SYSTEM, P. 25

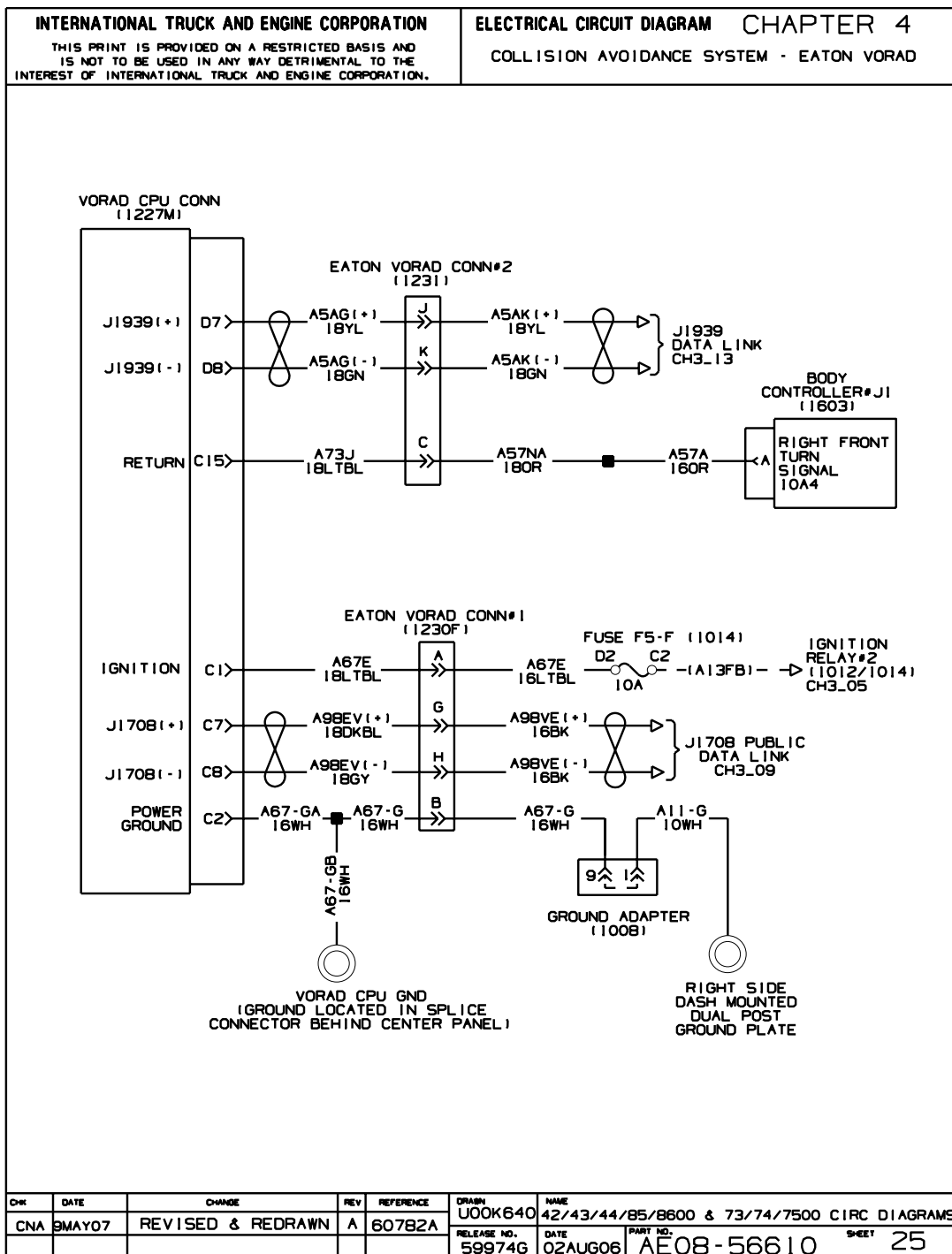


Figure 72 Eaton Vorad Collision Avoidance System

## 4.28. EATON VORAD COLLISION AVOIDANCE SYSTEM, P. 26

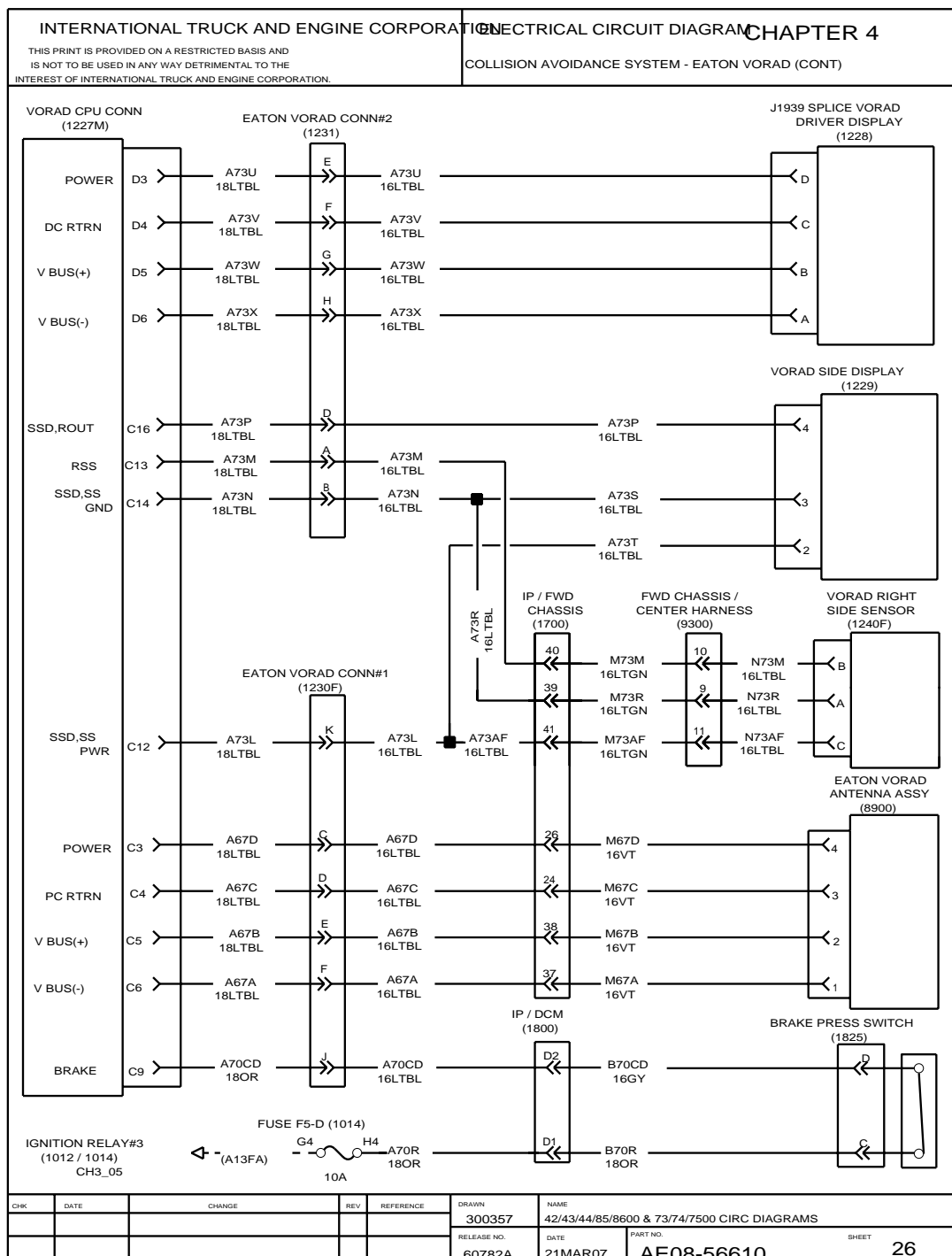


Figure 73 Eaton Vorad Collision Avoidance System

## 4.29. DRIVER DISPLAY, P. 27

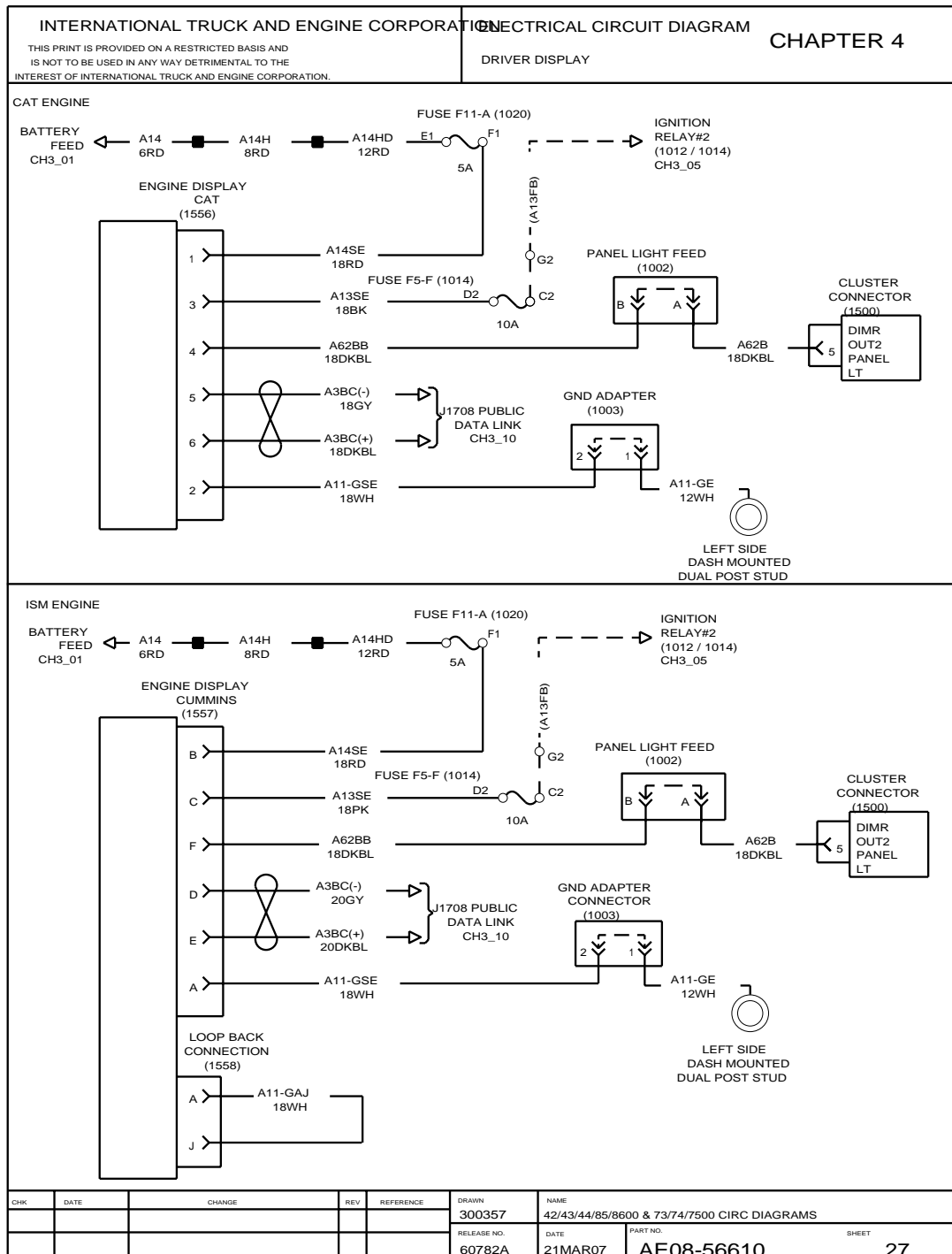


Figure 74 Driver Display

# 4.30. BACK-UP CAMERA, P. 28

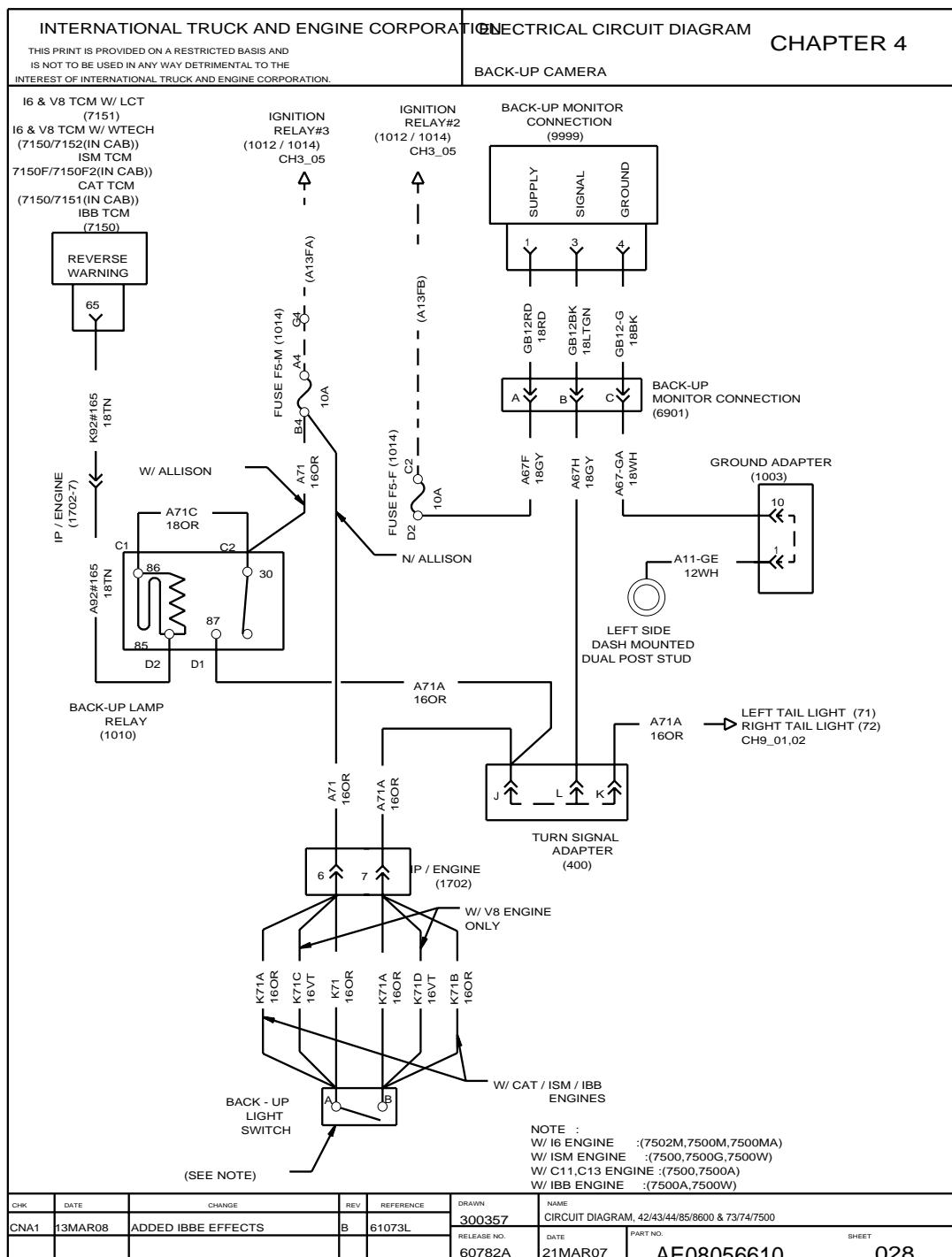


Figure 75 Back-Up Camera

### 4.31. SATELLITE COMMUNICATION — QUALCOMM MCT, P. 29

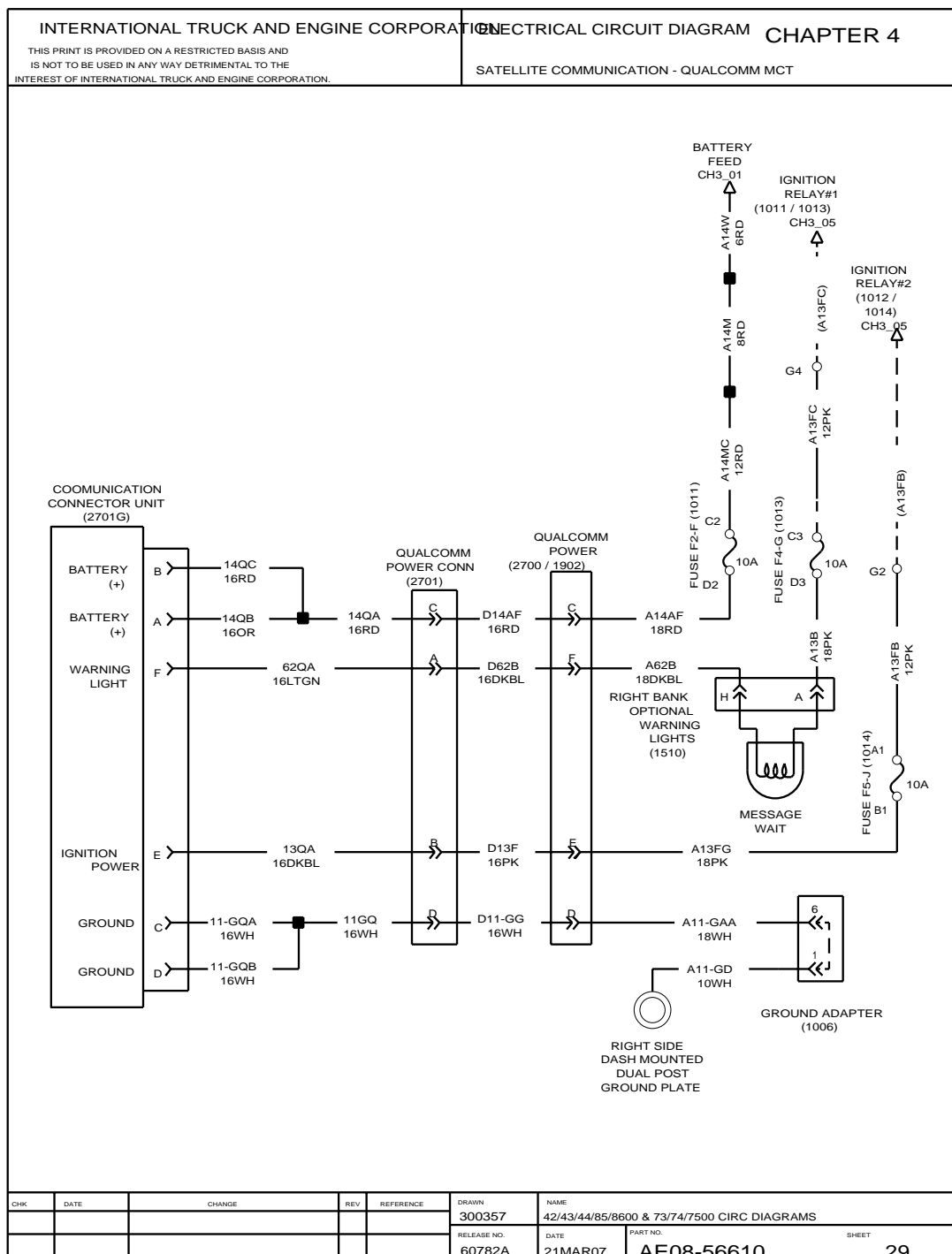


Figure 76 Satellite Communication — Qualcomm MCT

## 4.32. SATELLITE COMMUNICATION — QUALCOMM MCT WITH MVPC KEYBOARD, P. 30

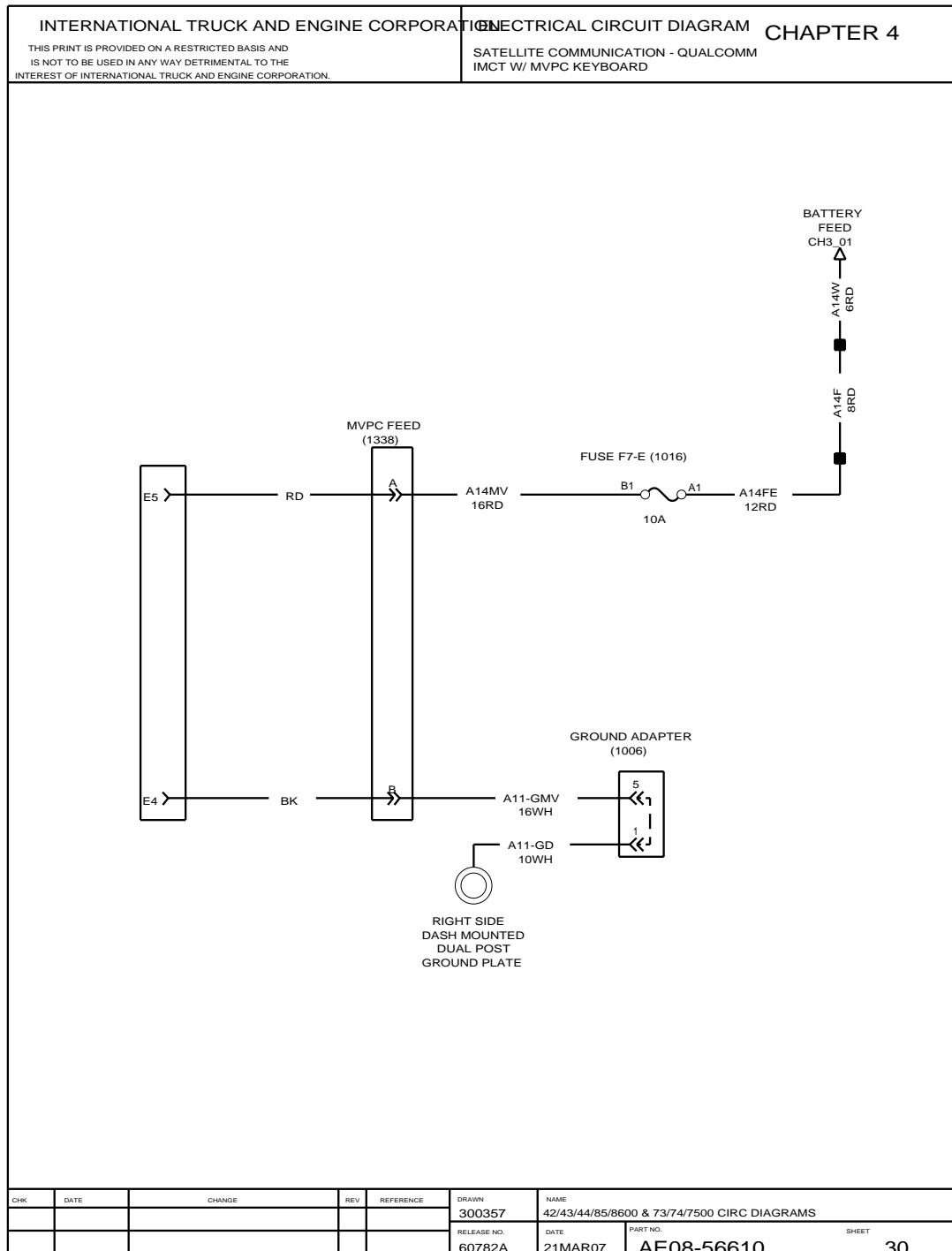
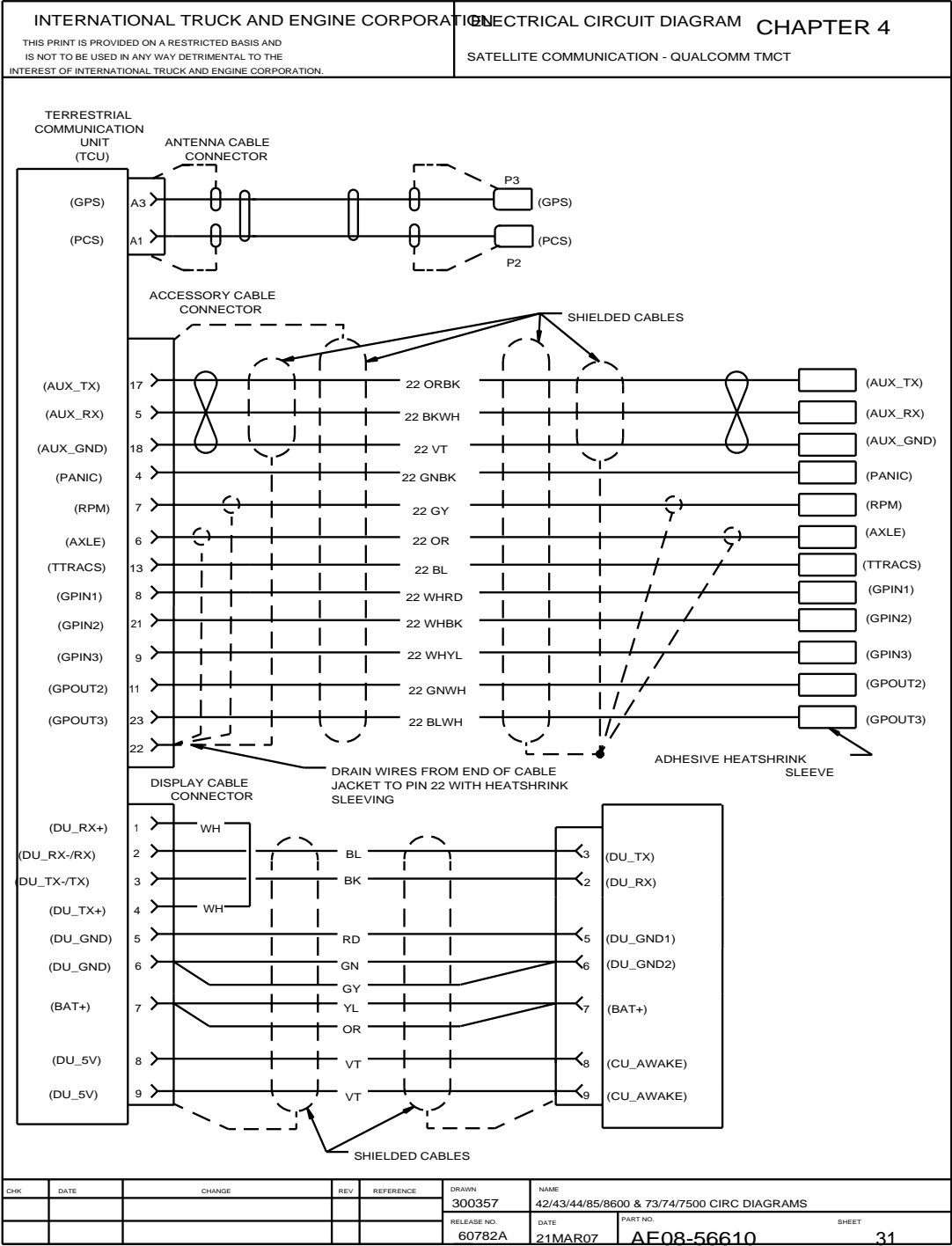


Figure 77 Satellite Communication — Qualcomm MCT with MVPC Keyboard

4.33. SATELLITE COMMUNICATION — QUALCOMM TMCT, P. 31





## 4.34. SATELLITE COMMUNICATION — QUALCOMM TMCT, P. 32

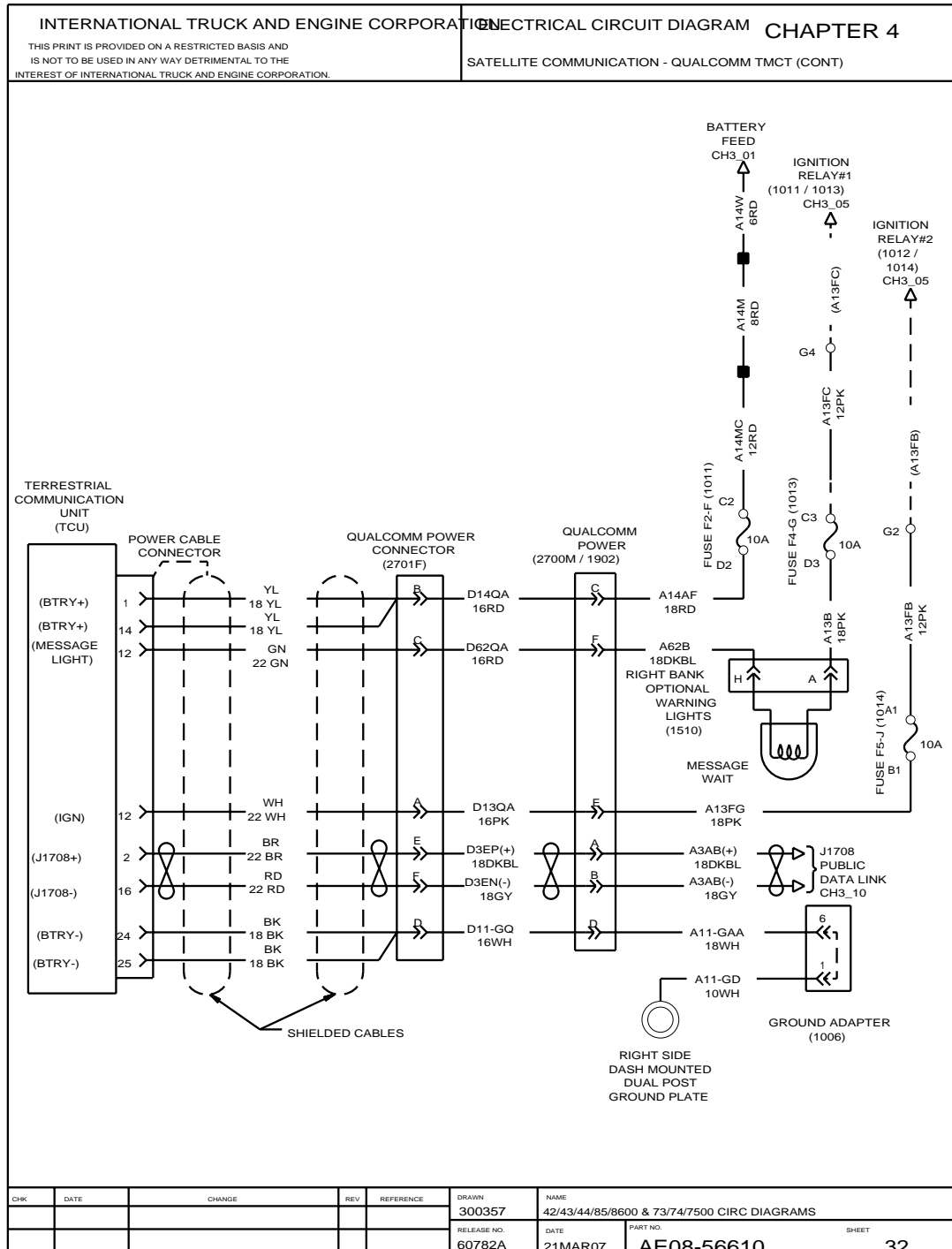


Figure 79 Satellite Communication — Qualcomm TMCT

### 4.35. AIR SHIELD LIGHT, P. 33

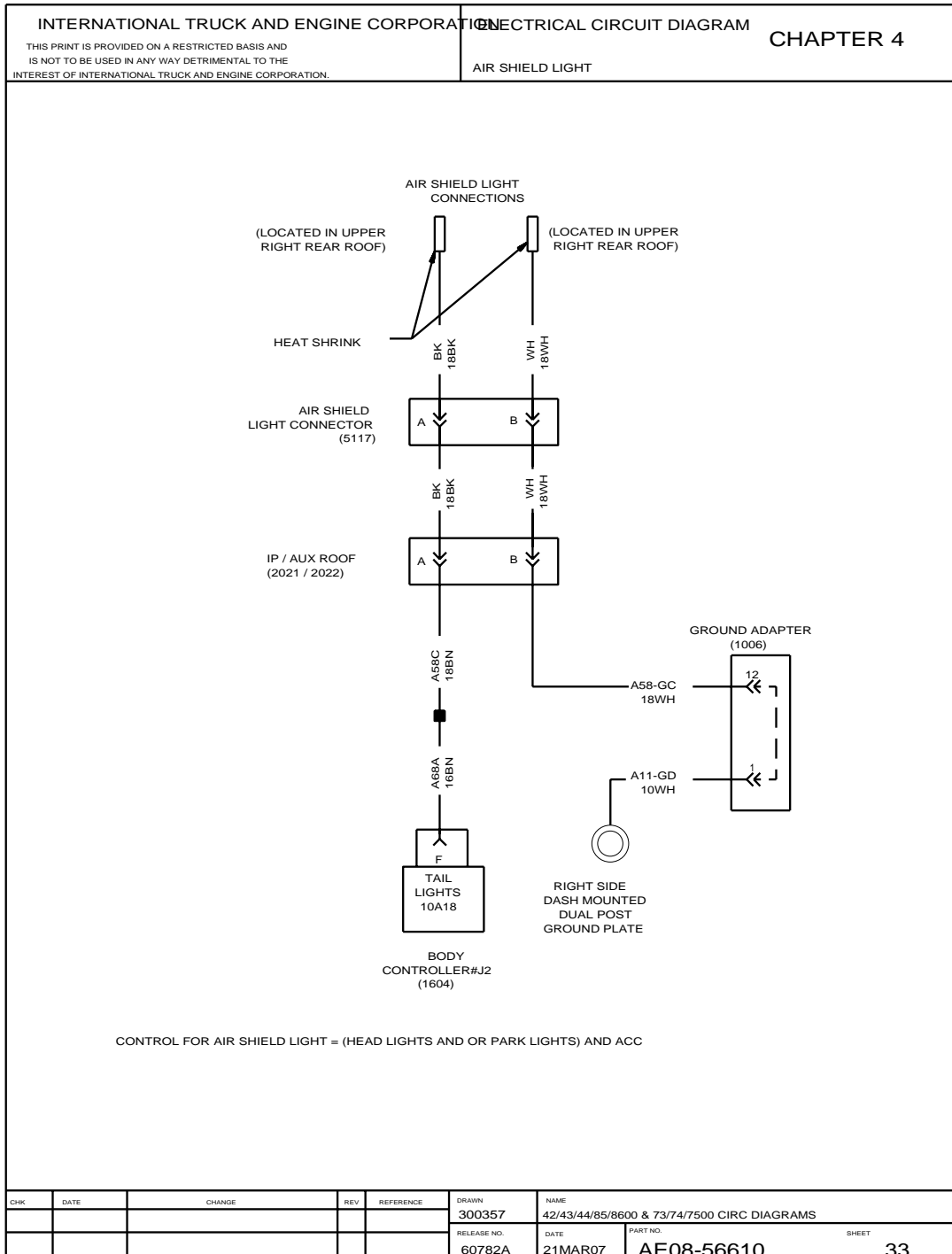


Figure 80 Air Shield Light

## 5. 12V CHARGING + CRANKING SYSTEM (CHAPTER 5)

### 5.1. I6 / V8 ENGINES WITH MANUAL TRANSMISSION, P. 1

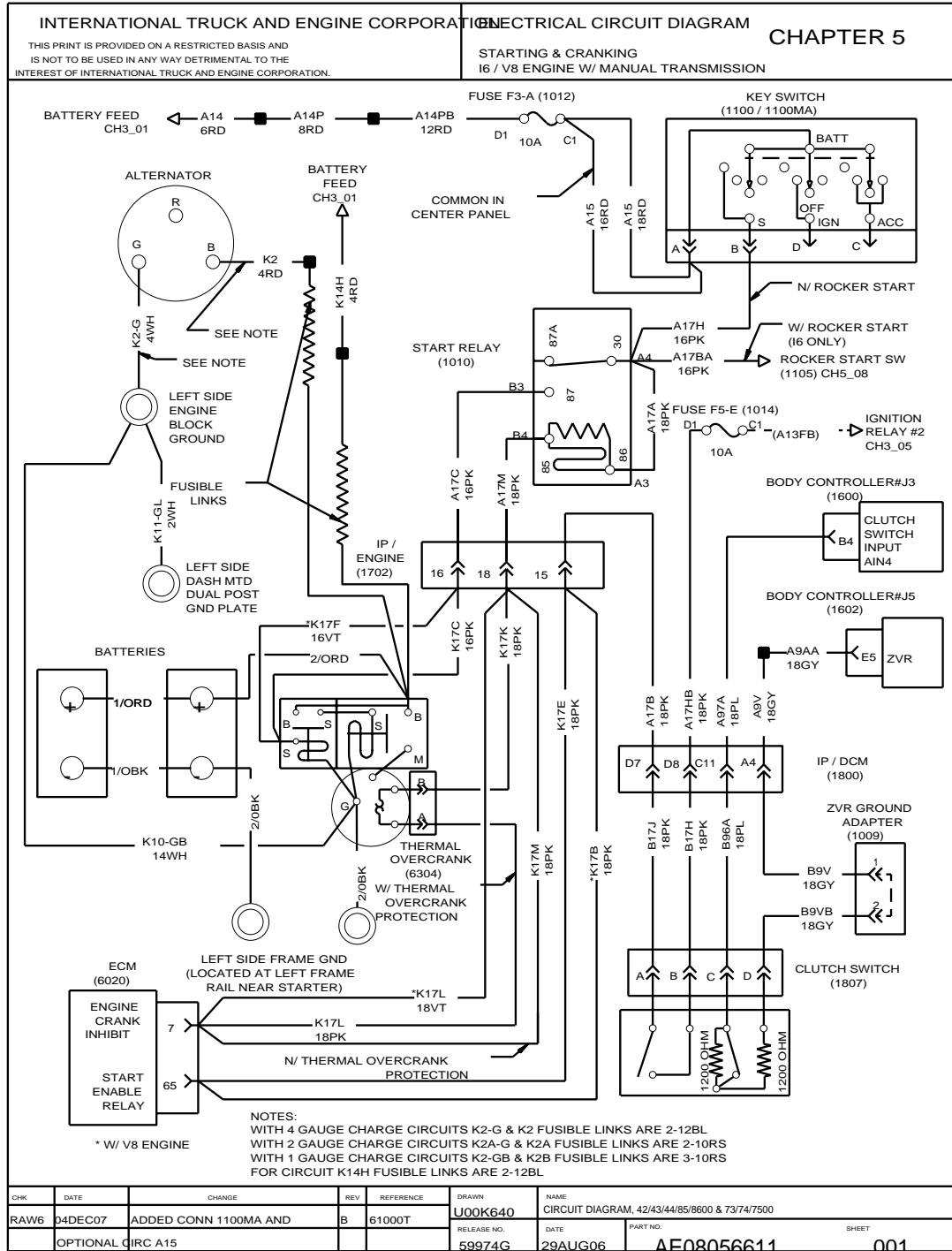
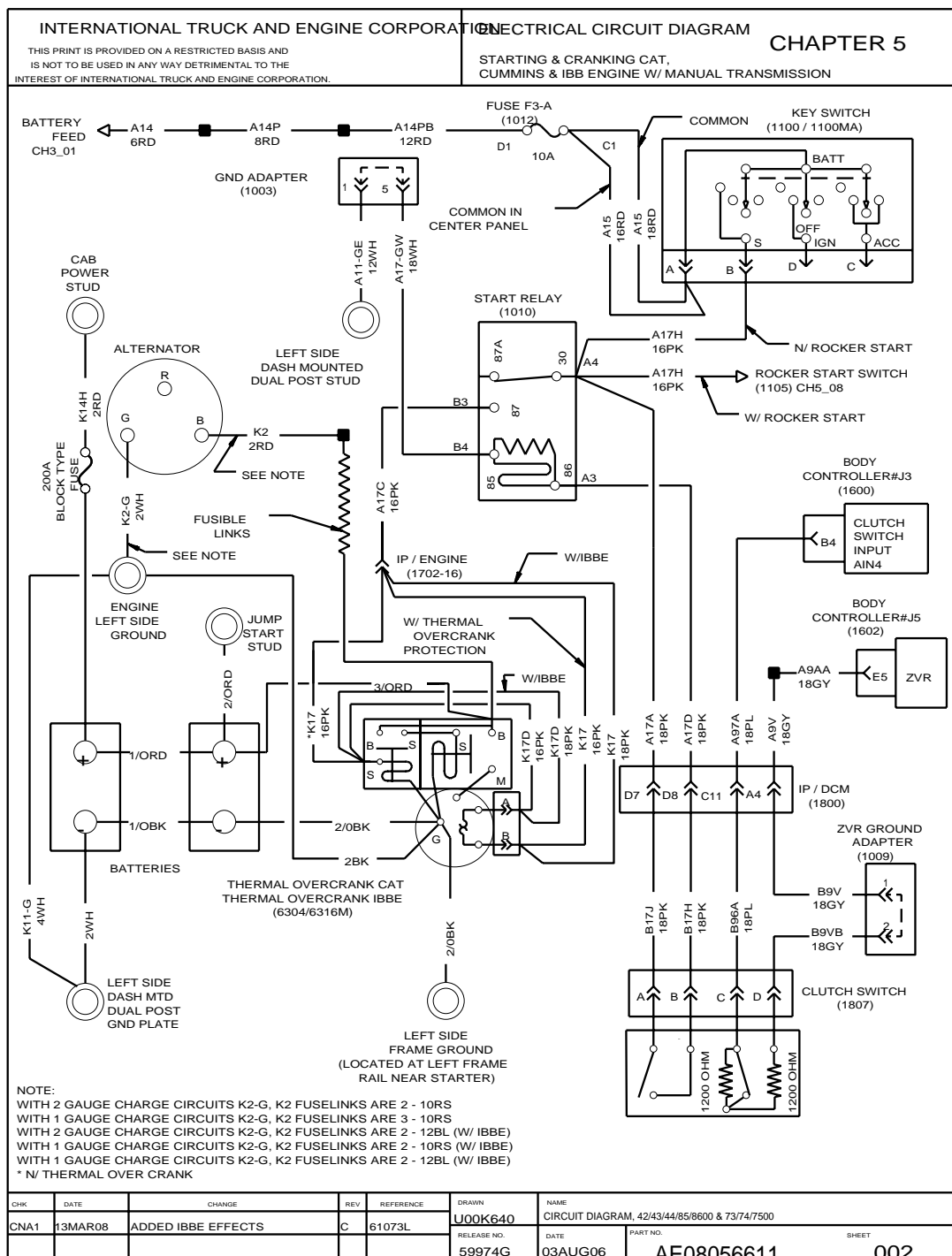


Figure 81 I6 / V8 Engines with Manual Transmission

**5.2. CAT, CUMMINS AND IBB ENGINES WITH MANUAL TRANSMISSION, P. 2**

**Figure 82 Cat, Cummins and IBB Engines with Manual Transmission**

### Figure 83 I6 / V8 Engines with Allison Transmission



## 5.4. CAT, CUMMINS AND IBB ENGINES WITH ALLISON TRANSMISSION, P. 4

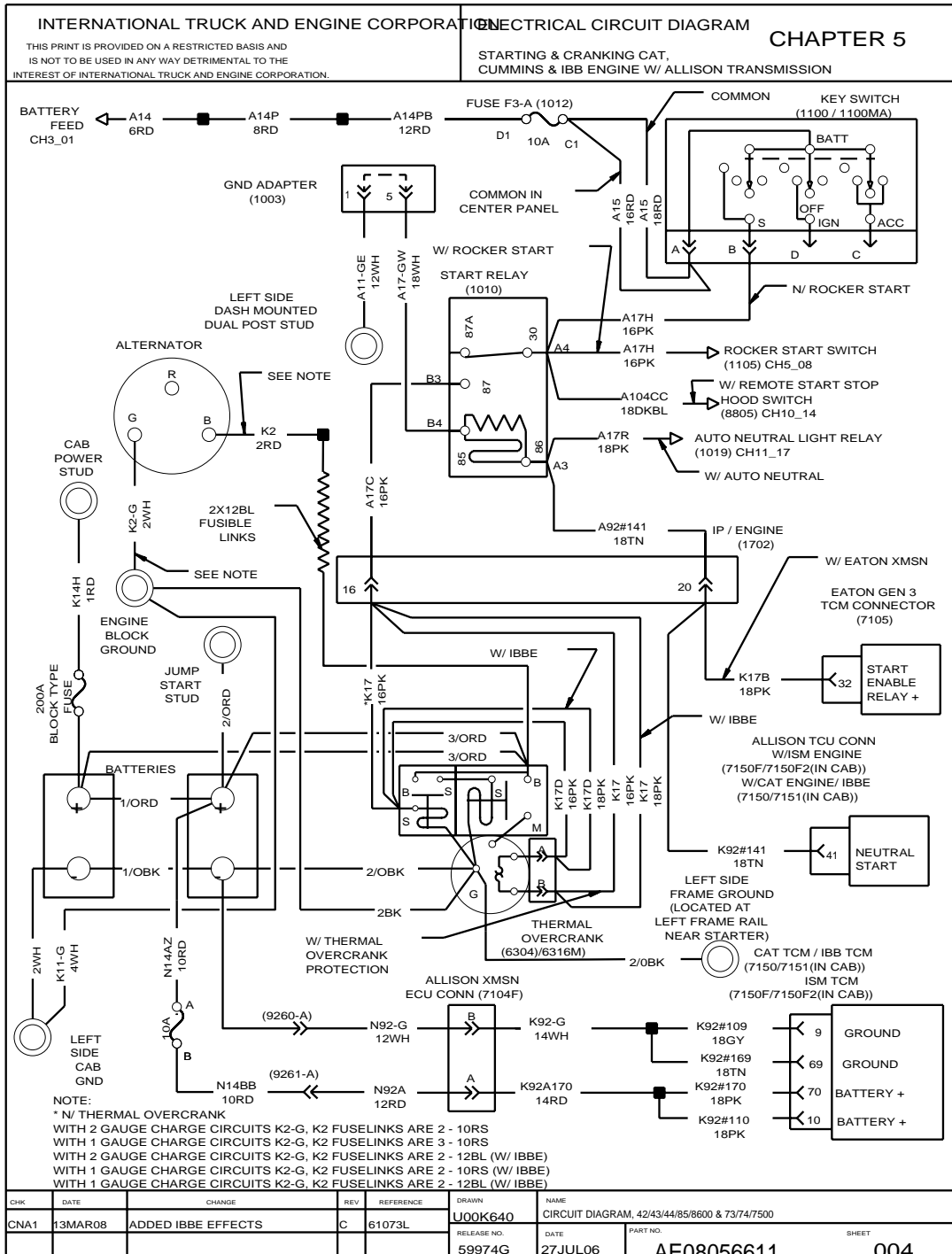


Figure 84 Cat, Cummins and IBB Engines with Allison Transmission

## 5.5. I6 ENGINE WITH AUTOSHIFT, ULTRASHIFT AND EATON HYBRID TRANSMISSION, P. 5

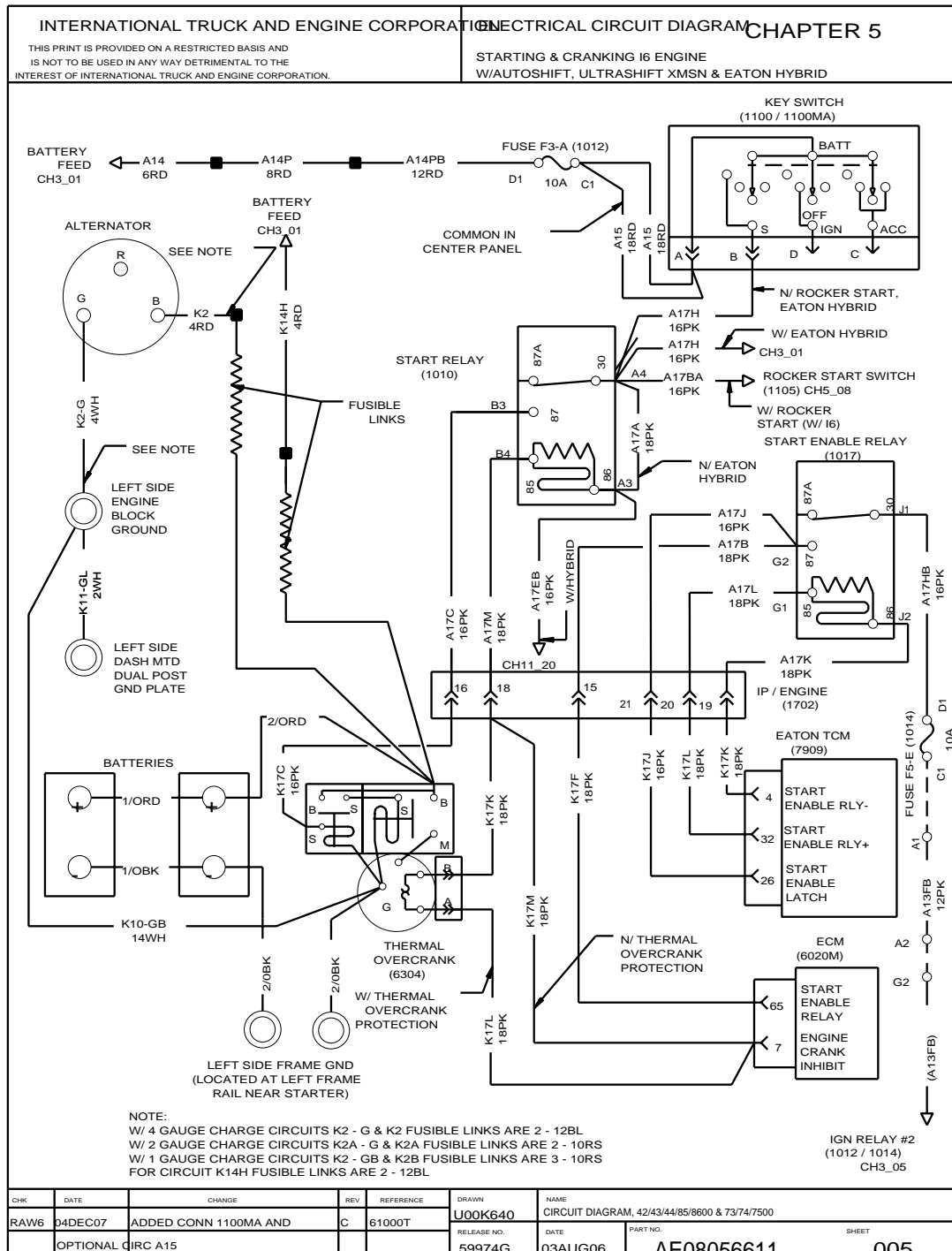


Figure 85 I6 Engine with Autoshift, Ultrashift, and Eaton Hybrid Transmission

## 5.6. CAT, CUMMINS AND IBB ENGINES WITH AUTOSHIFT AND ULTRASHIFT TRANSMISSION, P. 6

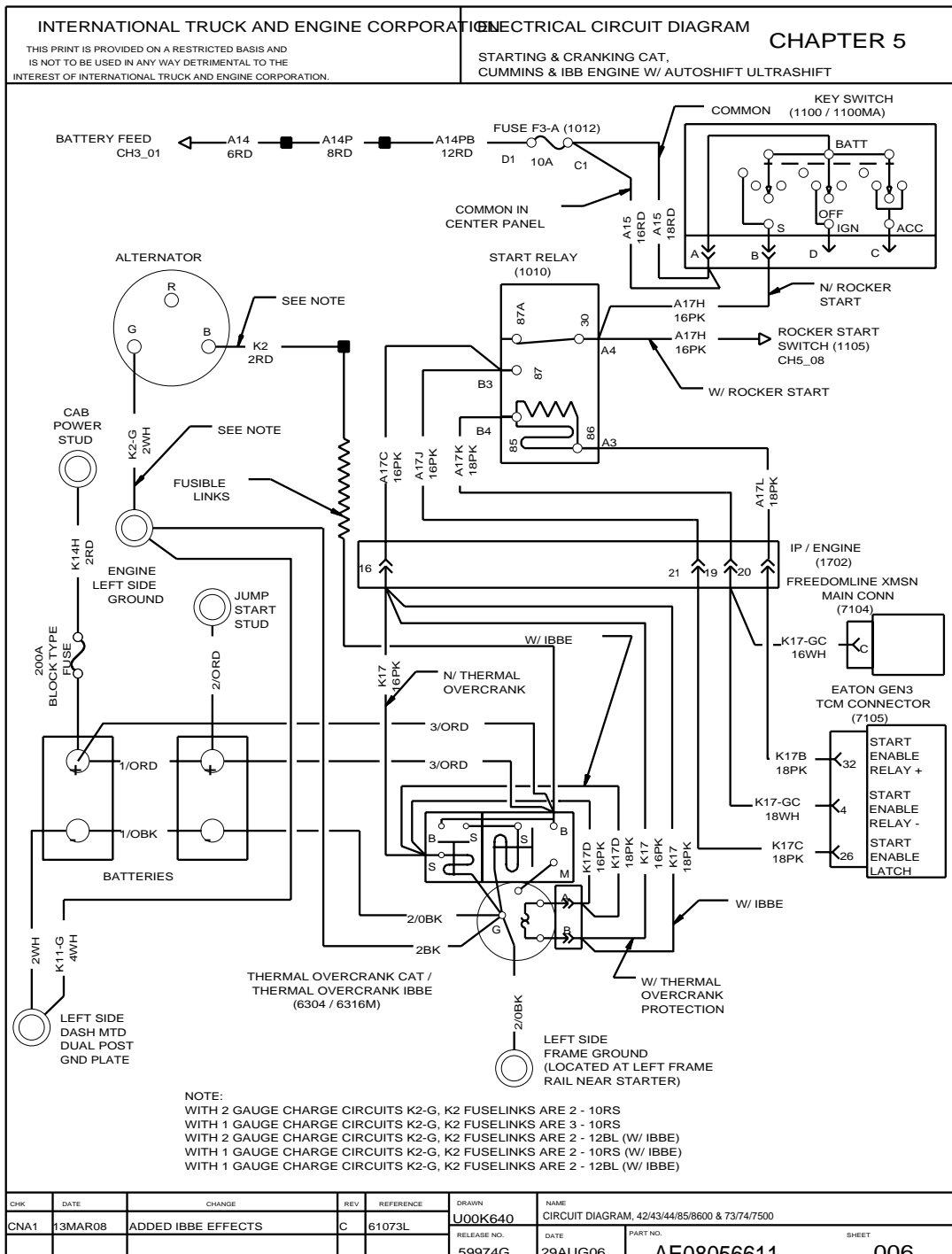


Figure 86 Cat, Cummins and IBB Engines with Autoshift and Ultrashift Transmission



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**ELECTRICAL CIRCUIT DIAGRAM**

**CHAPTER 5**

**16 POWER PACK**

The diagram illustrates the electrical system for the 16 Power Pack. Key components and their connections include:

- ALTERNATOR FIELD (197401):** Connected to the 150A battery bank via a 150A fuse. It has two terminals, A and B, which connect to the K11(+) and K11(-) terminals of the 14LTBL terminal block.
- CHARGE FIELD:** A circular component with terminals A, B, and C. It is connected to the K106C, K106B, and K106A terminals of the 40R terminal block.
- INVERTER:** A central component with terminals A, B, and C. It is connected to the K106C, K106B, and K106A terminals of the 40R terminal block.
- TERMINATING RESISTOR (78011):** Two resistors, each with a 120 OHMS rating. They are connected to the K5E1(-) and K5G1(-) terminals of the 18GN terminal block.
- INVERTER CONNECTOR (78011):** A component with terminals A and B, connected to the K5E1(+) and K5G1(+) terminals of the 18GN terminal block.
- ENGINE / IP (1702-5):** Connected to the K13Z terminal of the 18PK terminal block.
- FUSE F5-B (10141):** A 10A fuse connected between the K13Z terminal of the 18PK terminal block and the H2 terminal of the 10A fuse block.
- IGN RELAY #2 (1012 / 10141):** Connected to the G2 terminal of the 10A fuse block.
- BATTERIES:** Two 150A batteries connected in parallel. The positive terminal is connected to the 150A fuse, and the negative terminal is connected to the 150A fuse.
- STUDS:** A component with terminals A, B, C, and +, connected to the 150A battery bank.
- IGN:** A component with terminals A, B, C, and +, connected to the 150A battery bank.
- GFCI:** A component connected to the IGN terminal.

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	RELEASE NO.	DATE	PART NO.	SHEET
CNA	5MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/B600 & 73/74/7500 CIRC DIAGRAMS	59974G	28 JUL 06	AE08-56611	07

### Figure 87 I6 Power Pack

## 5.8. ROCKER START, P. 8

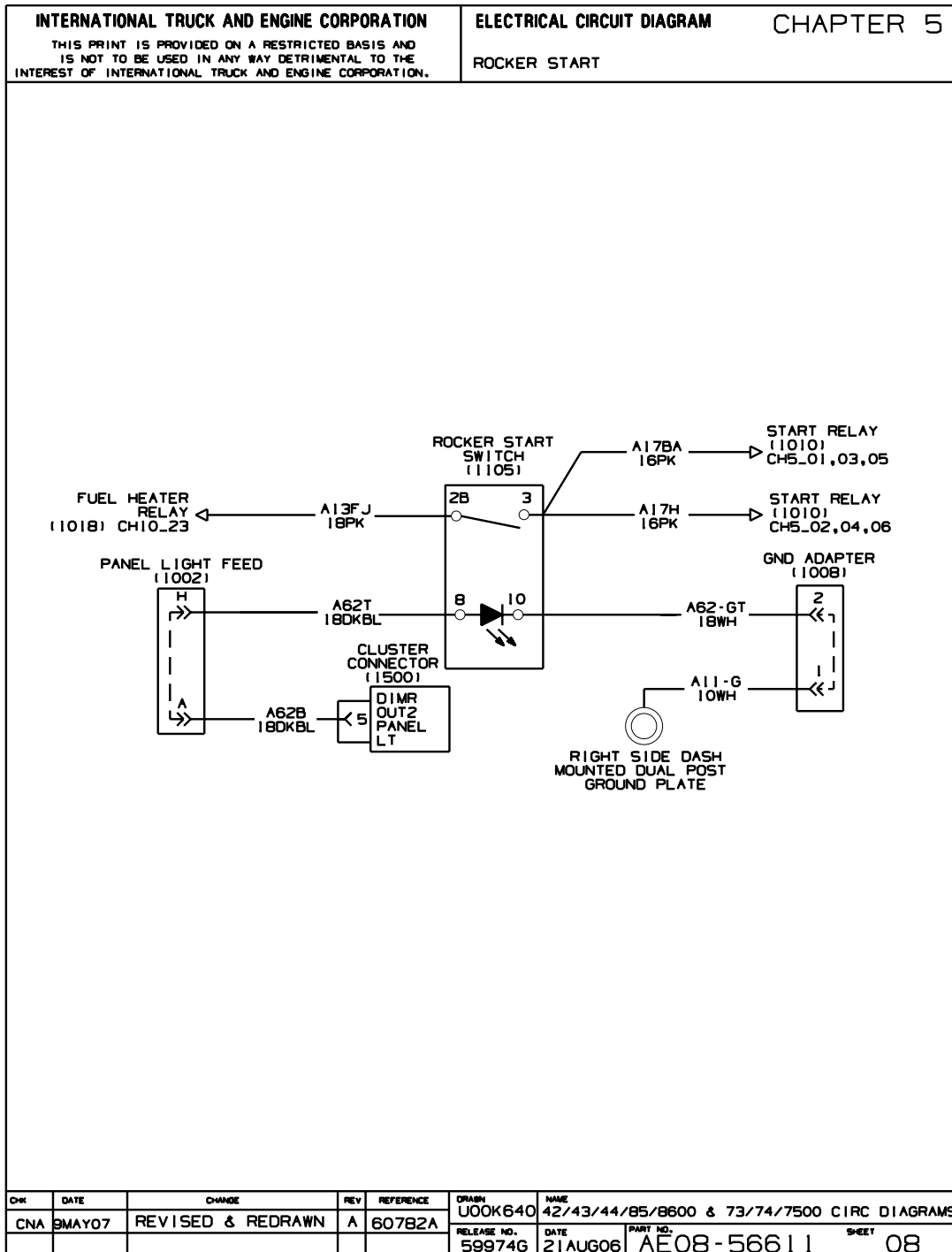


Figure 88 Rocker Start

## 6. FANS AND ENGINE ACCESSORIES (CHAPTER 6)

### 6.1. FAN WIRING, I6 / V8 2007 ENGINES, P. 1

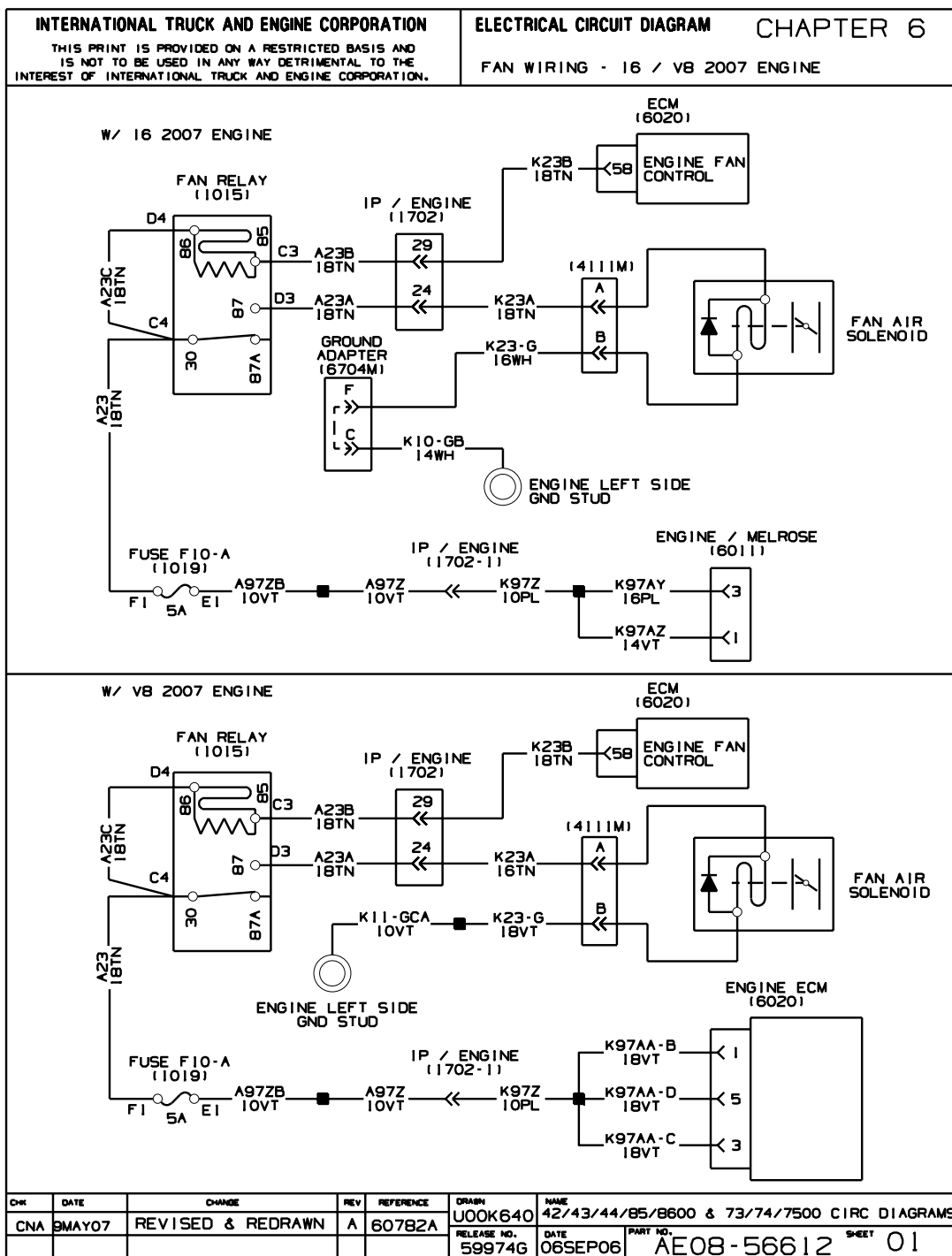


Figure 89 Fan Wiring, I6 / V8 2007 Engines

6.2. FAN WIRING, ISM, C11–C13 2007 ENGINES, P. 2

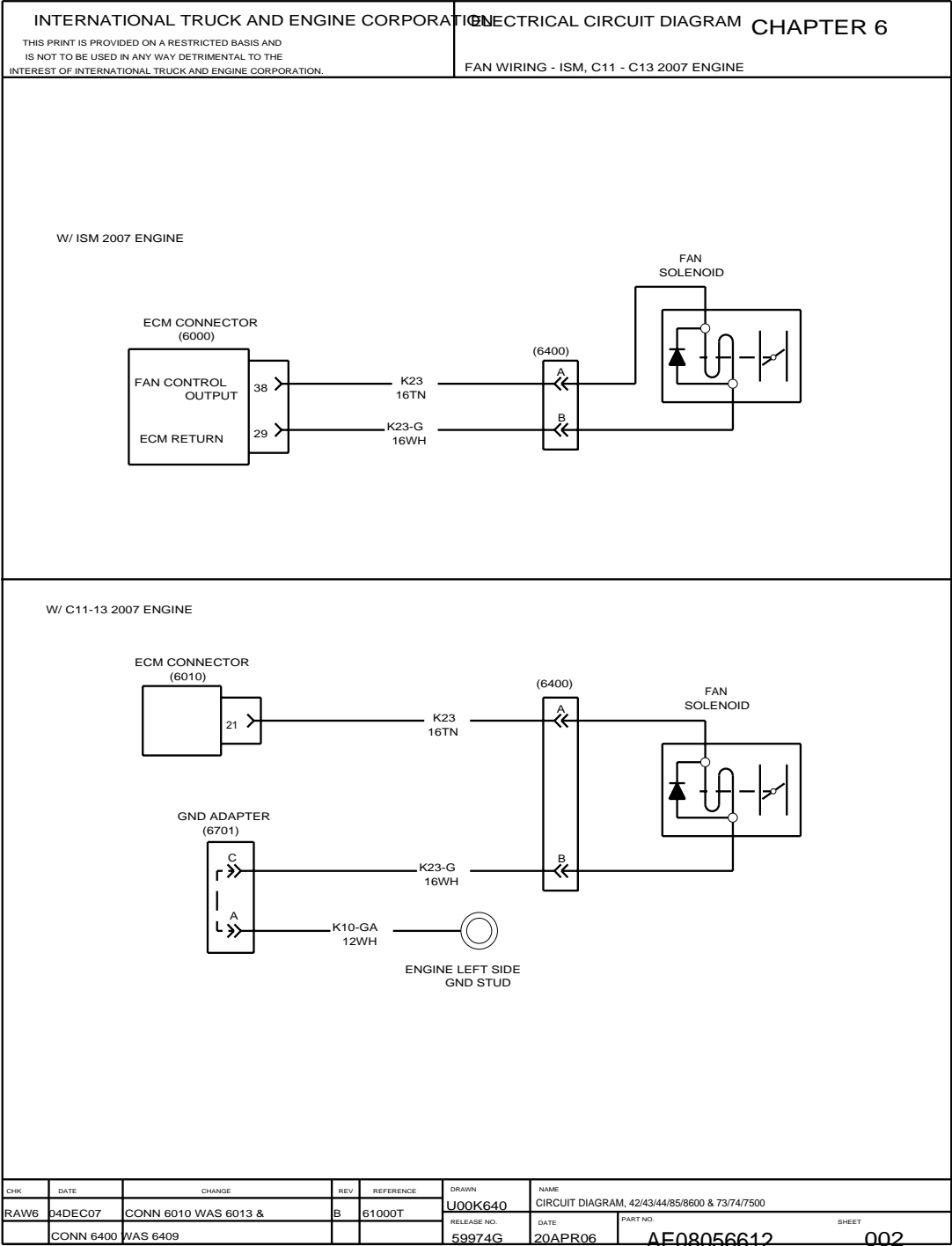


Figure 90 Fan Wiring, ISM, C11–C13 2007 Engines

### 6.3. STARTING AID — ETHER START, P. 3

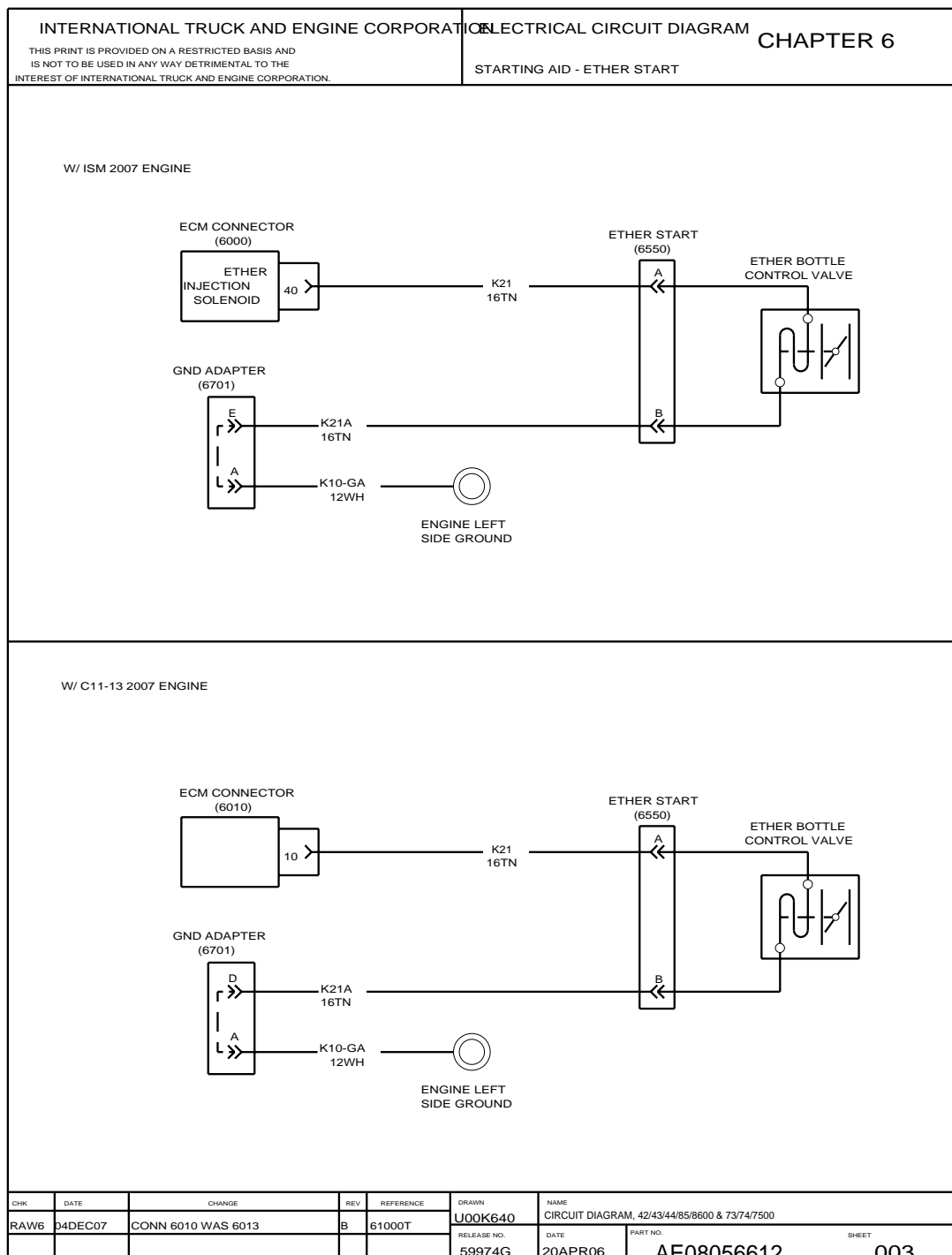


Figure 91 Starting Aid — Ether Start

## 6.4. SNOW VALVE, P. 4

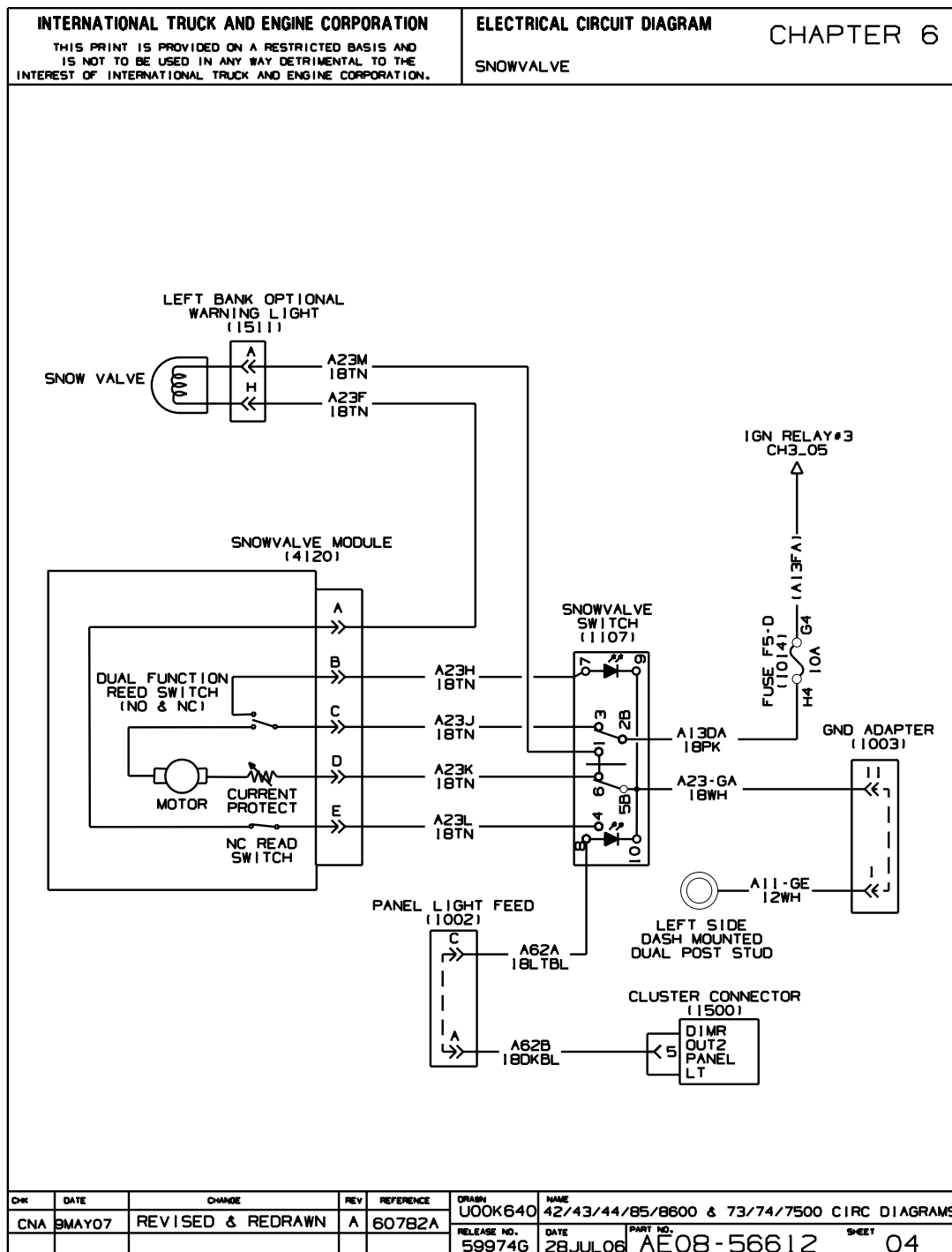


Figure 92 Snow Valve

## 6.5. STARTING AID — FLAME START (IBB ENGINE), P. 5

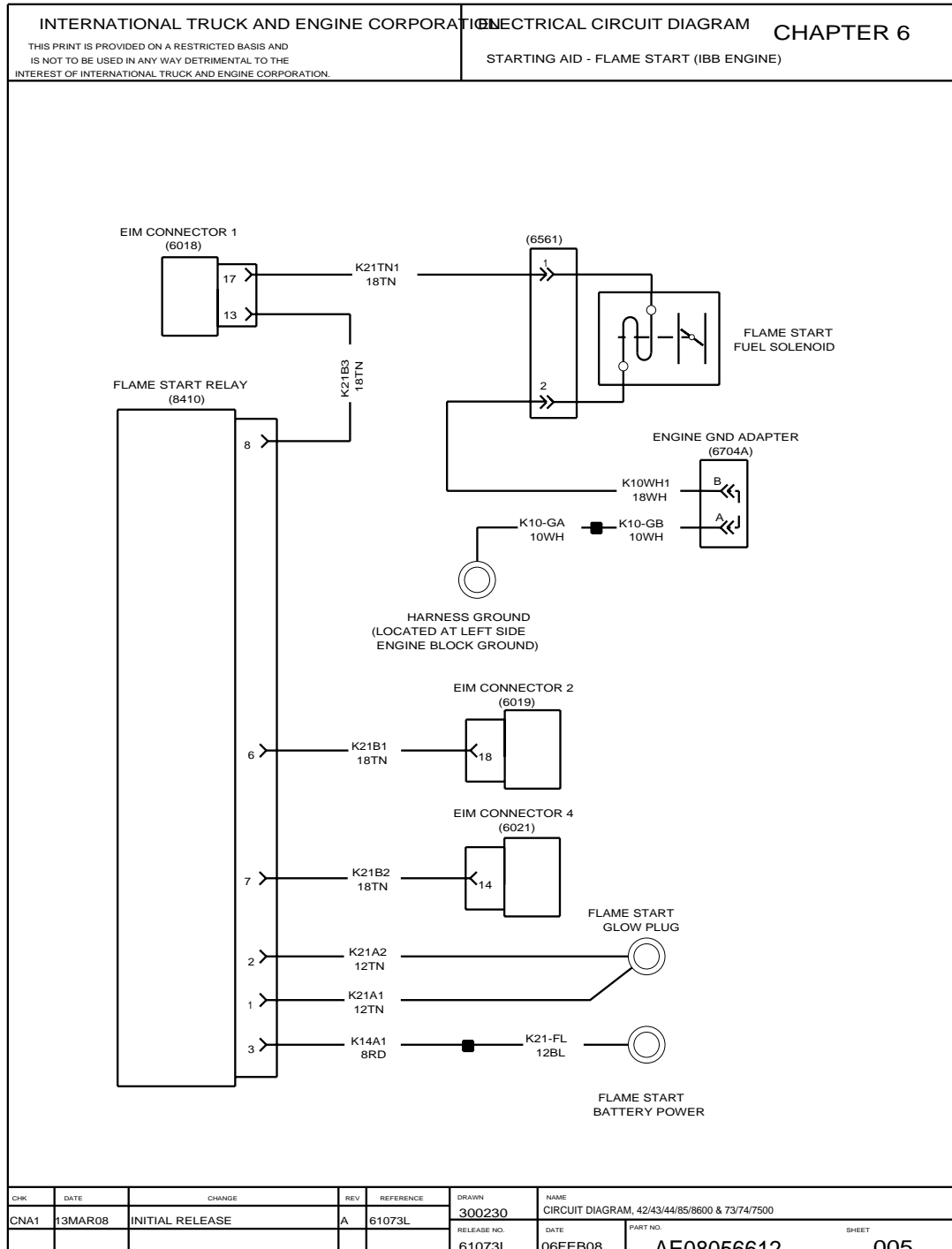


Figure 93 Starting Aid — Flame Start (IBB Engine)

## 6.6. FAN WIRING — IBB ENGINE, P. 6

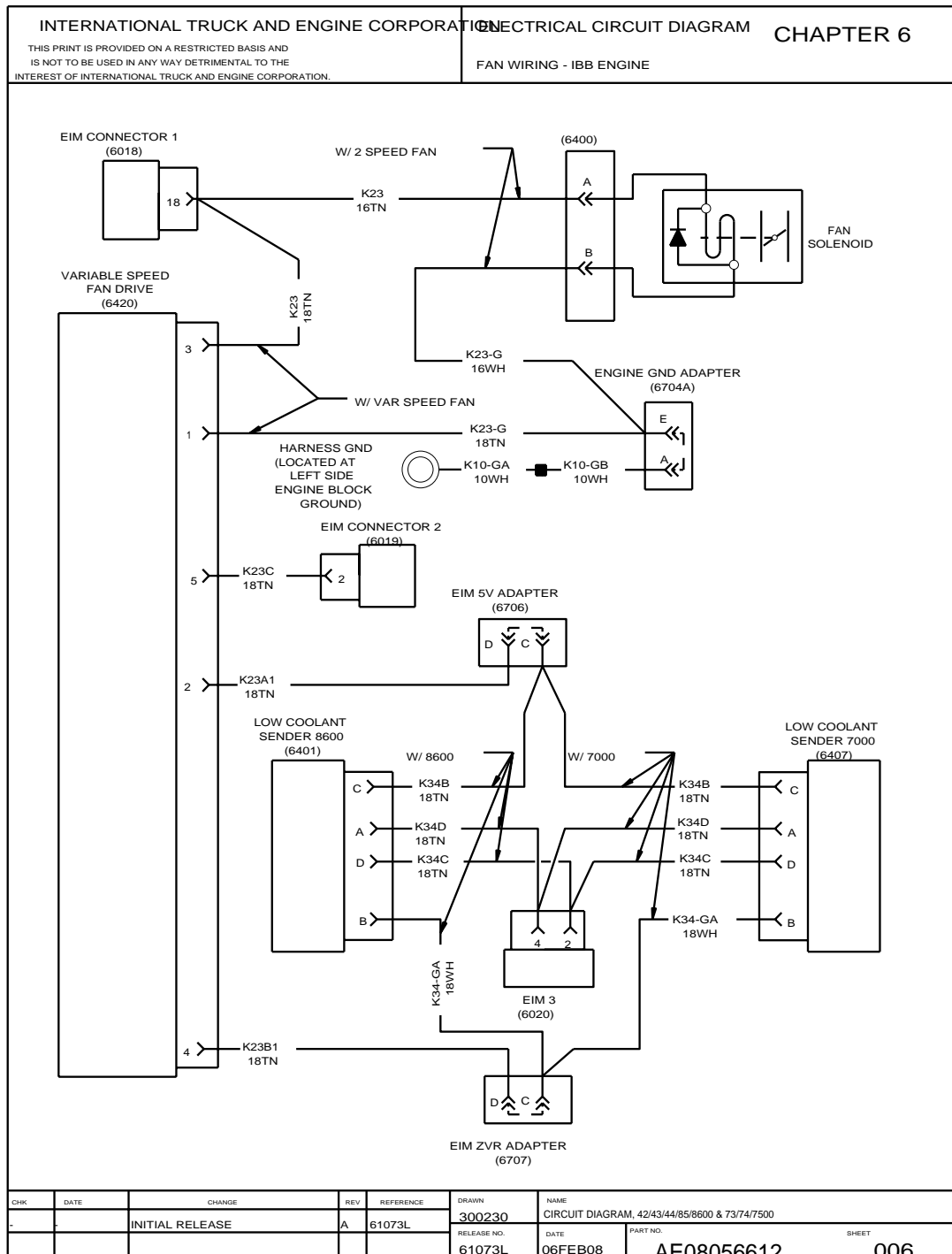


Figure 94 Fan Wiring — IBB Engine



## 7. ELECTRONIC ENGINES (CHAPTER 7)

### 7.1. ELECTRONIC ENGINE CONTROLS, CAT ENGINES, P. 1

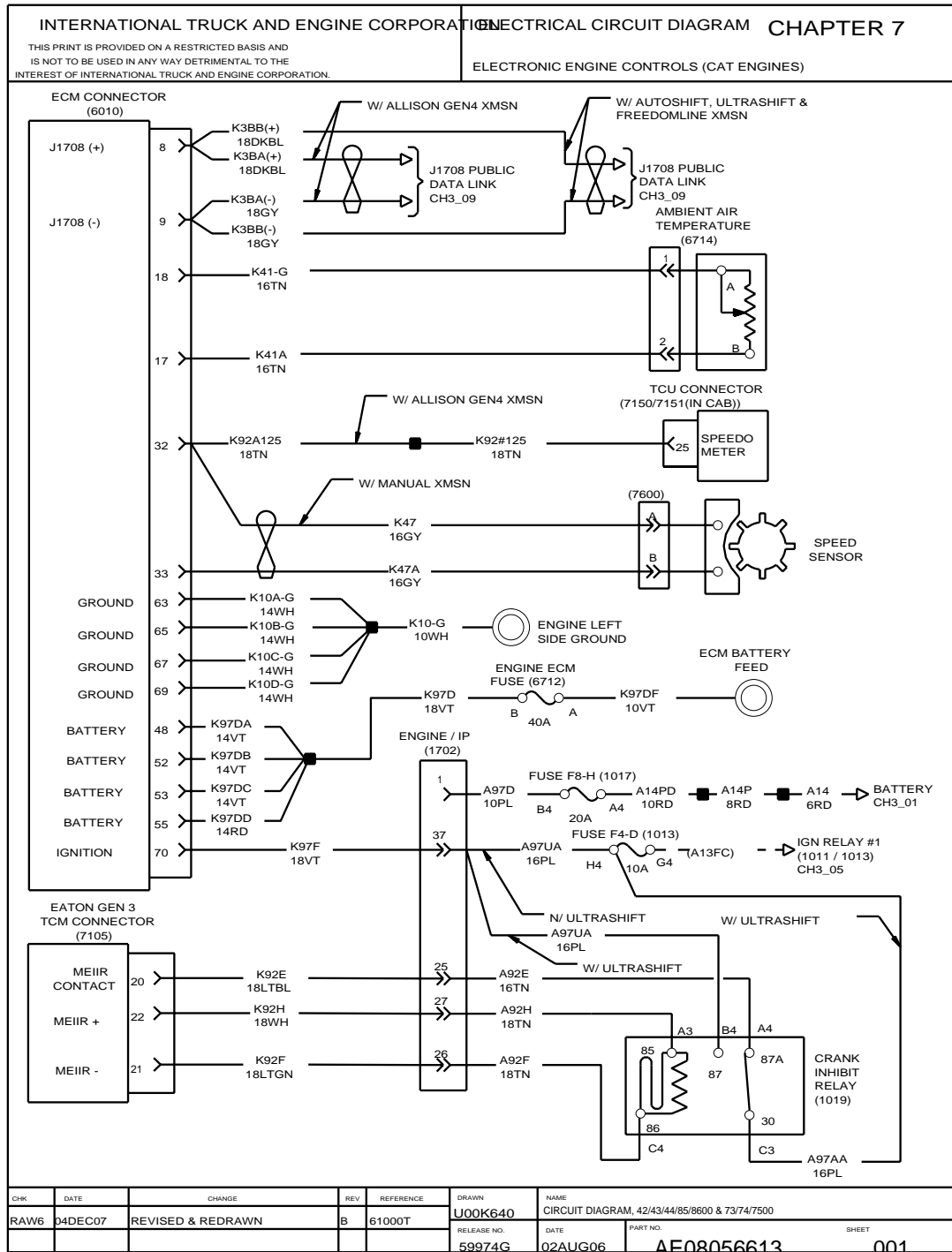


Figure 95 Electronic Engine Controls, Cat Engines

[illegible]

**Figure 96 Electronic Engine Controls, Cat Engines (Cont.)**

### 7.3. ENGINE BODY BUILDER — REMOTE ENGINE CONTROL (CAT/IBBE ENGINE), P. 3

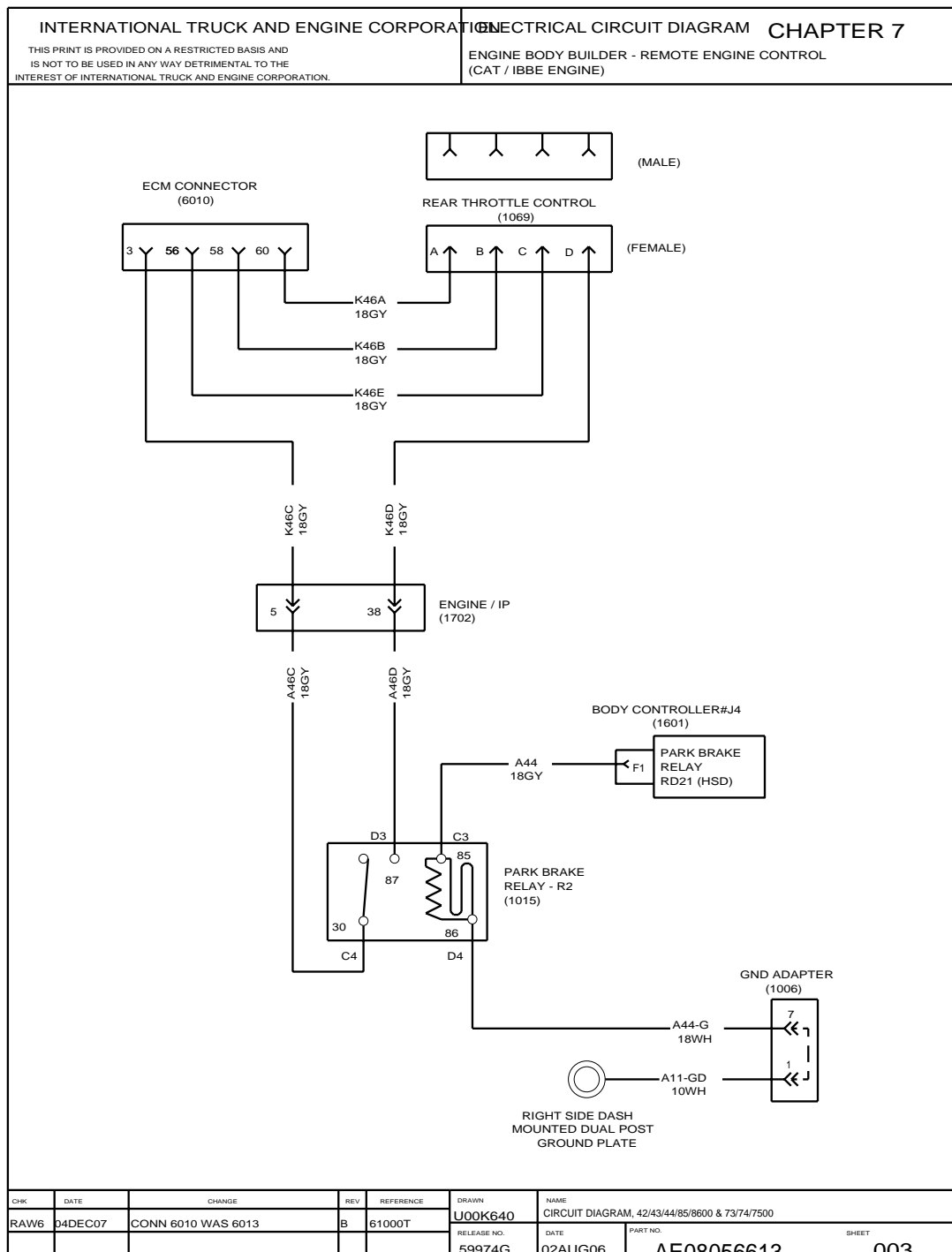
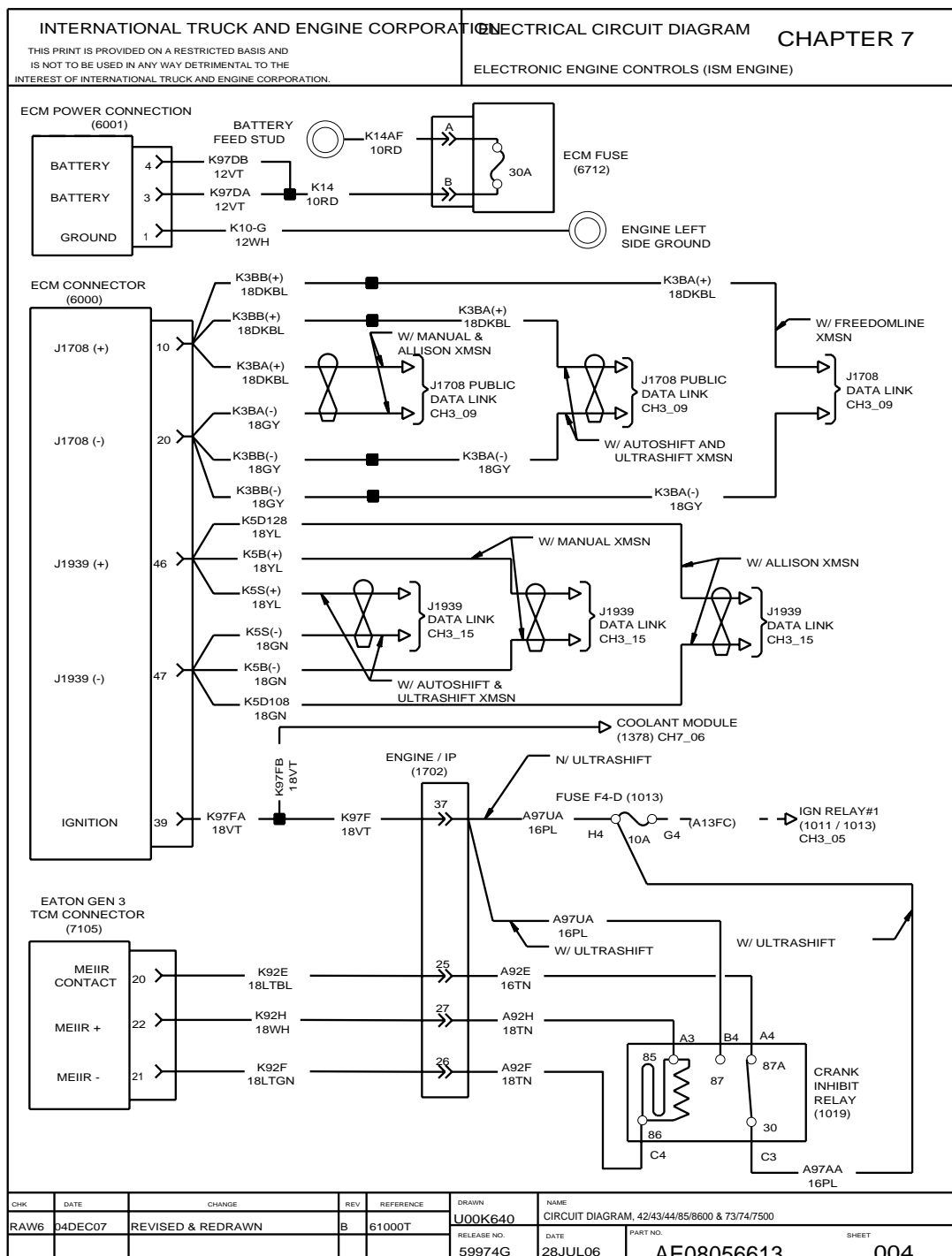


Figure 97 Engine Body Builder — Remote Engine Control (Cat/IBBE Engine)

## 7.4. ELECTRONIC ENGINE CONTROLS, ISM ENGINES, P. 4



**Figure 98 Electronic Engine Controls, ISM Engines**

## 7.5. ELECTRONIC ENGINE CONTROLS, ISM ENGINES, P. 5

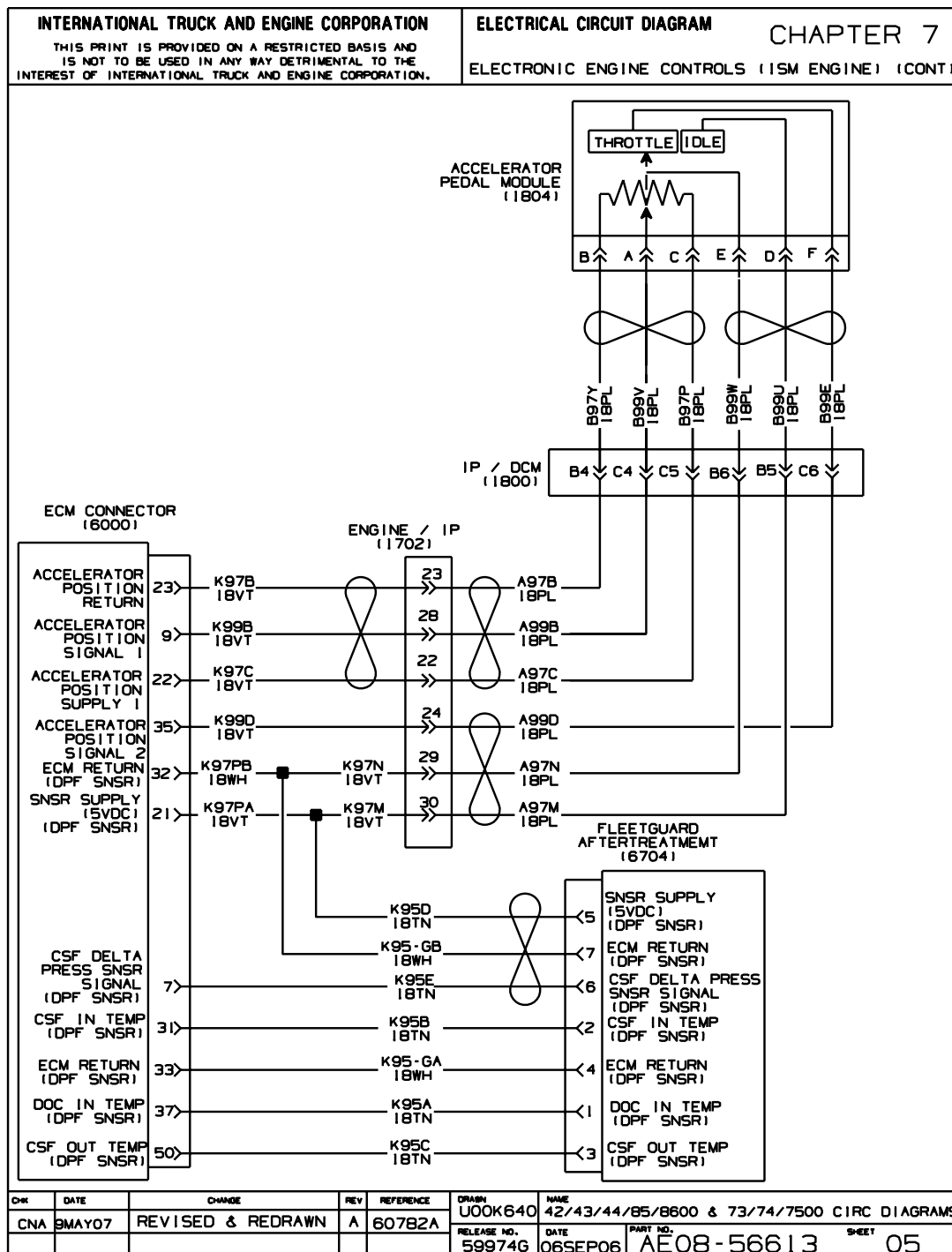


Figure 99 Electronic Engine Controls, ISM Engines (Cont.)

## 7.6. ELECTRONIC ENGINE CONTROLS, ISM ENGINES, P. 6

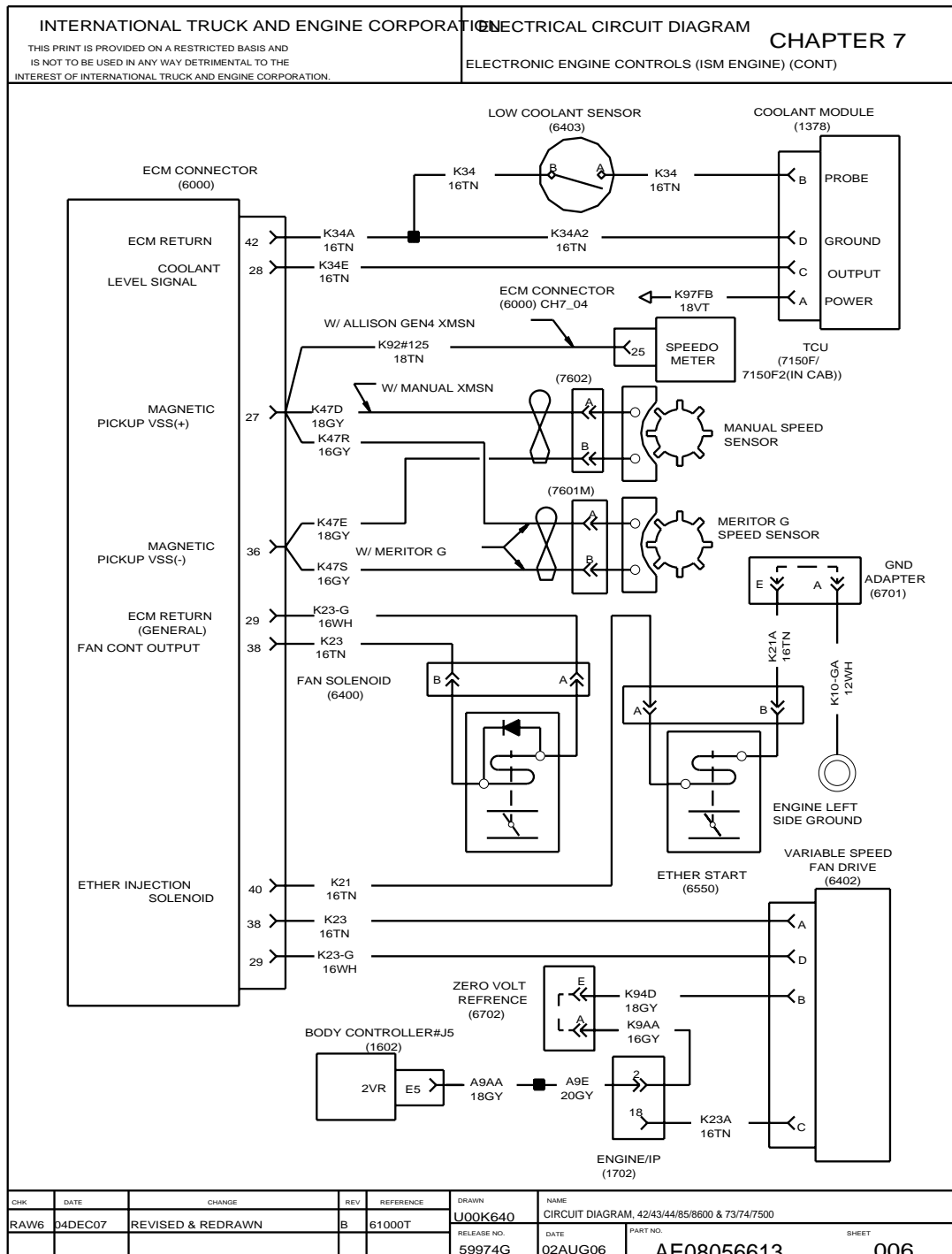


Figure 100 Electronic Engine Controls, ISM Engines (Cont.)

## 7.7. ELECTRONIC ENGINE CONTROLS, I6 ENGINES, P. 7

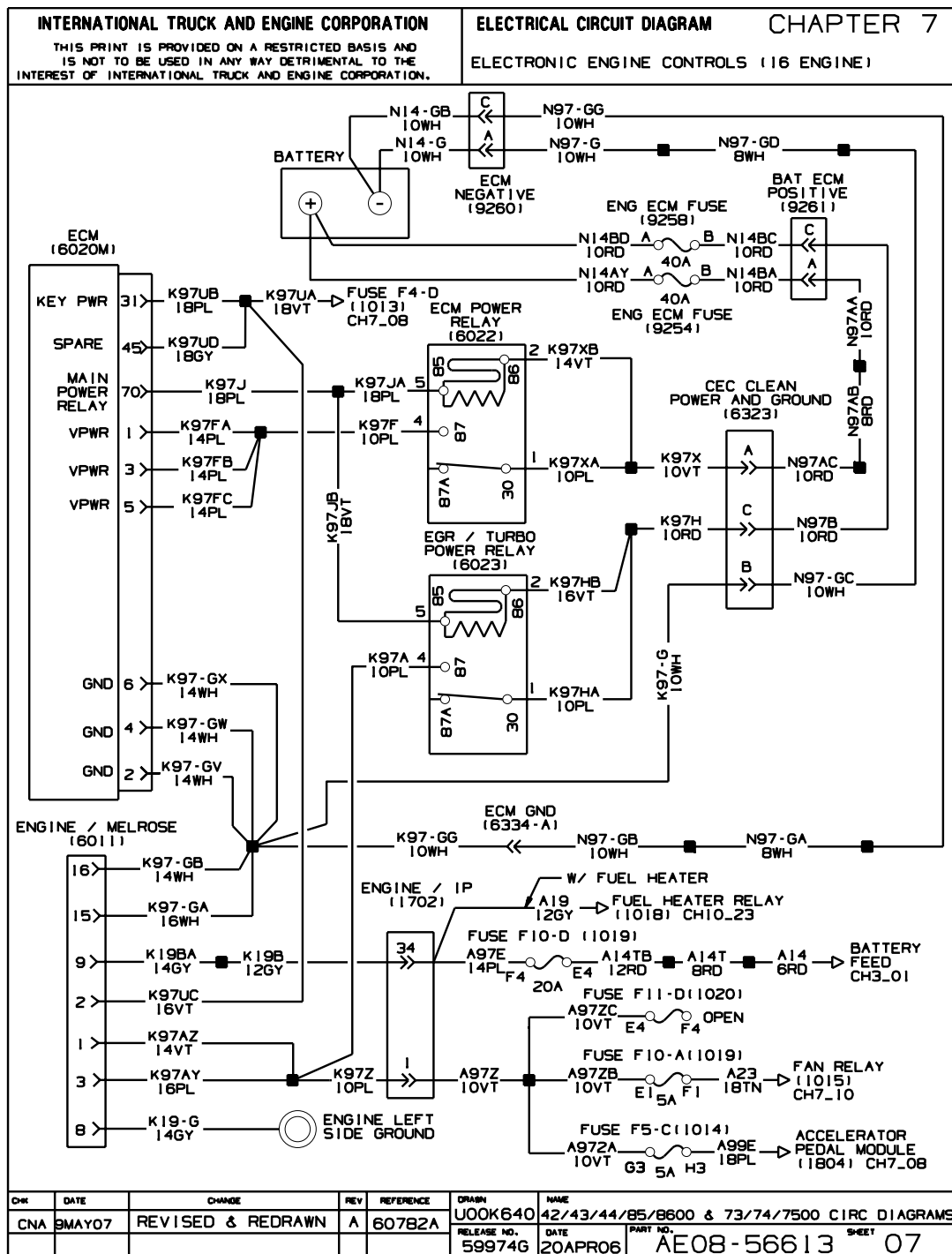


Figure 101 Electronic Engine Controls, I6 Engines

## 7.8. ELECTRONIC ENGINE CONTROLS, I6 ENGINES, P. 8

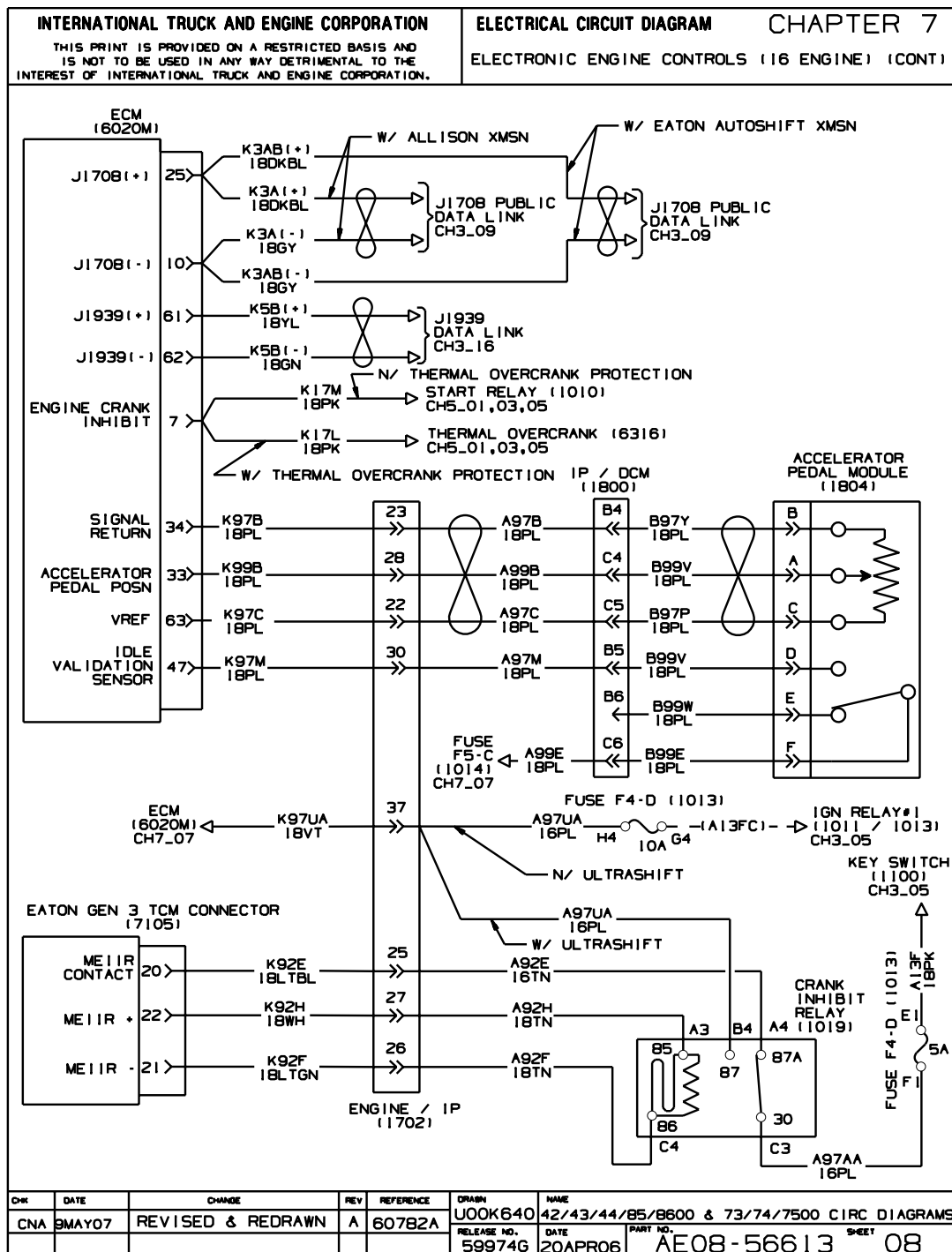


Figure 102 Electronic Engine Controls, I6 Engines (Cont.)



## 7.9. ELECTRONIC ENGINE CONTROLS, I6 ENGINES, P. 9

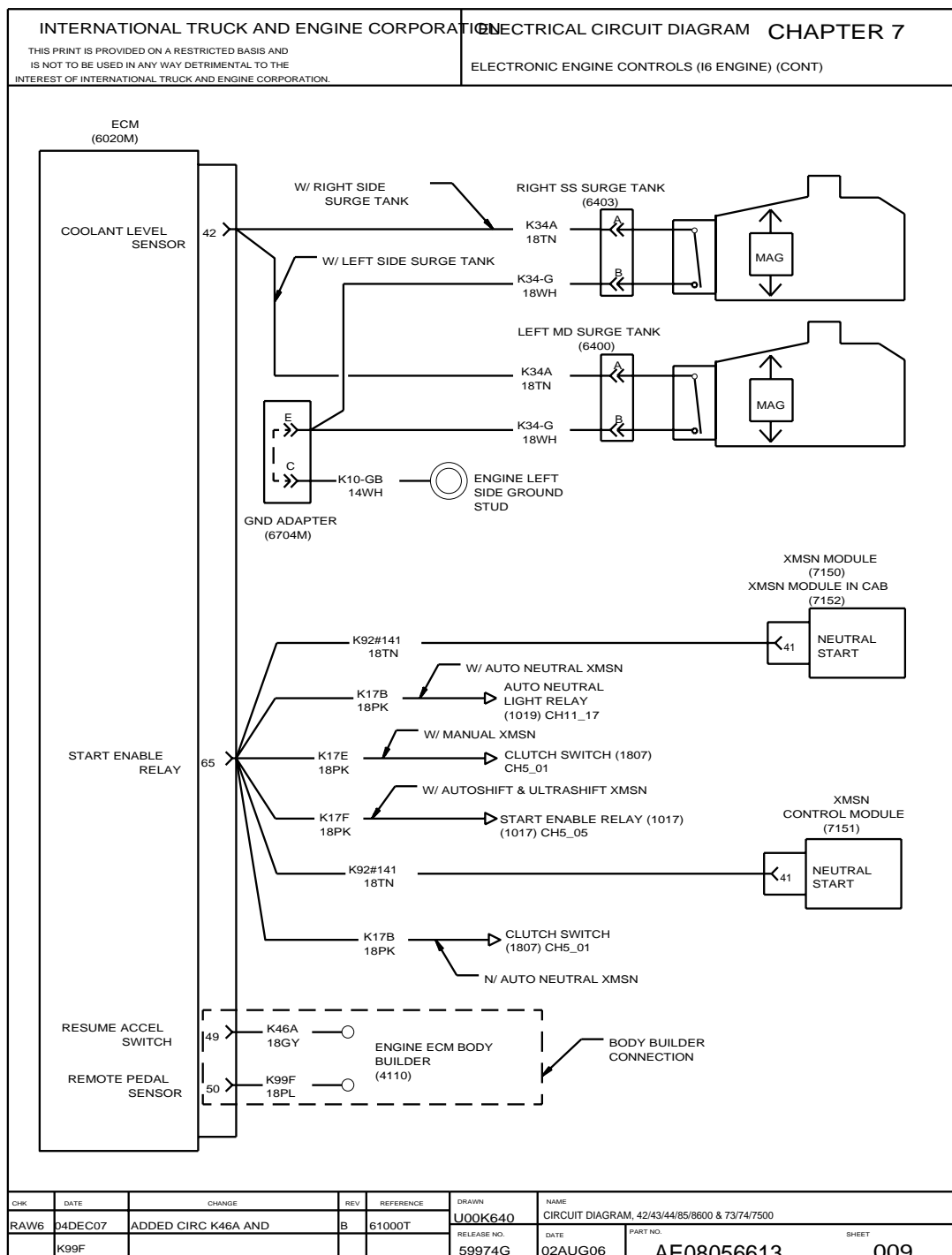


Figure 103 Electronic Engine Controls, I6 Engines (Cont.)

## 7.10. ELECTRONIC ENGINE CONTROLS, I6 ENGINES, P. 10

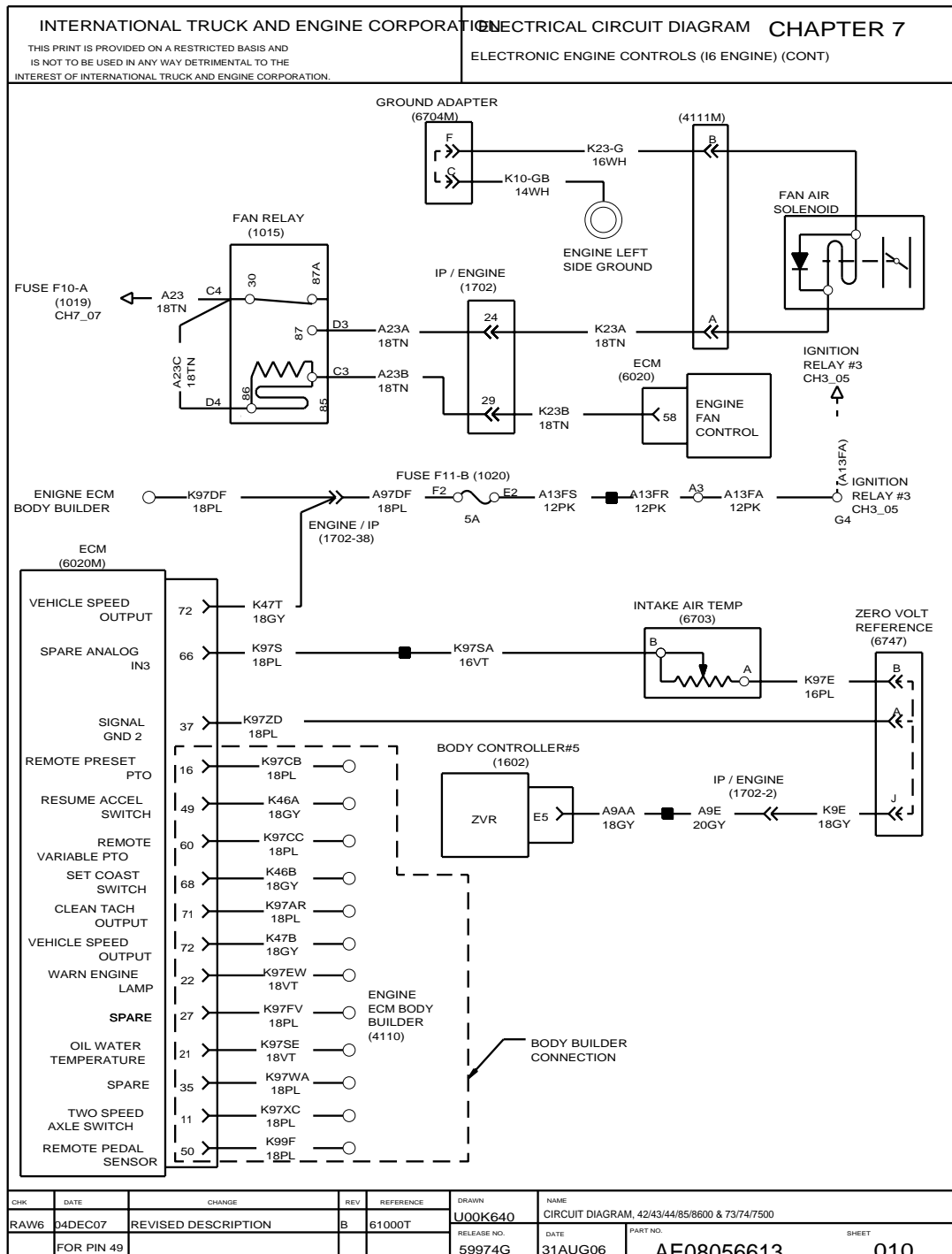


Figure 104 Electronic Engine Controls, I6 Engines (Cont.)

## 7.11. ELECTRONIC ENGINE CONTROLS, I6 ENGINES, P. 11

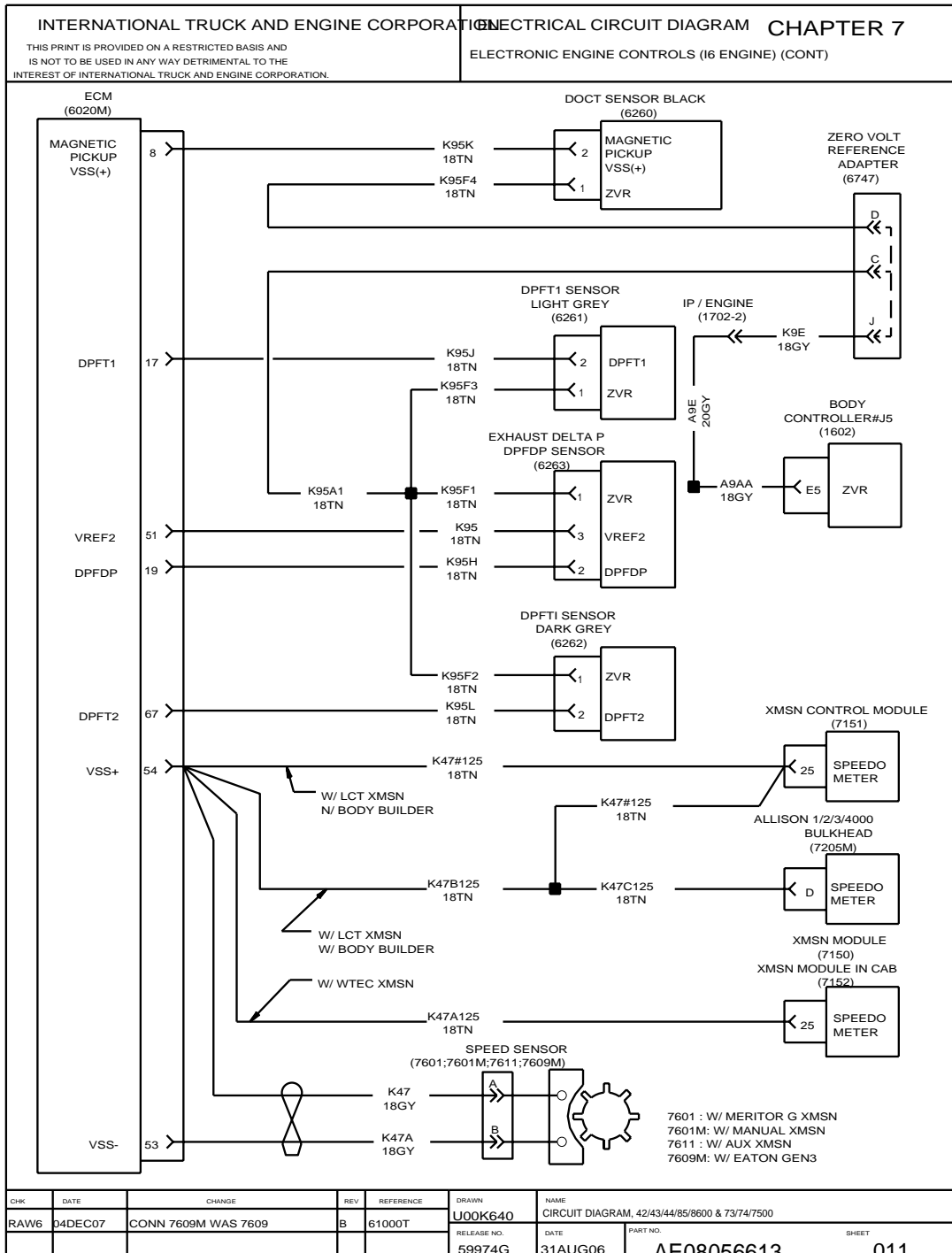


Figure 105 Electronic Engine Controls, I6 Engines (Cont.)

## 7.12. ELECTRONIC ENGINE CONTROLS — V8 ENGINES, P. 12

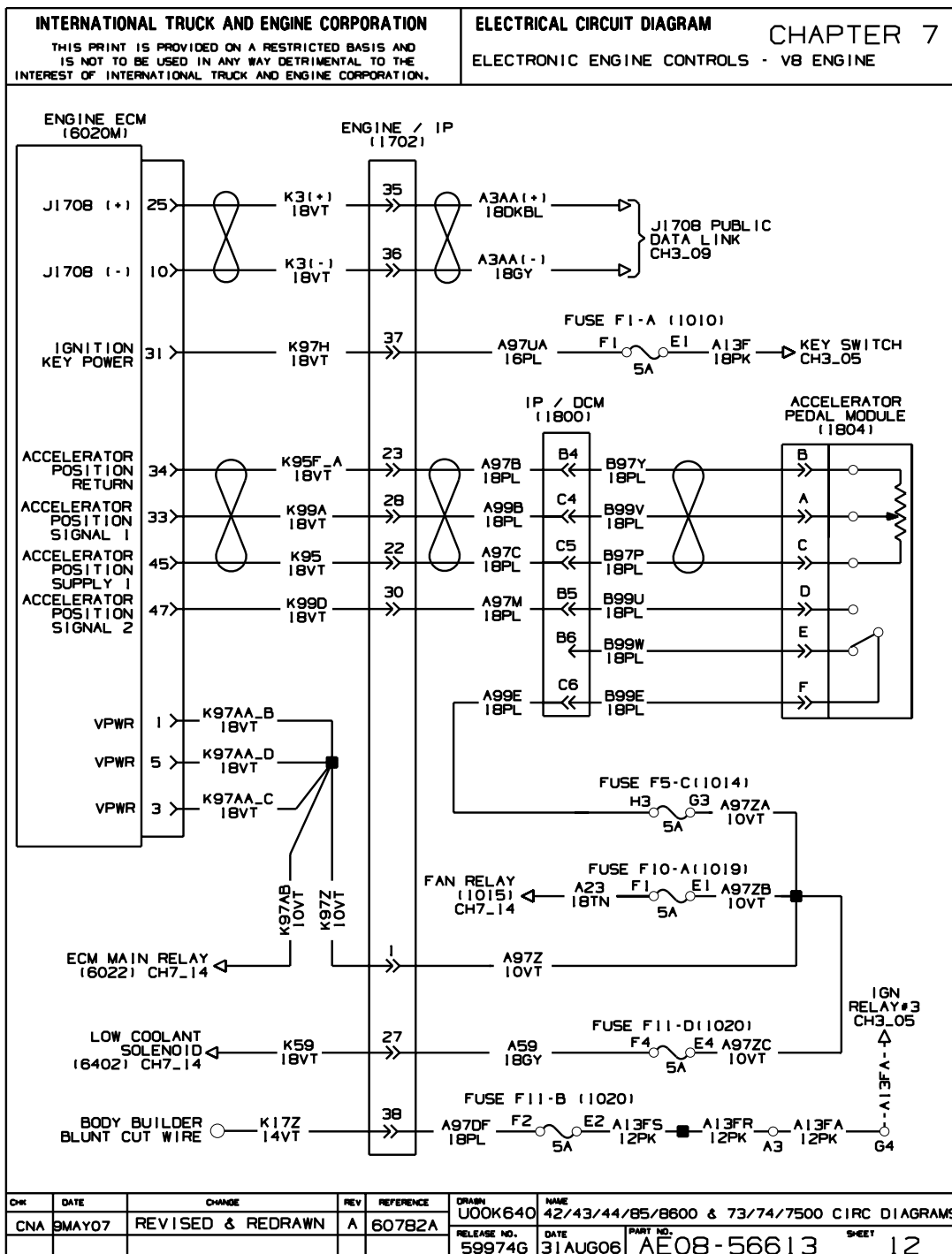


Figure 106 Electronic Engine Controls — V8 Engines

## 7.13. ELECTRONIC ENGINE CONTROLS — V8 ENGINES, P. 13

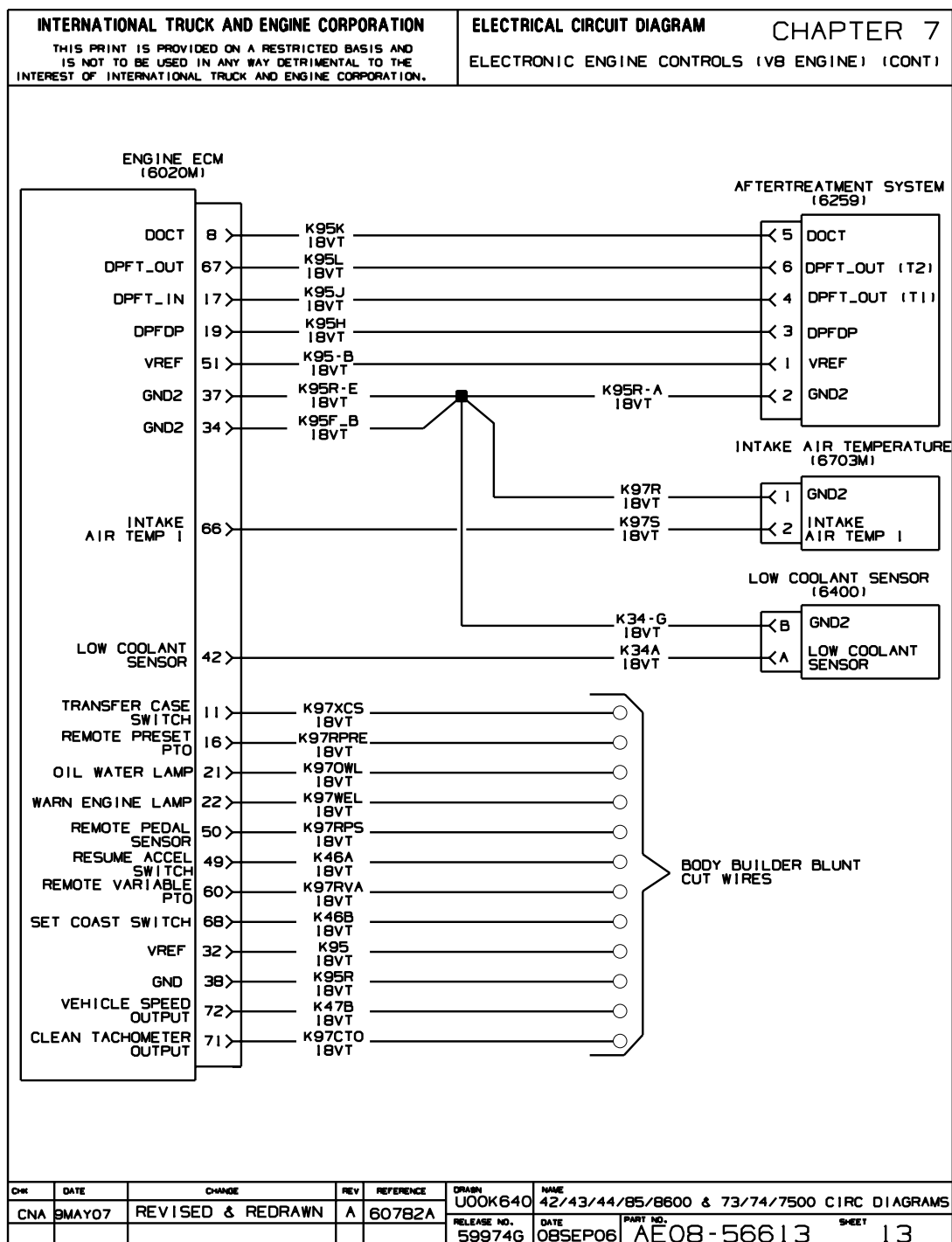


Figure 107 Electronic Engine Controls — V8 Engines

## 7.14. ELECTRONIC ENGINE CONTROLS — V8 ENGINES, P. 14

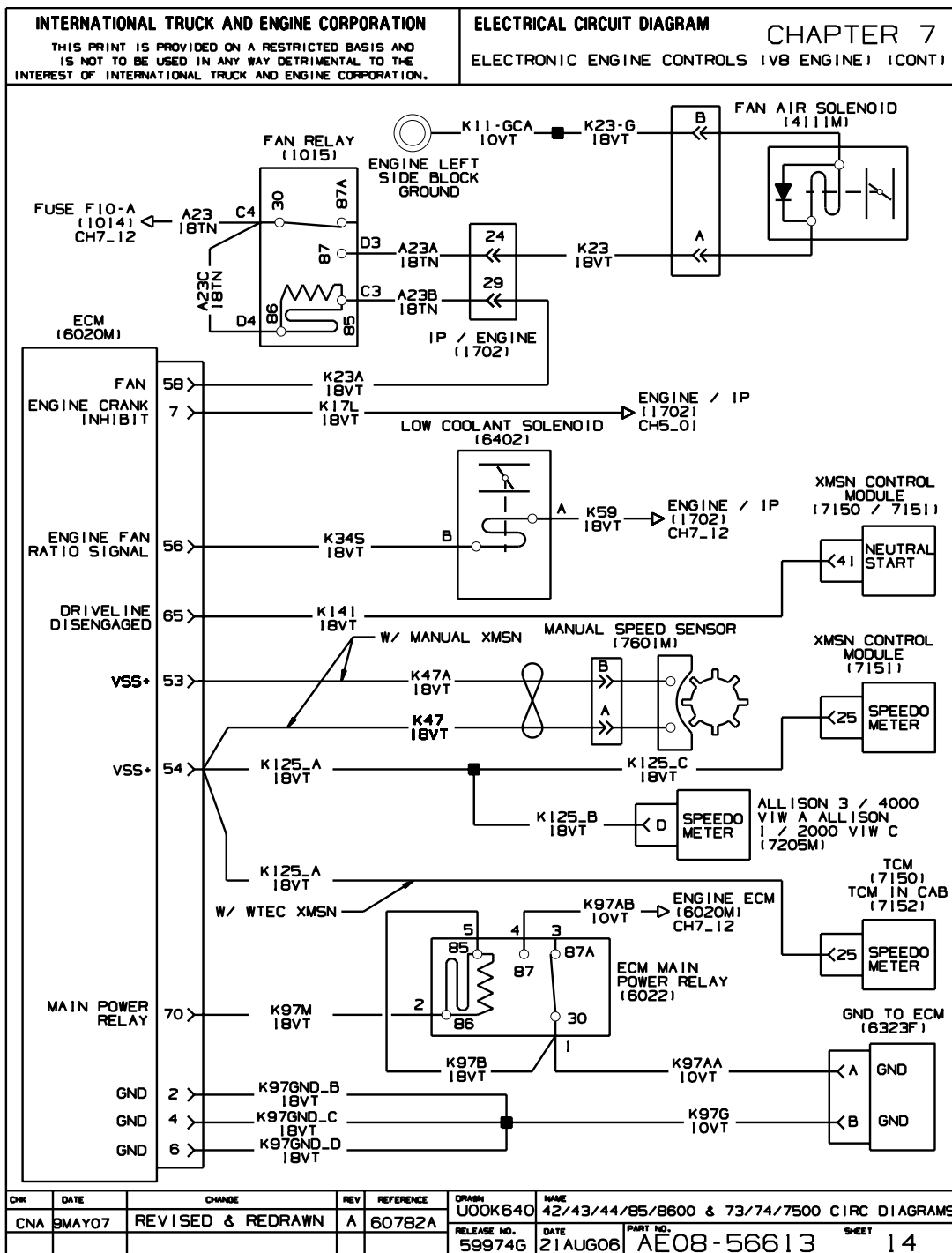


Figure 108 Electronic Engine Controls — V8 Engines

## 7.15. CRUISE CONTROL, P. 15

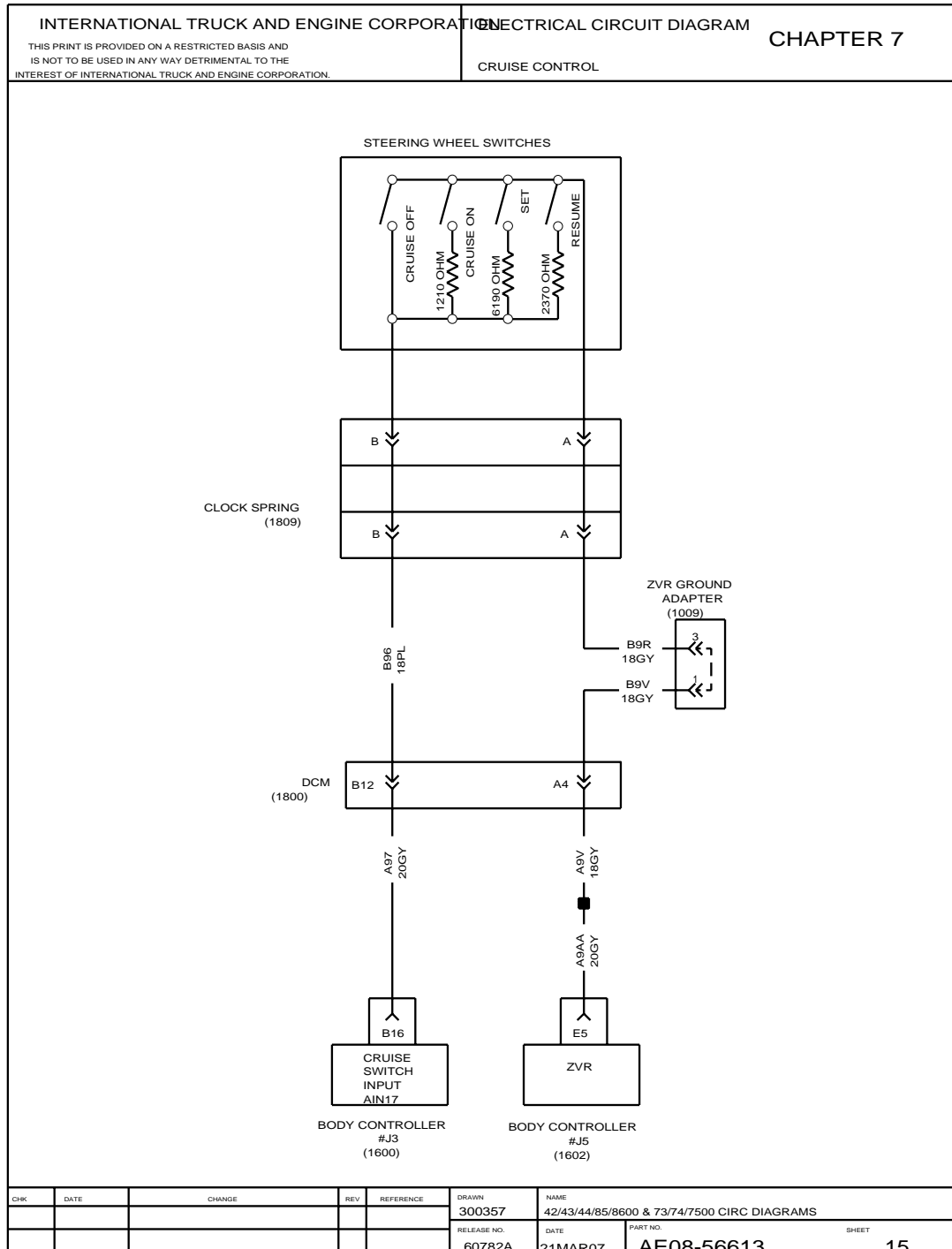
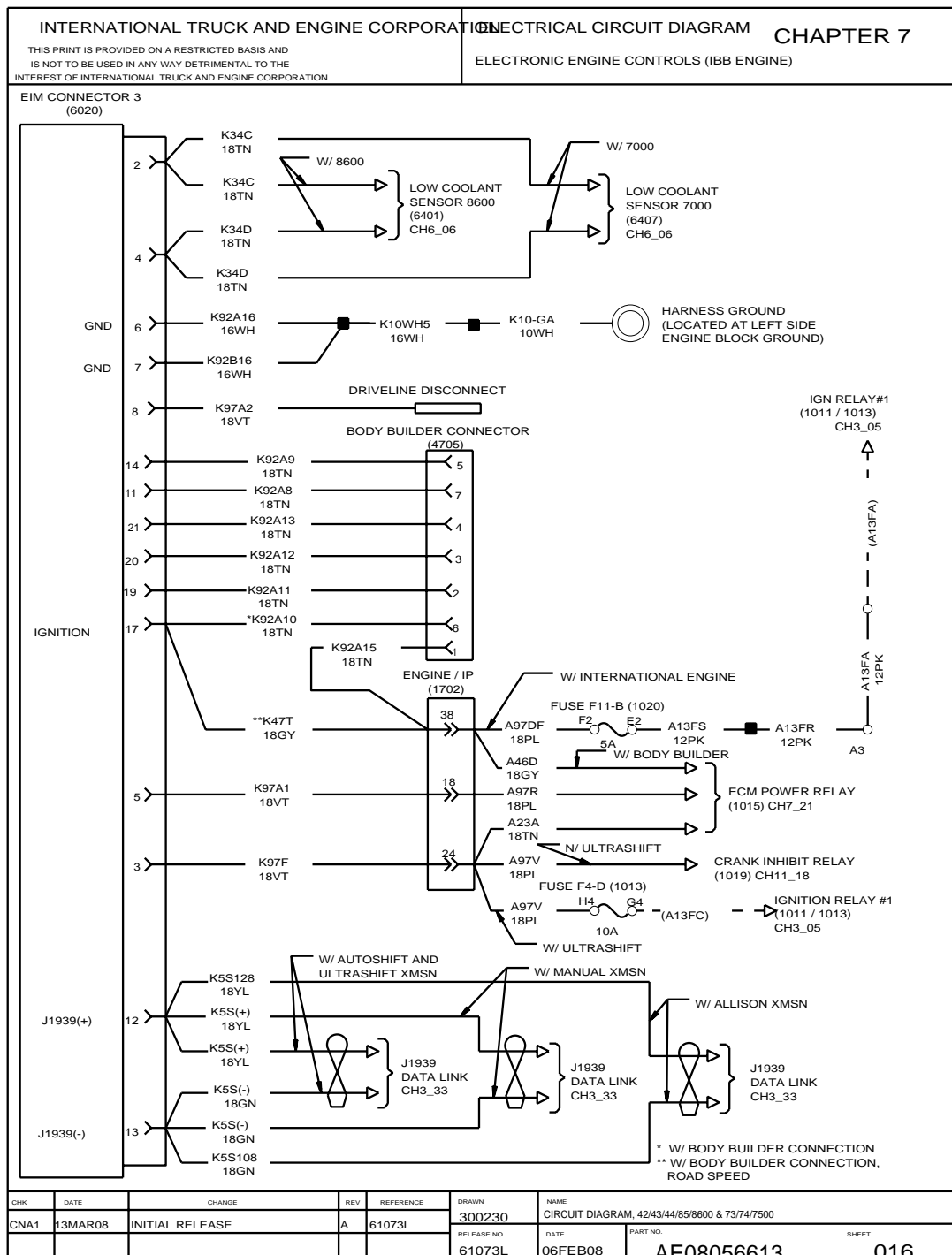


Figure 109 Cruise Control

## 7.16. ELECTRONIC ENGINE CONTROLS (IBB ENGINE), P. 16



**Figure 110 Electronic Engine Controls (IBB Engine)**



## 7.17. ELECTRONIC ENGINE CONTROLS (IBB ENGINE), P. 17

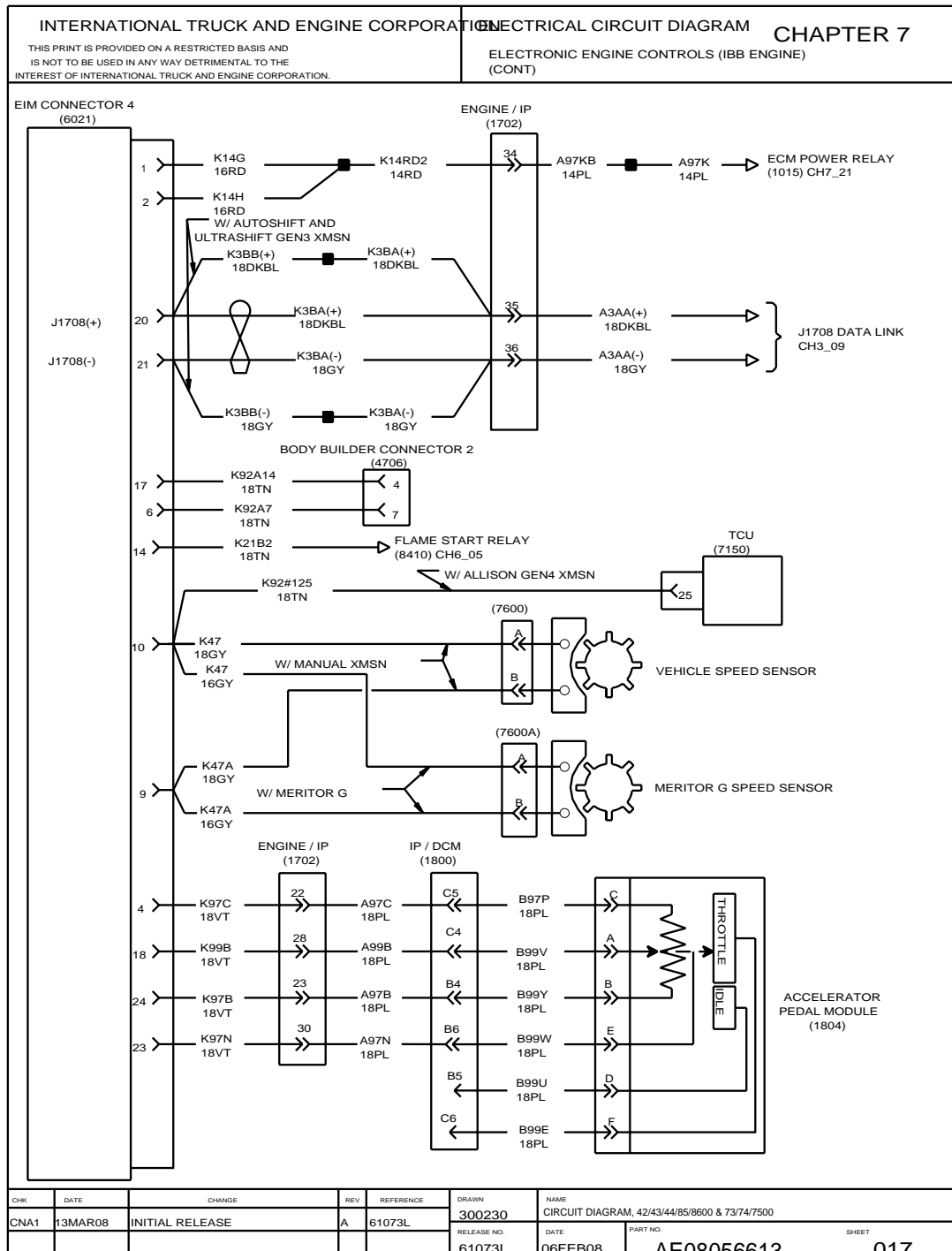


Figure 111 Electronic Engine Controls (IBB Engine)

## 7.18. ELECTRONIC ENGINE CONTROLS (IBB ENGINE), P. 18

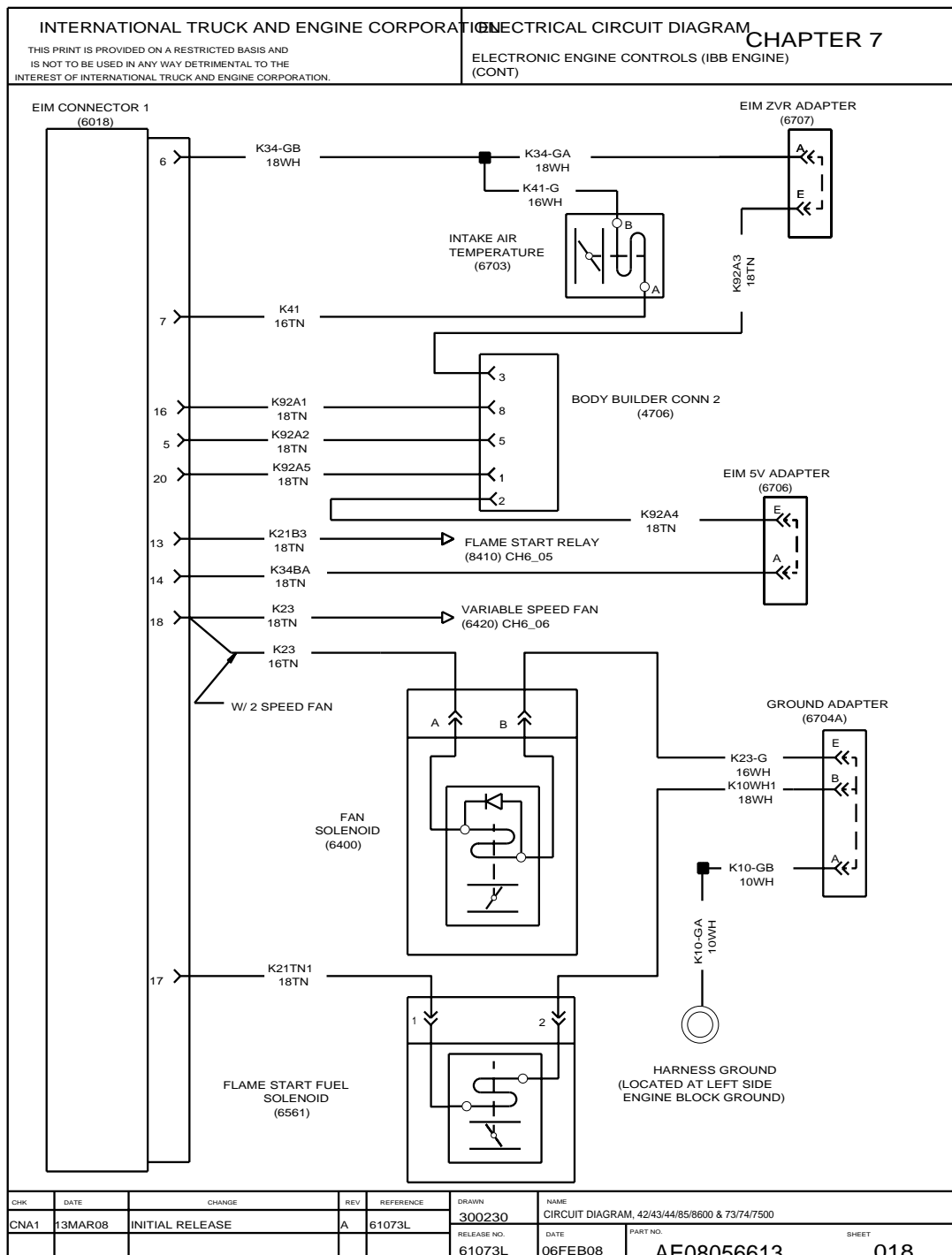


Figure 112 Electronic Engine Controls (IBB Engine)

## 7.19. ELECTRONIC ENGINE CONTROLS (IBB ENGINE), P. 19

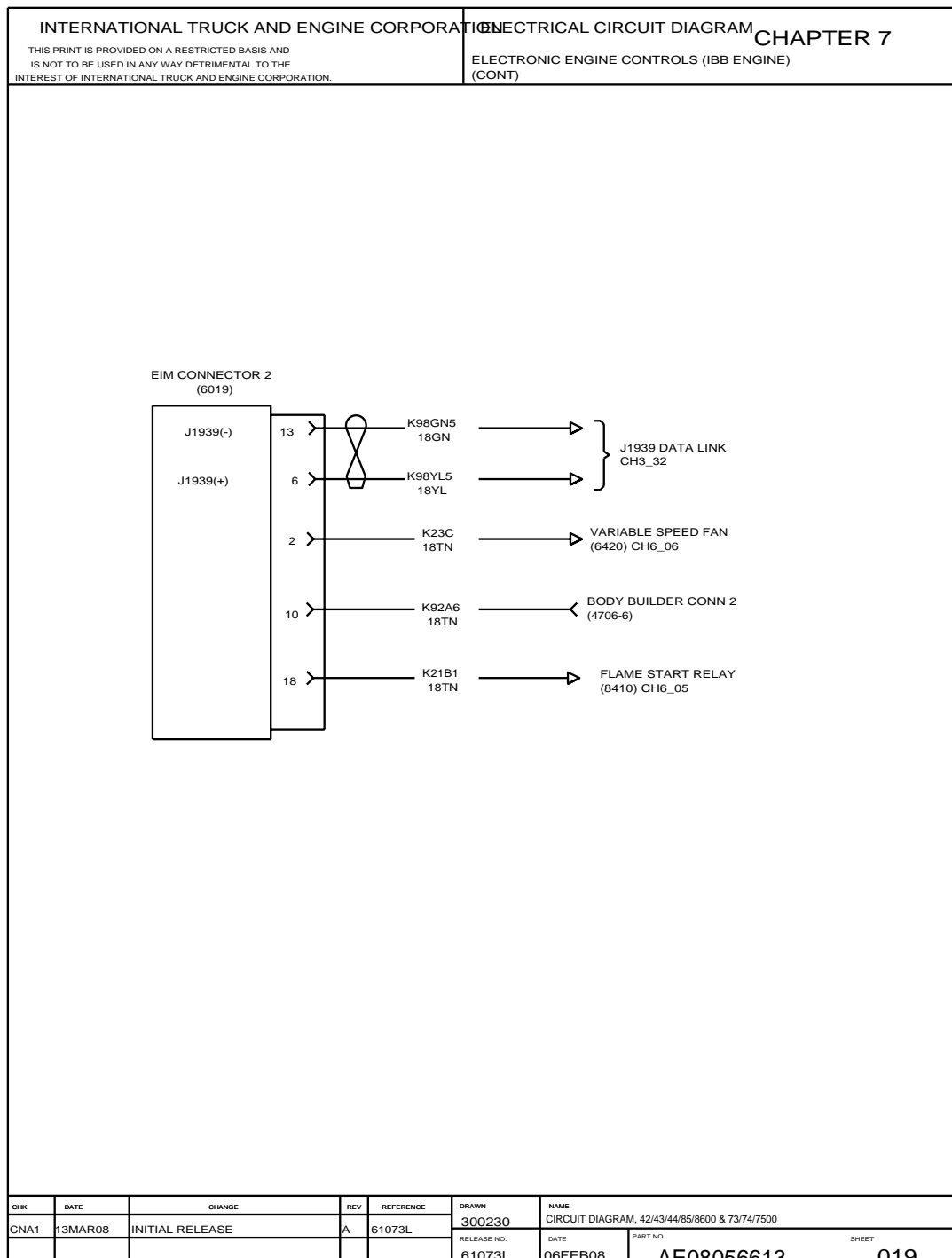


Figure 113 Electronic Engine Controls (IBB Engine)

## 7.20. ELECTRONIC ENGINE CONTROLS (IBB ENGINE), P. 20

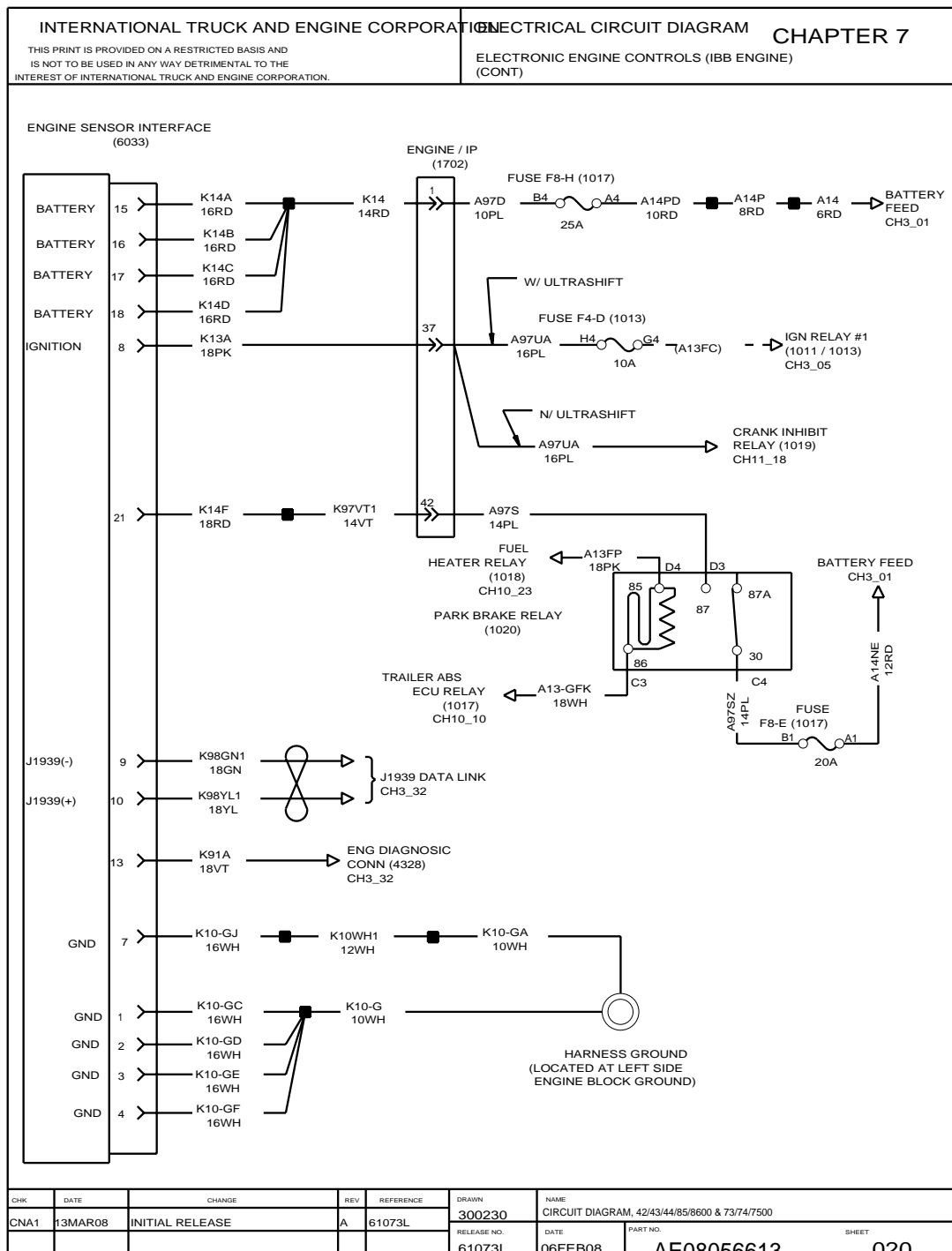


Figure 114 Electronic Engine Controls (IBB Engine)

## 7.21. AFTERTREATMENT (IBB ENGINE), P. 21

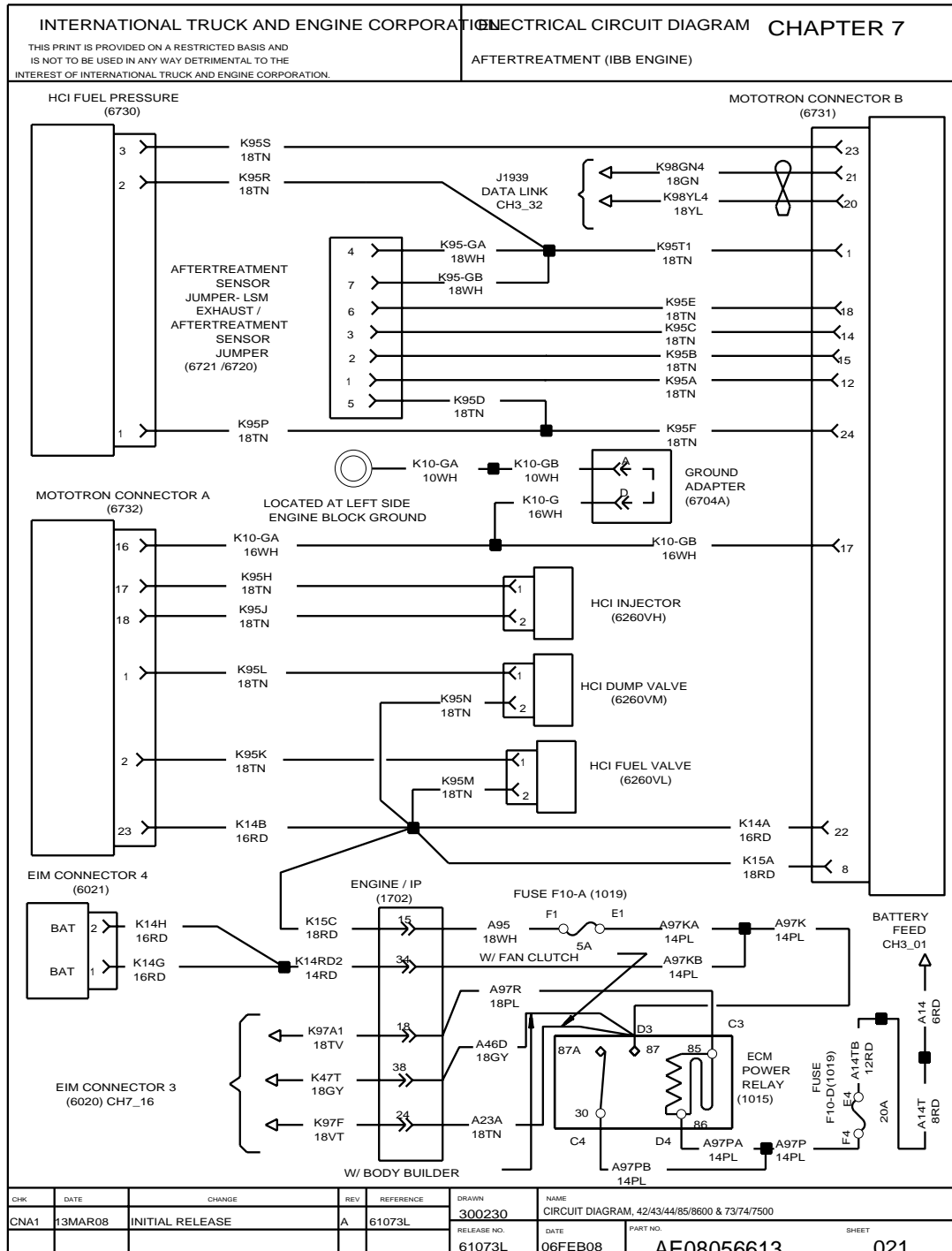


Figure 115 Aftertreatment (IBB Engine)