

SERVICE MANUAL

SERVICE MANUAL SECTION

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT
Models Built March 1, 2007 and After — ELECTRICAL CIRCUIT DIAGRAMS**

**Model: 3200
Start Date: 03/01/2007**

**Model: 4100
Start Date: 03/01/2007**

**Model: 4300
Start Date: 03/01/2007**

**Model: 4400
Start Date: 03/01/2007**

**Model: 7300
Start Date: 03/01/2007**

**Model: 7400
Start Date: 03/01/2007**

**Model: 7500
Start Date: 03/01/2007**

**Model: 7600
Start Date: 03/01/2007**

**Model: 7700
Start Date: 03/01/2007**

**Model: 8500
Start Date: 03/01/2007**

Model: 8600
Start Date: 03/01/2007

Model: RXT
Start Date: 03/01/2007

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2.1. ABBREVIATIONS, P. 1

INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAMS 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	DATE	PART NO.	SHEET
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 DIAGRAMCHAPTER 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

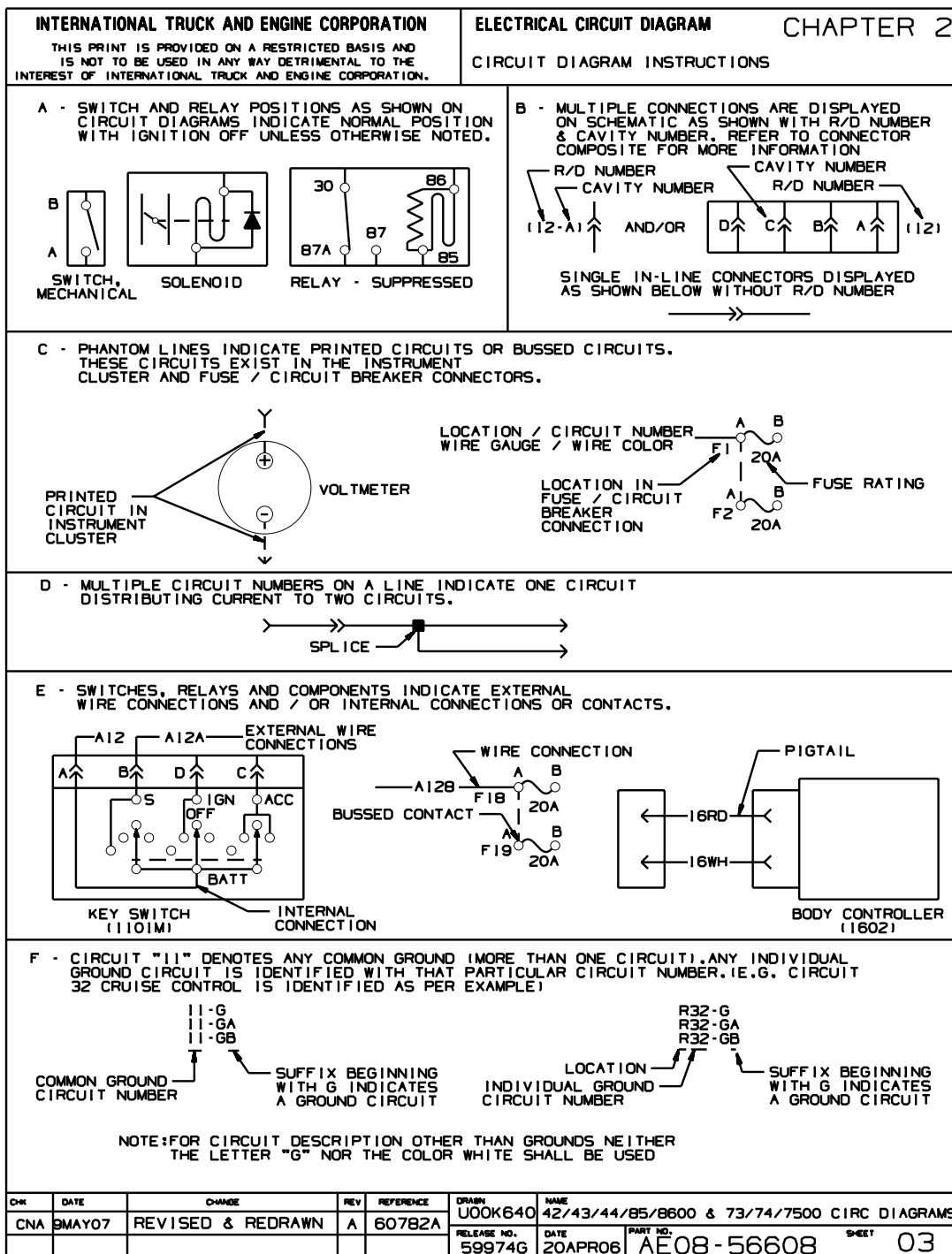


Figure 3 Circuit Diagram Instructions

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
					59974G	20APR06
						PART NO.
						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)
57	OR	TURN SIGNAL LIGHTS - RIGHT
	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)
71	OR	BACK-UP LIGHTS
	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

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ELECTRICAL CIRCUIT DIAGRAM

CIRCUIT NUMBER IDENTIFICATION AND COLOR (CONT)

CHAPTER 2

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

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.	PART NO.
					59974G	AE08056608

DATE	SHEET
12SEP06	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			

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

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
					U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS
					RELEASE NO.	DATE
					59974G	20APR06
					PART NO.	SHEET
					AF08-56608	07

Figure 7 Lamp Bulb Chart

2.8. RELAY FUNCTION AND WIRING GUIDE, P. 8

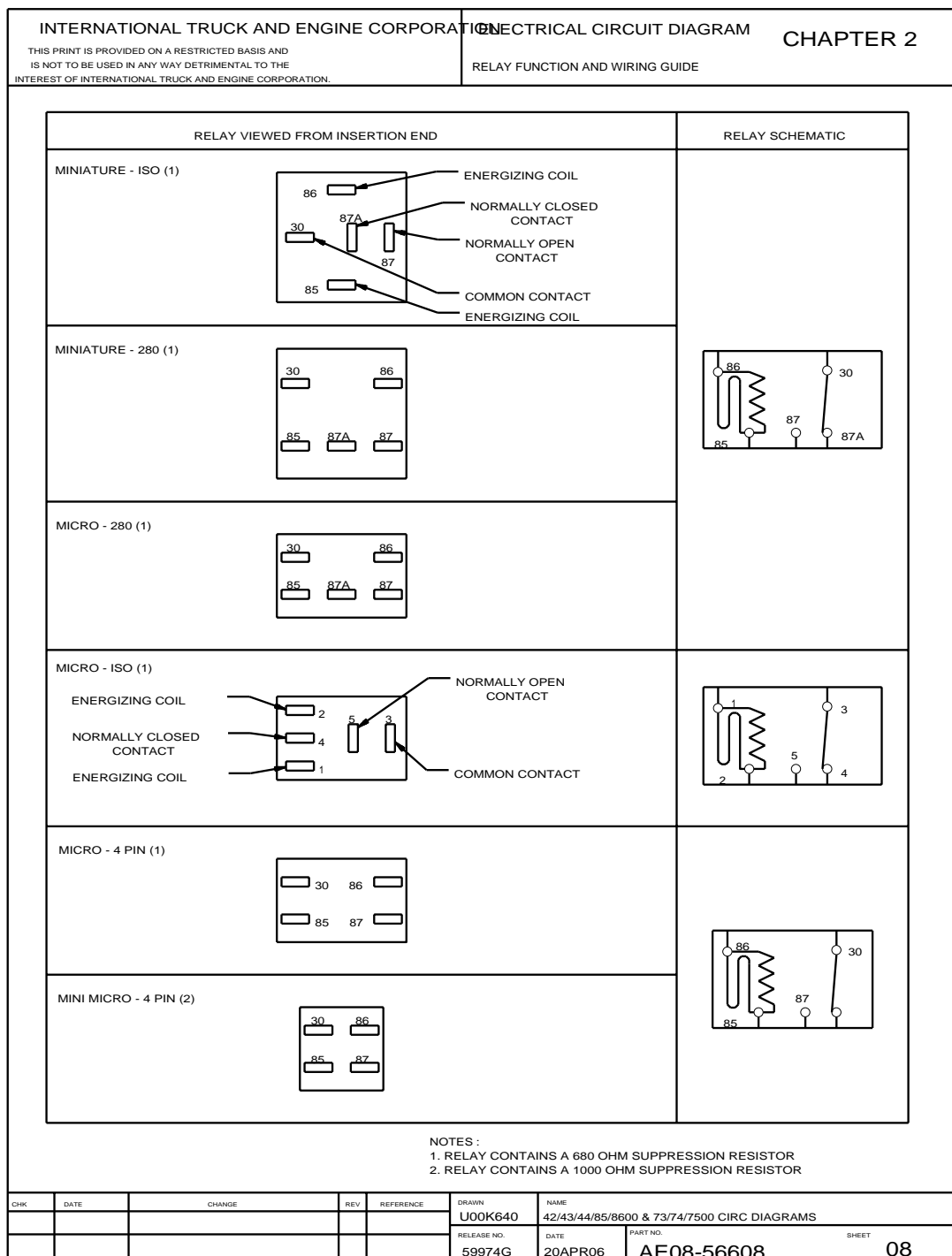


Figure 8 Relay Function and Wiring Guide

2.9. SCHEMATIC SYMBOL CHART, P. 9

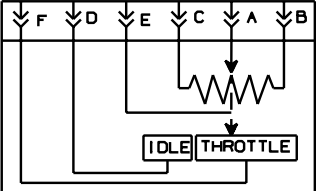
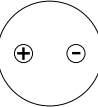
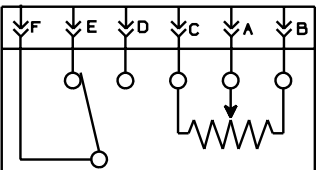
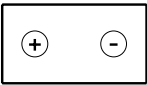
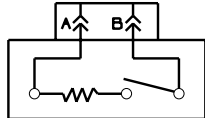
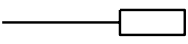
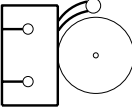
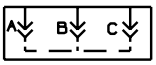
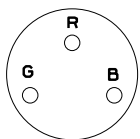
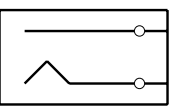


INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2			
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				SCHEMATIC SYMBOL CHART			
SYMBOL		DESCRIPTION		SYMBOL		DESCRIPTION	
		ACCEL PEDAL POSN SENSOR				AMMETER	
		ACCEL PEDAL POSN SENSOR				BATTERY	
		AIR DRYER				BLUNT CUT CIRCUIT	
		ALARM				BUSBAR	
		ALTERNATOR				CIGAR LIGHTER	
				TYPE 1 TYPE 2 OR 3 		CIRCUIT BREAKER	
						DIODE	
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	
		ACCEL PEDAL POSN SNSR			RELEASE NO. 59974G	DATE 12SEP06	PART NO. AE08-56608 SHEET 09

Figure 9 Schematic Symbol Chart

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						

CHK	DATE	CHANGE	REV	REFERENCE	ORIGIN	NAME	RELEASE NO.	DATE	PART NO.	SHEET
CNA	5MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS	59974G	12SEP06	AE08-56608	10

Figure 10 Schematic Symbol Chart (Cont.)

2.11. SCHEMATIC SYMBOL CHART, P. 11



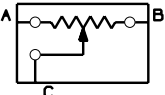
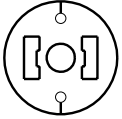
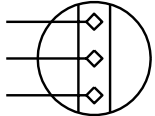
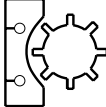

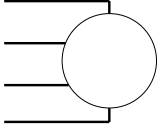
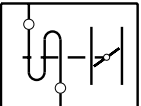

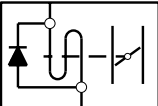
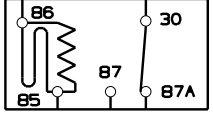
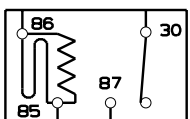
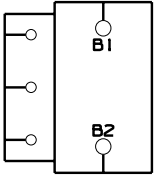
INTERNATIONAL TRUCK AND ENGINE CORPORATION THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2 SCHEMATIC SYMBOL CHART (CONT.)	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	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				

Figure 11 Schematic Symbol Chart (Cont.)

2.12. SCHEMATIC SYMBOL CHART, P.12

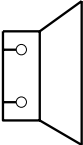


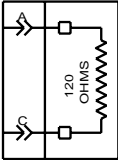


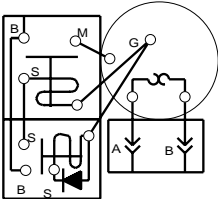
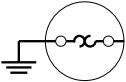

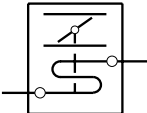

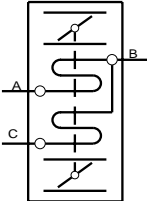
INTERNATIONAL TRUCK AND ENGINE CORPORATION					ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2				
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.					SCHEMATIC SYMBOL CHART (CONT)				
SYMBOL		DESCRIPTION			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. 12 VOLT POWER DISTRIBUTION, GROUNDS, DATA BUS AND ELECTRICAL SYSTEM CONTROLLER (CHAPTER 3)

3.1. BATTERY FEED, P. 1

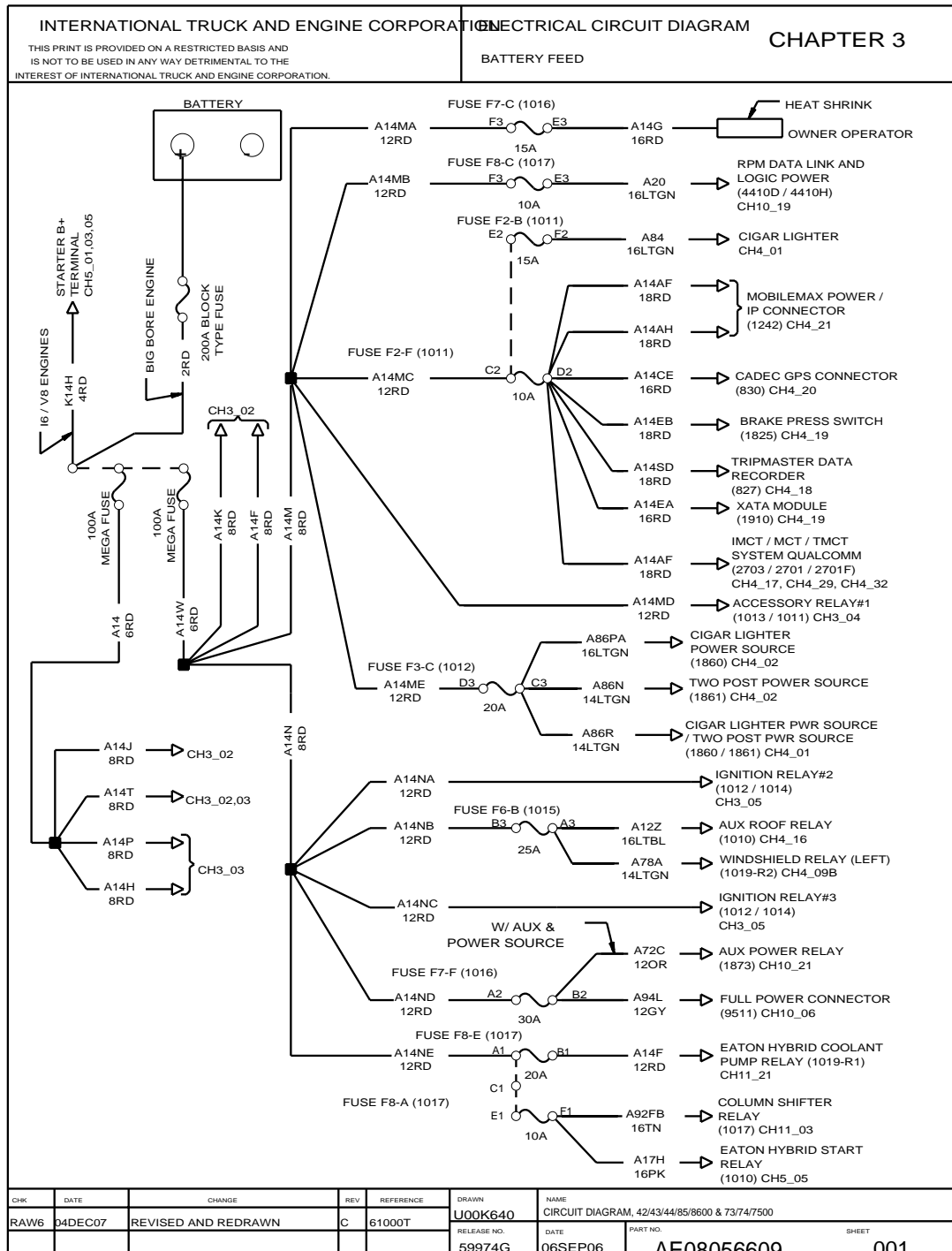


Figure 13 Battery Feed

3.2. BATTERY FEED, P. 2

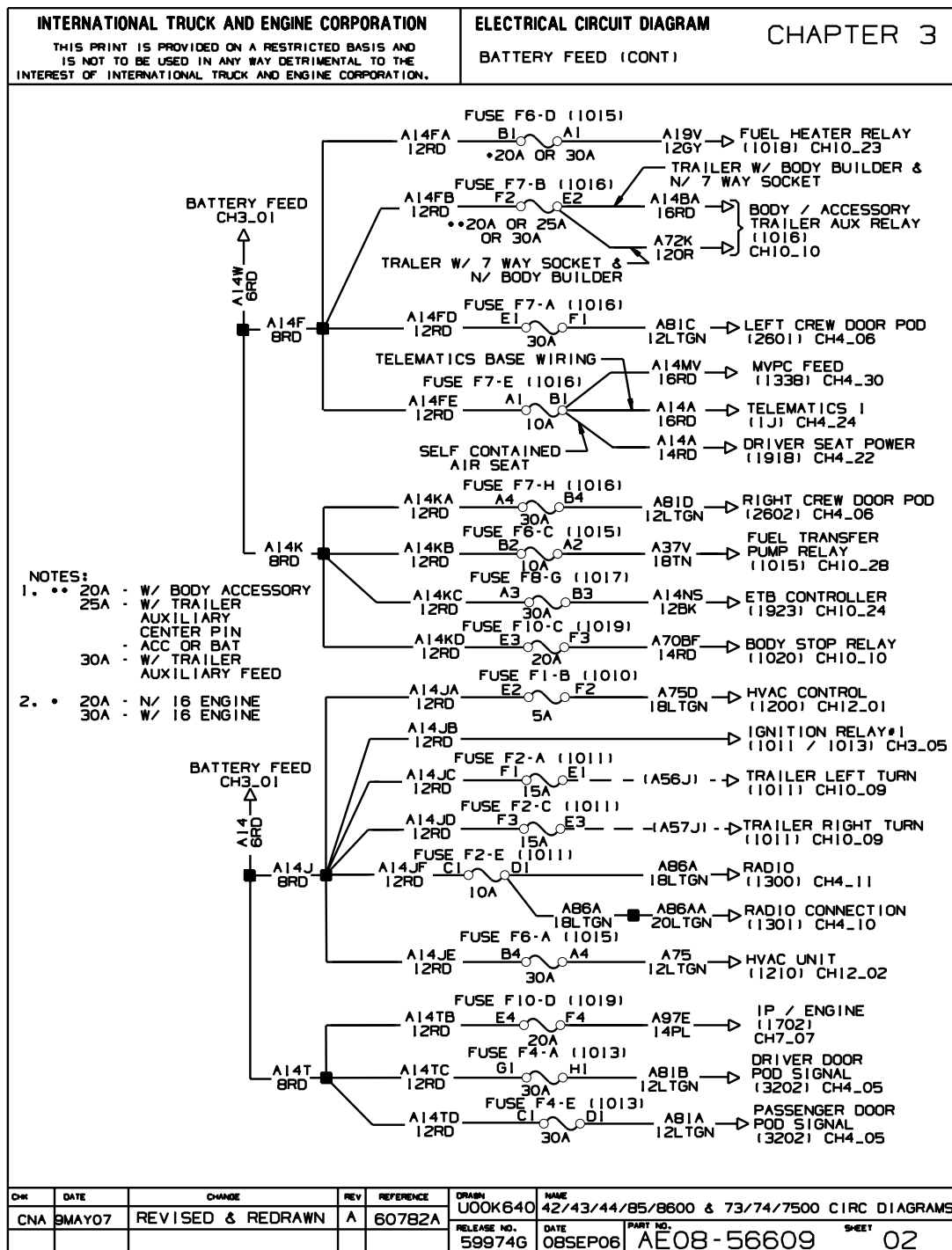


Figure 14 Battery Feeds (Cont.)

3.3. BATTERY FEED, P. 3

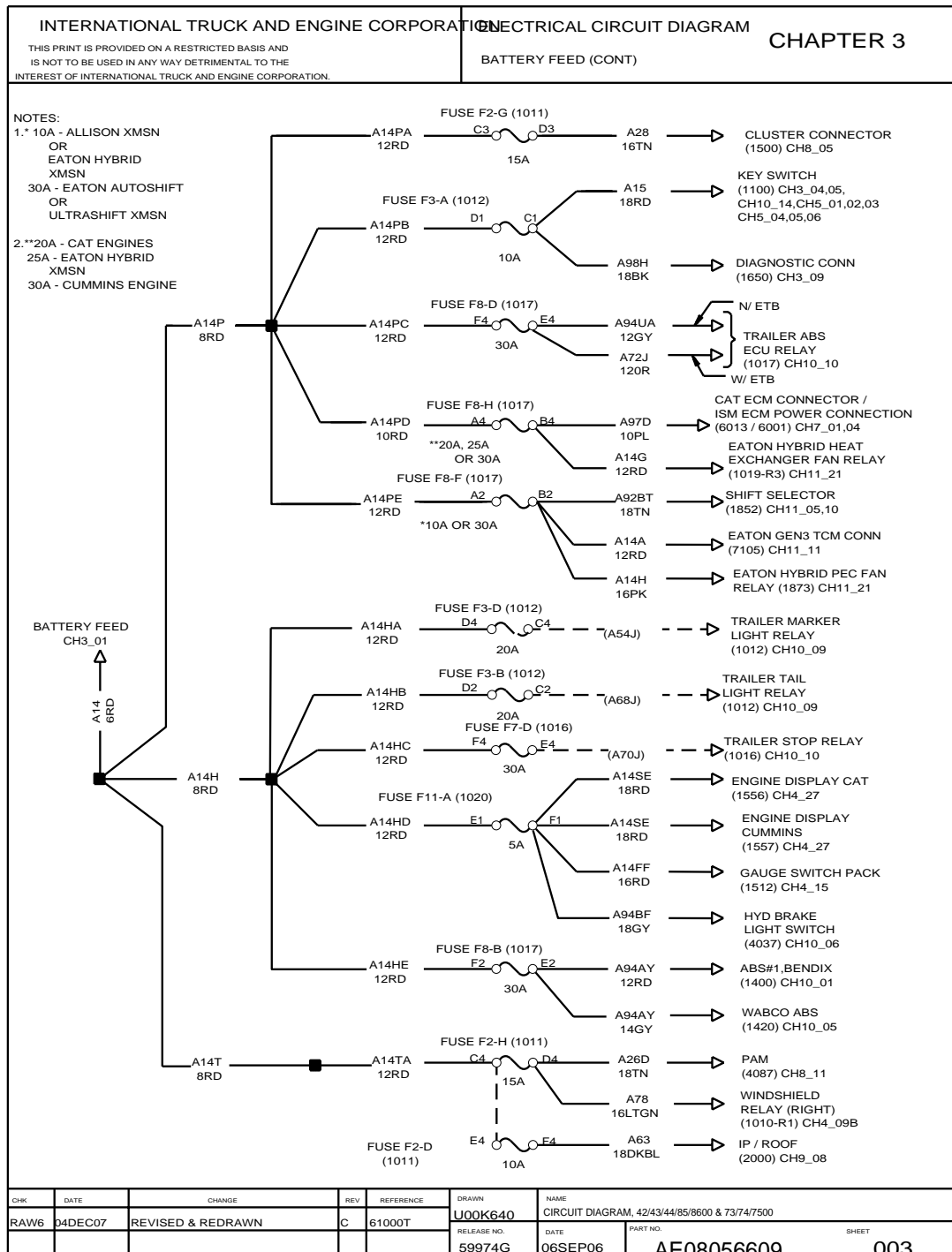


Figure 15 Battery Feed (Cont.)

3.4. ACCESSORY FEED, P. 4

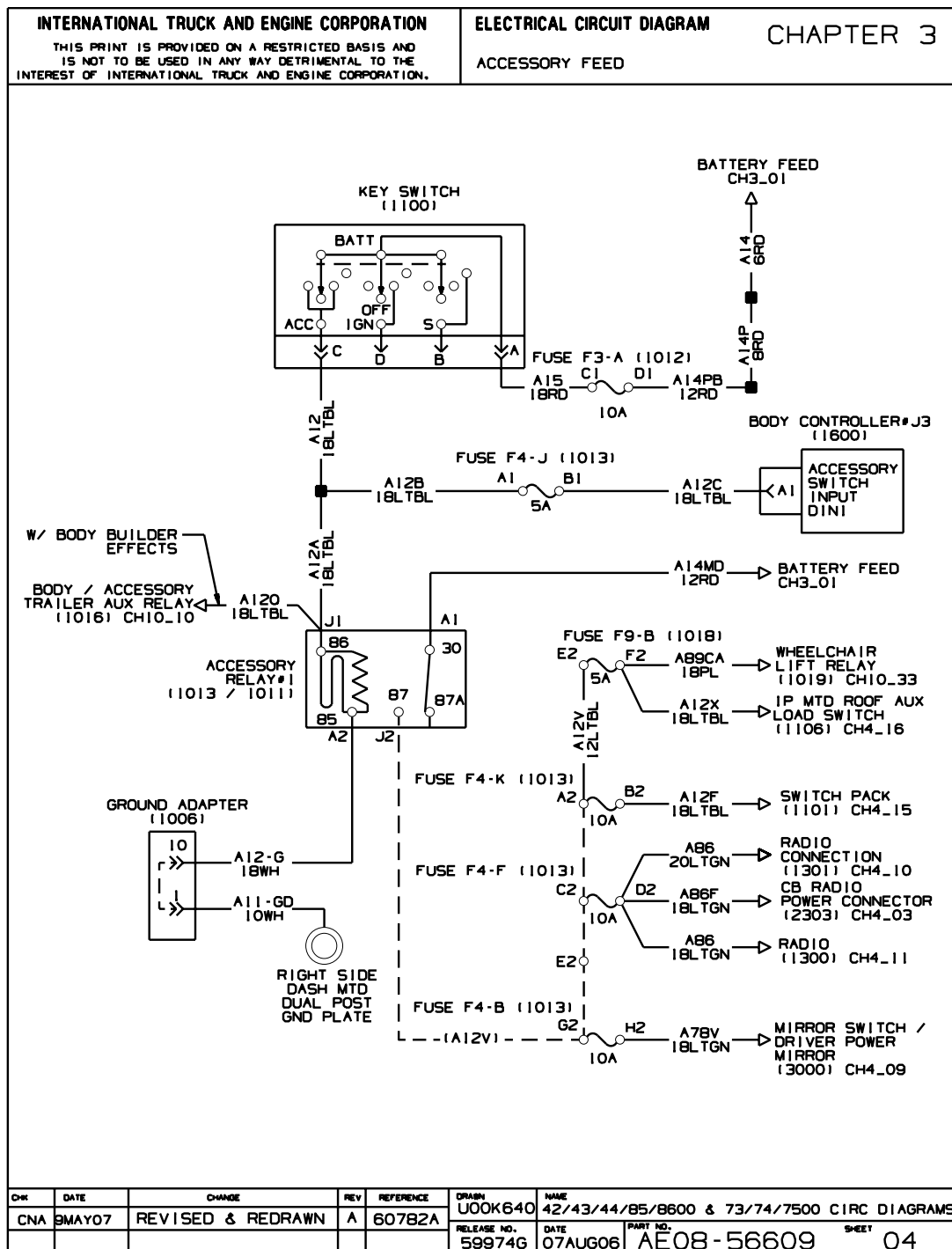


Figure 16 Accessory Feed

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CHAPTER 3

IGNITION FEED - STANDARD, THEFT DETERRENT, REMOTE START / STOP

KEY SWITCH (1100)

BATTERY FEED CH3_01

ENGINE ECM (6020M) CH7_12

CRANK INHIBIT RLY (1019) CH11_18

REMOTE-STOP RLY (1018) CH10_14

W/ REMOTE START / STOP

GROUND ADAPTER (1006)

RIGHT SIDE DASH MTD DUAL POST GND PLATE

TRAILER ABS ECU RELAY (1017) CH10_10

W/ THEFT DETERRENT

BODY CONTROLLER# J4 (1601)

THEFT DETERRENT R05 (LSD)

AUX POWER RELAY (1873)

REMOTE STOP RELAY (1018) CH10_14

IGNITION RELAY#1 (1011 / 1013)

IGNITION RELAY#2 (1012 / 1014)

IGNITION RELAY#3 (1012 / 1014)

FUSE F3-A (1012)

FUSE F1-A (1010)

FUSE F4-D (1013) CH3_06

FUSE F5-B (1014) CH3_07 PRESSURE SWITCH (4070) CH11_03

FUSE F5-D (1014) CH3_08

BATTERY FEED CH3_01

BATTERY FEED CH3_01

BATTERY FEED CH3_01

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	DATE	PART NO.	SHEET
CNA	9MAY07	REVISED & REDRAWN	A	60782A	U00K640	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS	06SEP06	AE08-56609	05

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

INTERNATIONAL TRUCK AND ENGINE CORPORATION

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ELECTRICAL CIRCUIT DIAGRAM

CHAPTER 3

IGNITION FEED - RELAY 1

Legend:

Component	Part Number
CRANK INHIBIT RELAY	(1019) CH11_18
CAT ECM / ISM ECM / I6 ECM	(6013 / 6000 / 6020M) CH7_01,04,08
WASHER PUMP (W/ MD)	(4021) CH4_14
WASHER PUMP / RIGHT UNDER CAB WASHER PUMP	(9745 / 9747) CH4_14
BODY CONTROLLER#J3	(1600) CH12_01
HVAC UNIT	(1210) CH12_02
RIGHT BANK OPTIONAL WARNING LIGHTS	(1510) CH8_14
CLUSTER CONNECTOR	(1500) CH8_05
HVAC CONTROL / AUTOTHERM SYSTEM	(1200) CH12_01,06
RIGHT BANK OPTIONAL WARNING LIGHTS	(1510) CH4_17,29,32 CH8_14
RIGHT BANK OPTIONAL WARNING LIGHTS	(1510) CH8_14
LEFT BANK OPTIONAL WARNING LIGHTS	(1511) CH8_15
OVERHEAD MTD 2 WAY RADIO / FLOOR MTD 2 - WAY RADIO CONNECTIONS	(6900) CH4_12
T HANDLE SHIFTER	(422F) CH11_03
TCM / TCU CONN	(7151 / 7150 / 7152 / 7150F / 7150F2) CH11_01,05,10,13
COLUMN SHIFTER RELAY	(1017) CH11_03
COLUMN MTD SHIFTER / SHIFT SELECTOR	(1828 / 1852) CH11_03, 05, 10
TCU CONN / MERITOR G POWER	(7150 / 7111) CH11_13,18
FREEDOMLINE XMSN	(7104) CH11_25
ALLISON TCU CONN IN CAB	(7151) CH11_24
EATON GEN3 TCM CONN	(7105) CH11_11,16,19

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
RAW6	04DEC07	ADDED CIRC A13A	C	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500
		AND A92-163			59974G	DATE 07AUG06 PART NO. AE08056600

RELEASE NO.
DATE
PART NO.
SHEET

S08322

3.7. IGNITION FEED RELAY 2, P. 7

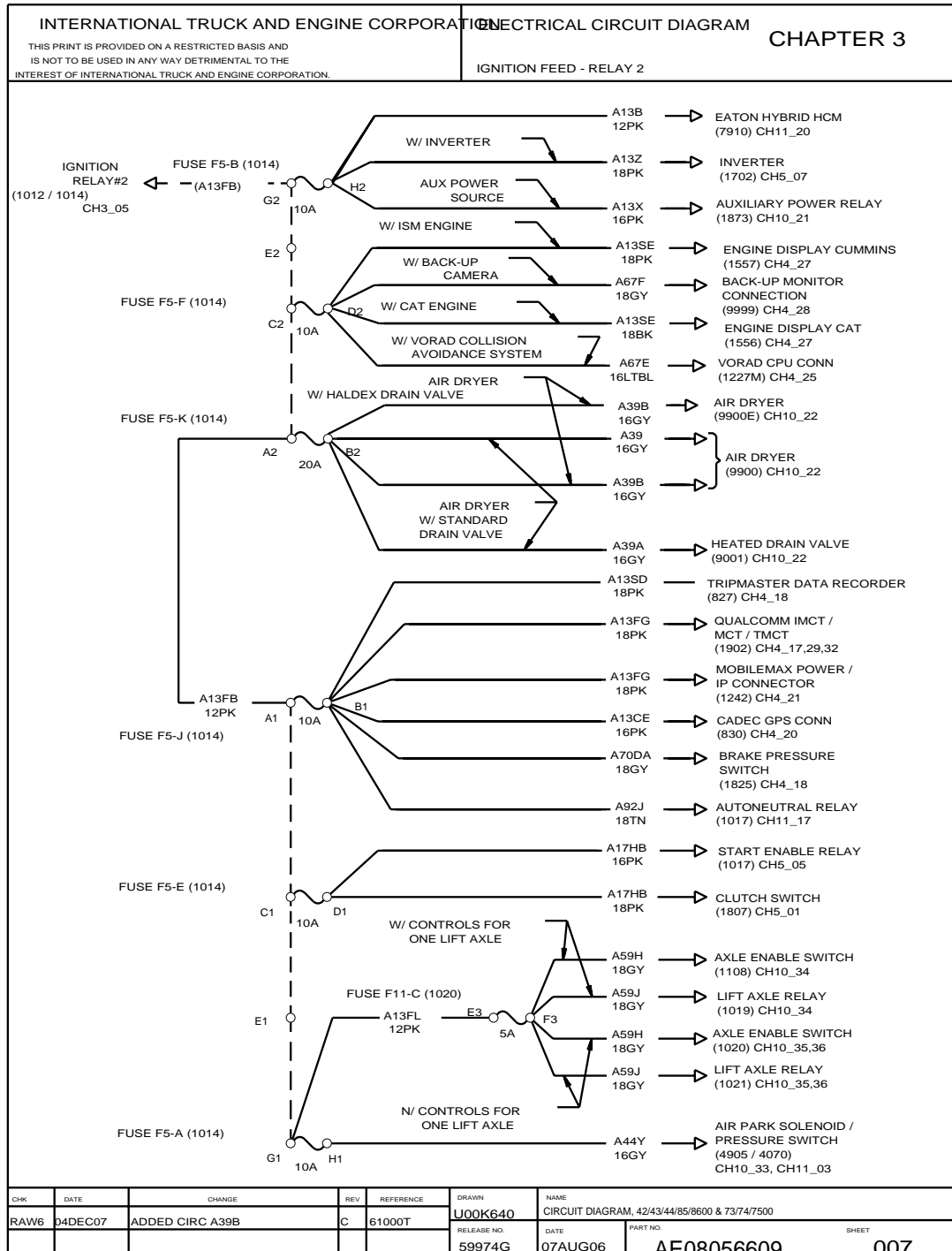


Figure 19 Ignition Feed Relay 2

3.8. IGNITION FEED RELAY 3, P. 8

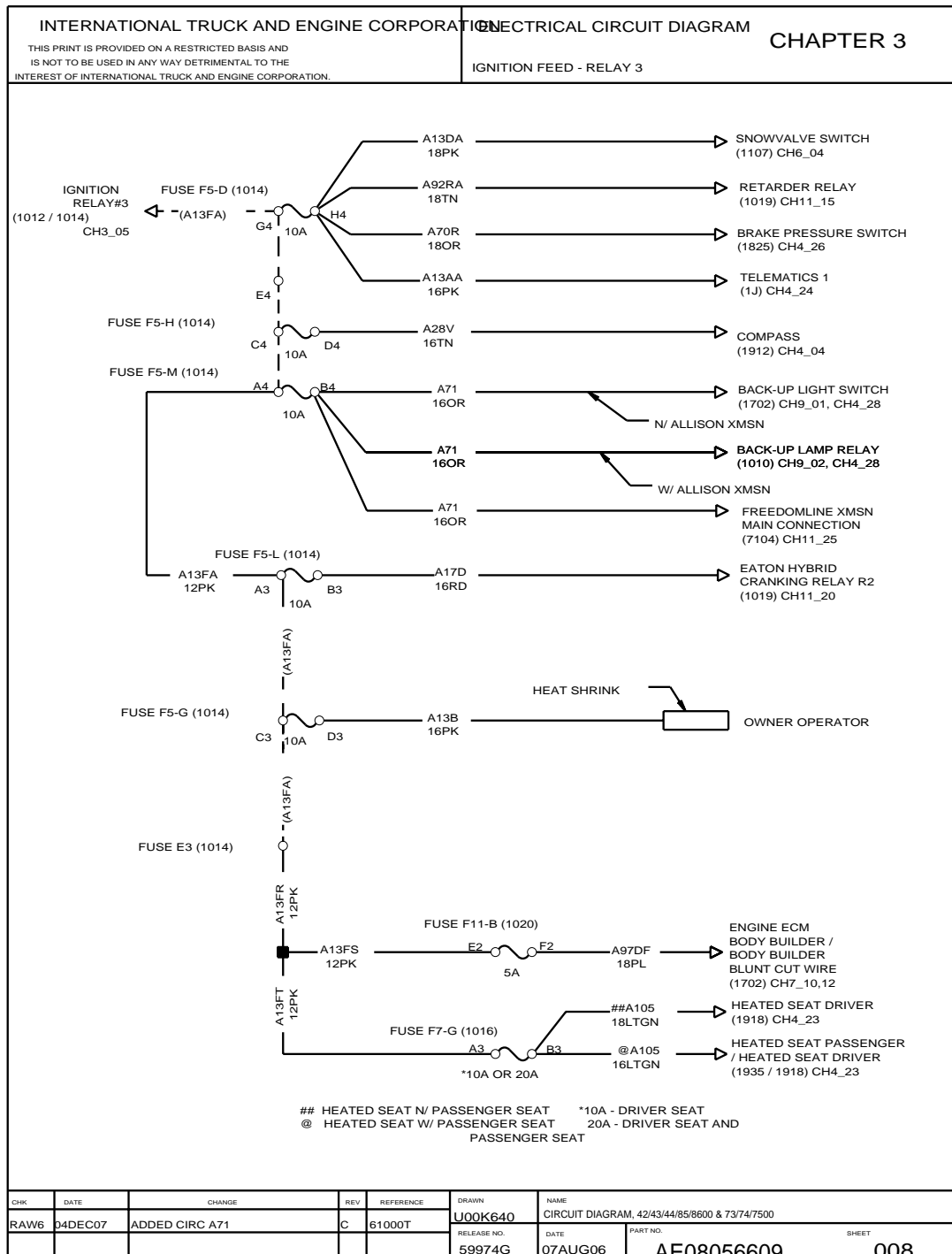


Figure 20 Ignition Feed Relay 3

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

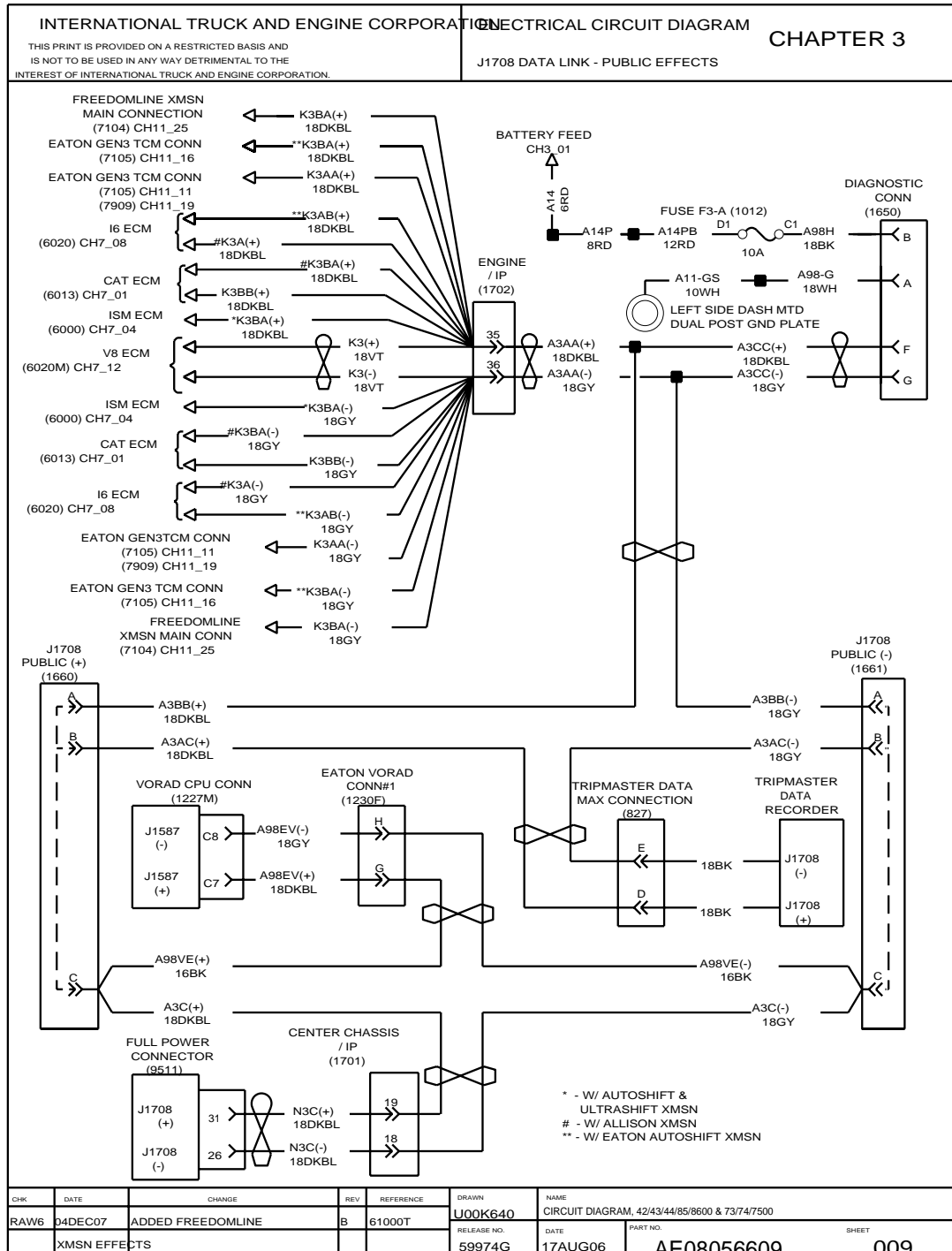


Figure 21 J1708 Data Link — Public Effects

[illegible]

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

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

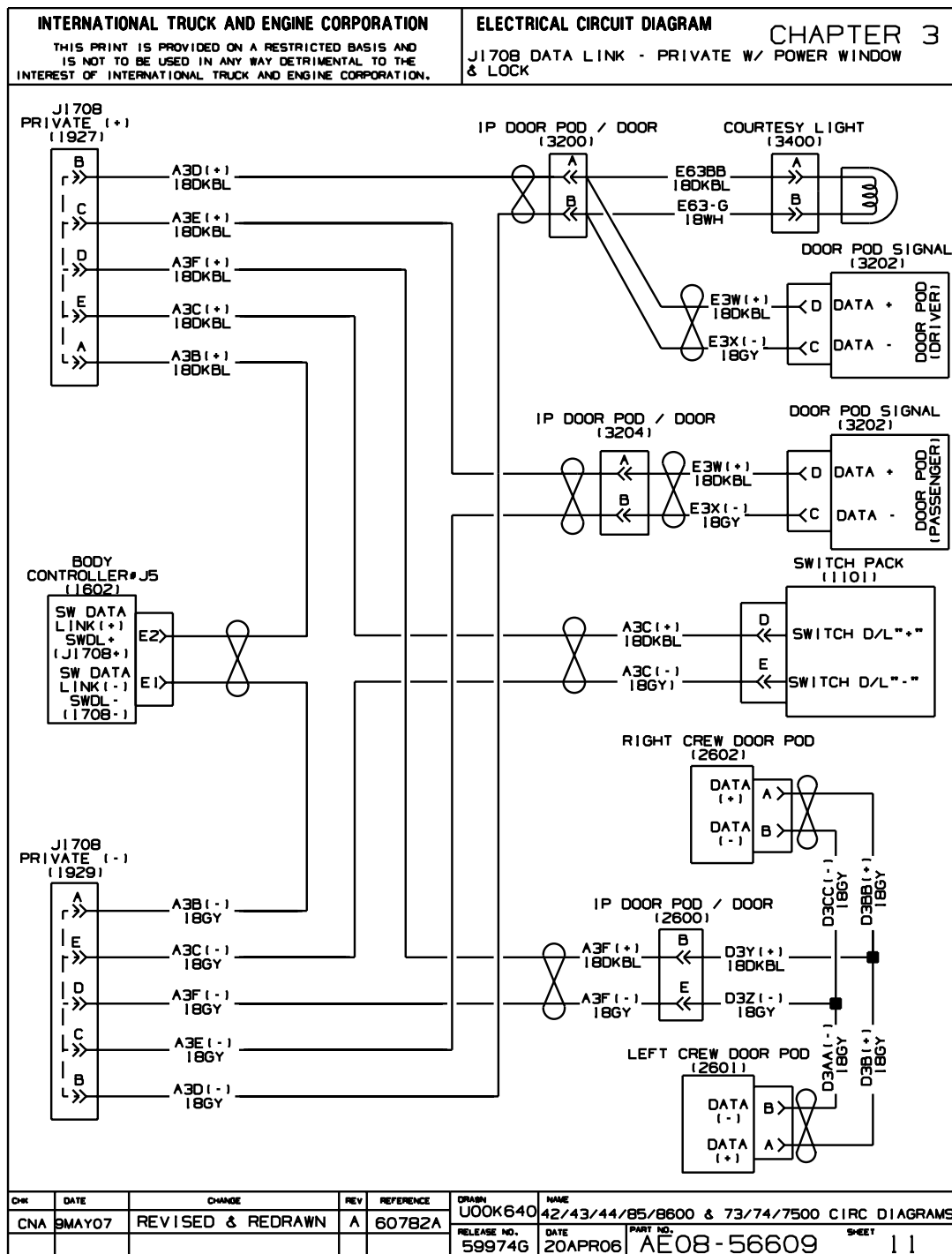


Figure 23 J1708 Data Link — Private with Power Window and Lock

INTERNATIONAL TRUCK AND ENGINE CORPORATION ELECTRICAL CIRCUIT DIAGRAM CHAPTER 3

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J1939 DATA LINK

The diagram illustrates the J1939 Data Link circuit. Key components and connections include:

- Terminating Resistors:** J1939 Terminating Resistor (9530) with a 120 OHMS resistor, and J1939 Terminating Resistor (1657) with a 120 OHMS resistor.
- Connectors:** Full Power Connector (9511), PAM (4087 / 4087B), Body Controller #J5 (1602), Diagnostic Connector (1650), and Cluster Connector (1501).
- Wiring:** Various wires are shown, including N5A(+), N5A(-), A5LI(+), A5LI(-), A5R(+), A5R(-), A5RJ(+), A5RJ(-), A5RA(+), A5RA(-), A5B(+), A5B(-), A5D(+), and A5D(-).
- Other Components:** BENDIX OR WABCO ABS, FULL POWER W/ PAM MODULE, and a 120 OHMS resistor.

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	PART NO.	SHEET
RAW6	04DEC07	ADDED CONN 4087B	B	61000T	U00K640	CIRCUIT DIAGRAM, 42/43/44/85/8600 & 73/74/7500	AE080566009	012
					RELEASE NO. 59974G	DATE 07AUG06		

S08322

3.13. J1939 DATA LINK WITH OPTIONS, P. 13

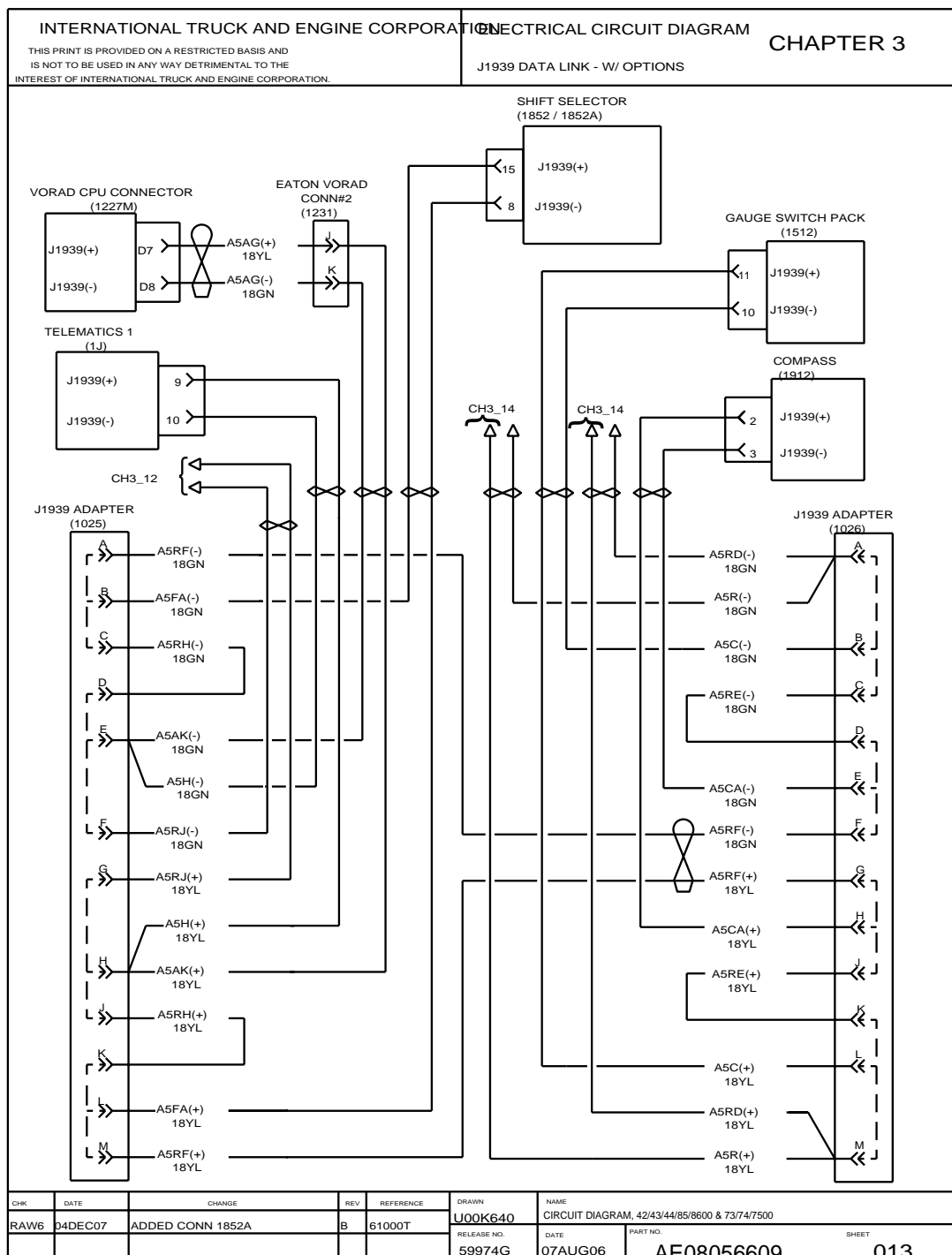


Figure 25 J1939 Data Link with Options

3.14. J1939 DATA LINK WITH OPTIONS, P. 14

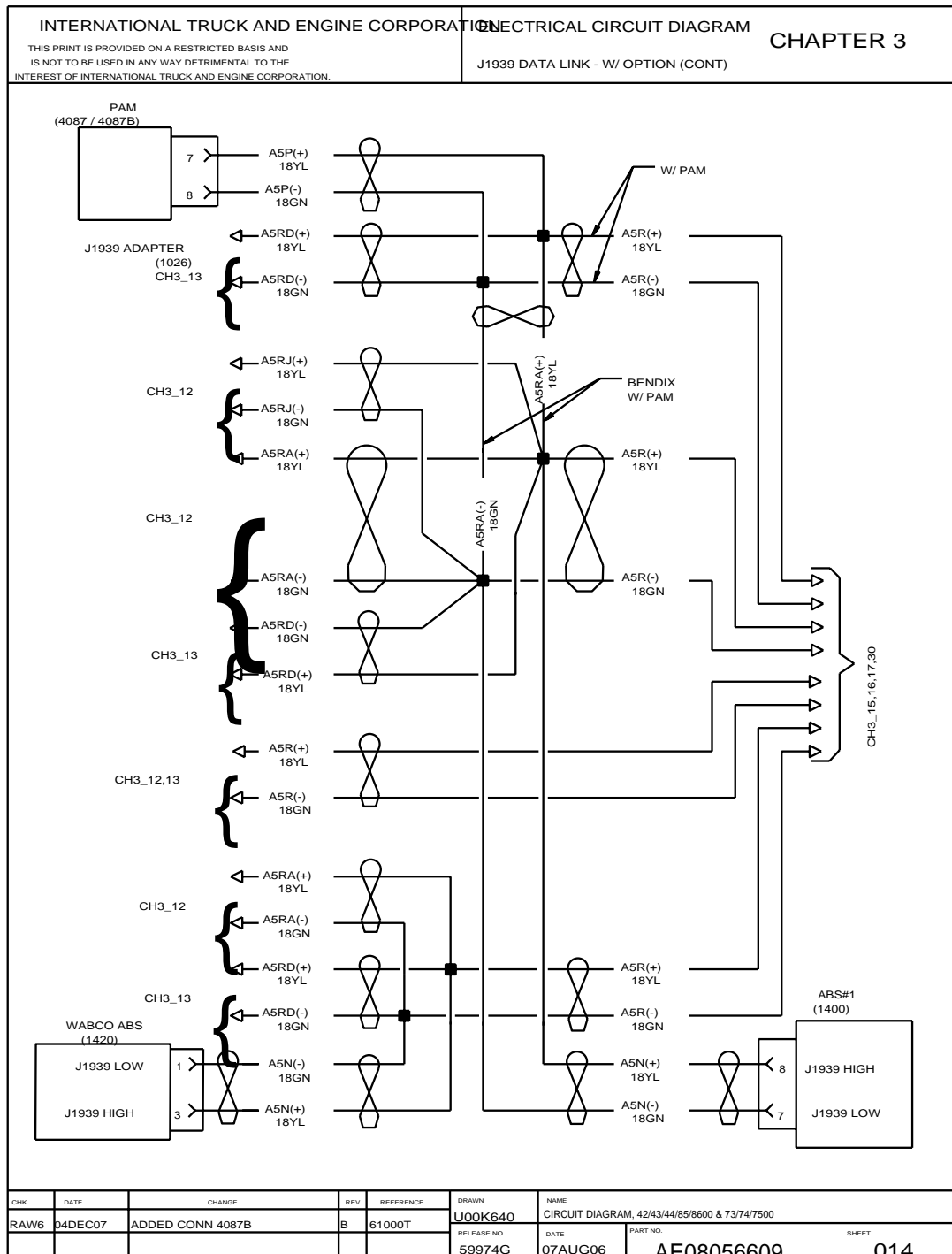


Figure 26 J1939 Data Link with Options

[illegible]

Figure 27 J1939 Data Link — ISM 2007 Engine

3.16. J1939 DATA LINK — I6 2007 ENGINE, P. 16

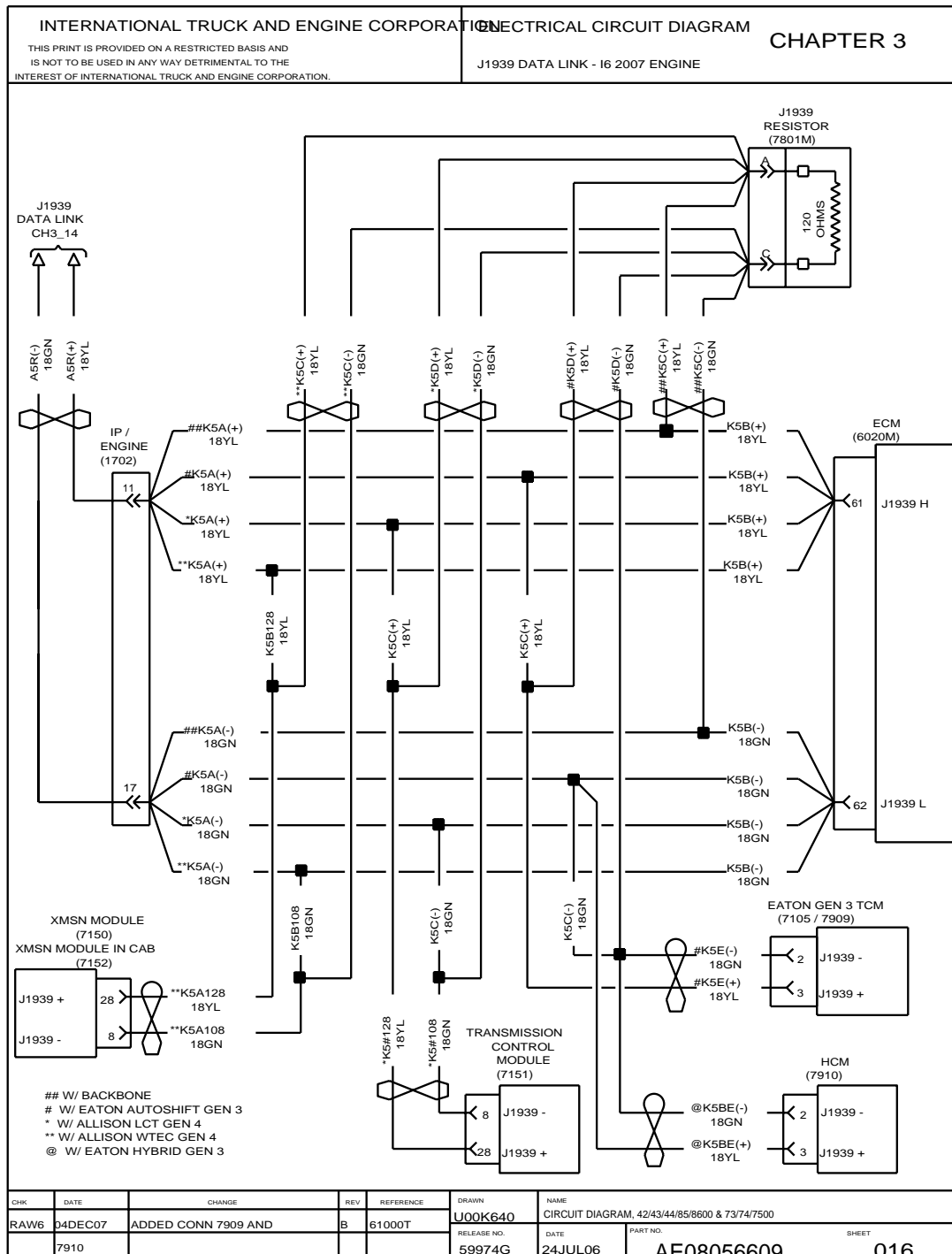


Figure 28 J1939 Data Link — I6 2007 Engine

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

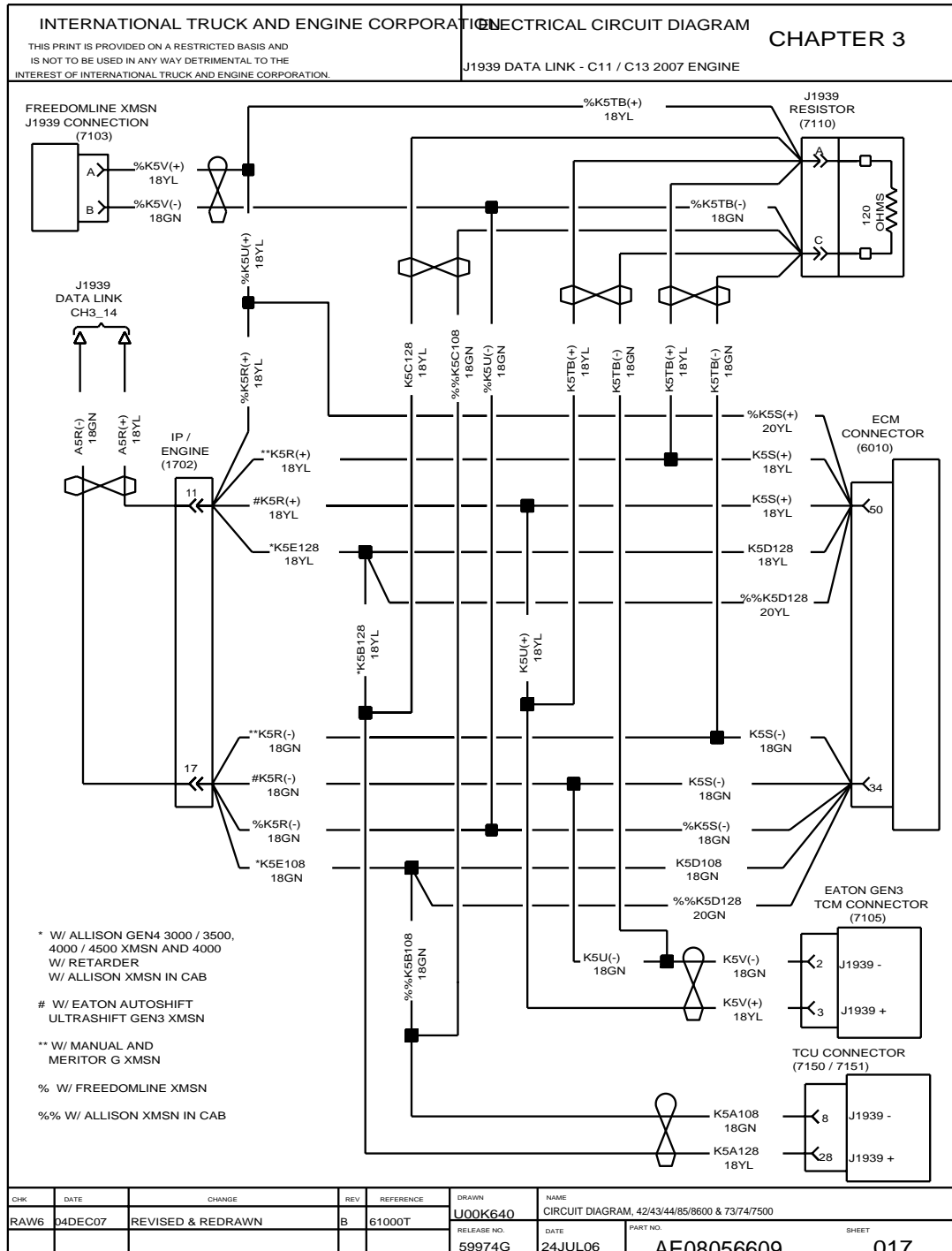


Figure 29 J1939 Data Link — C11/C13 2007 Engine

3.18. GROUND — IP, P. 18

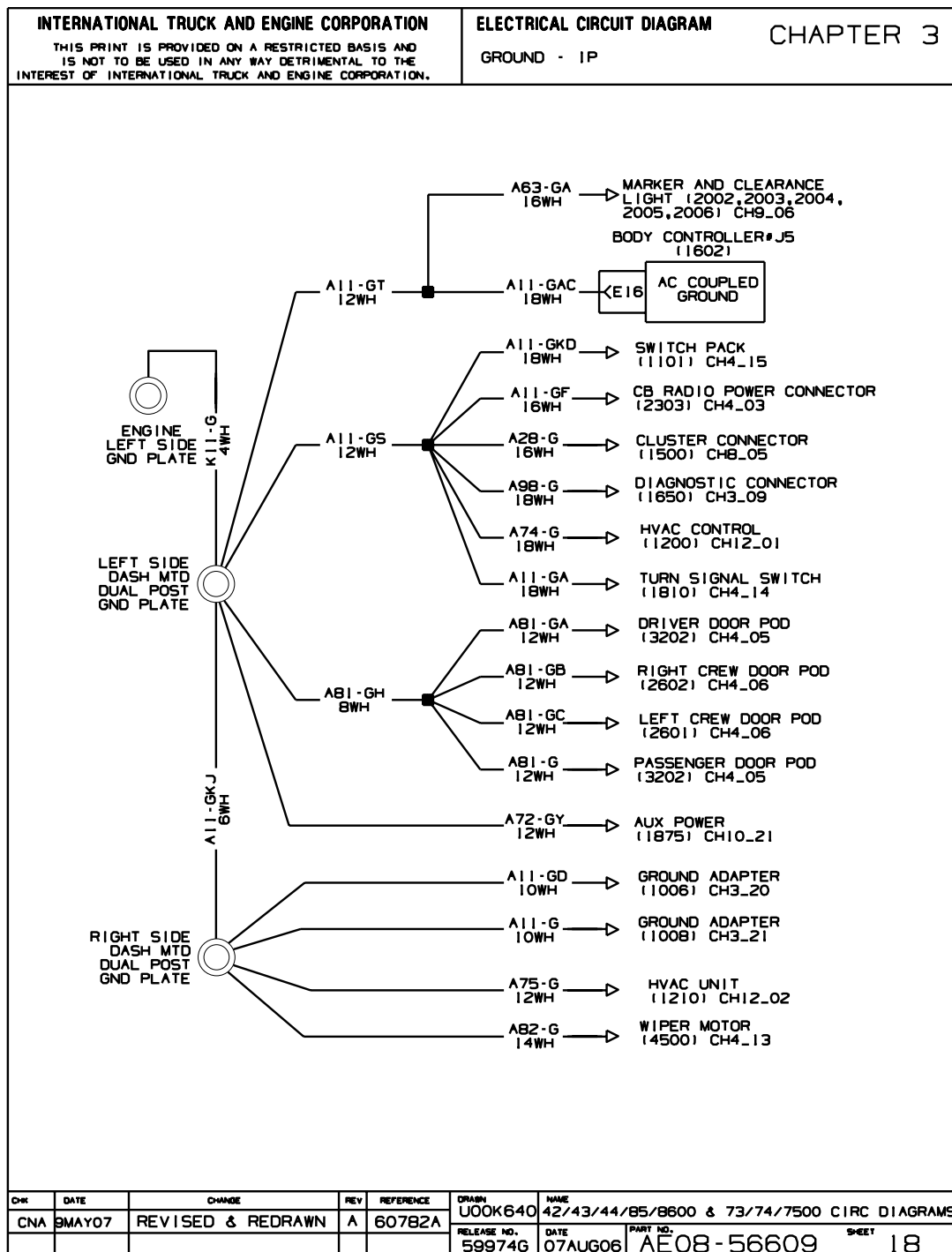


Figure 30 Ground — IP

3.19. GROUND — IP, P. 19

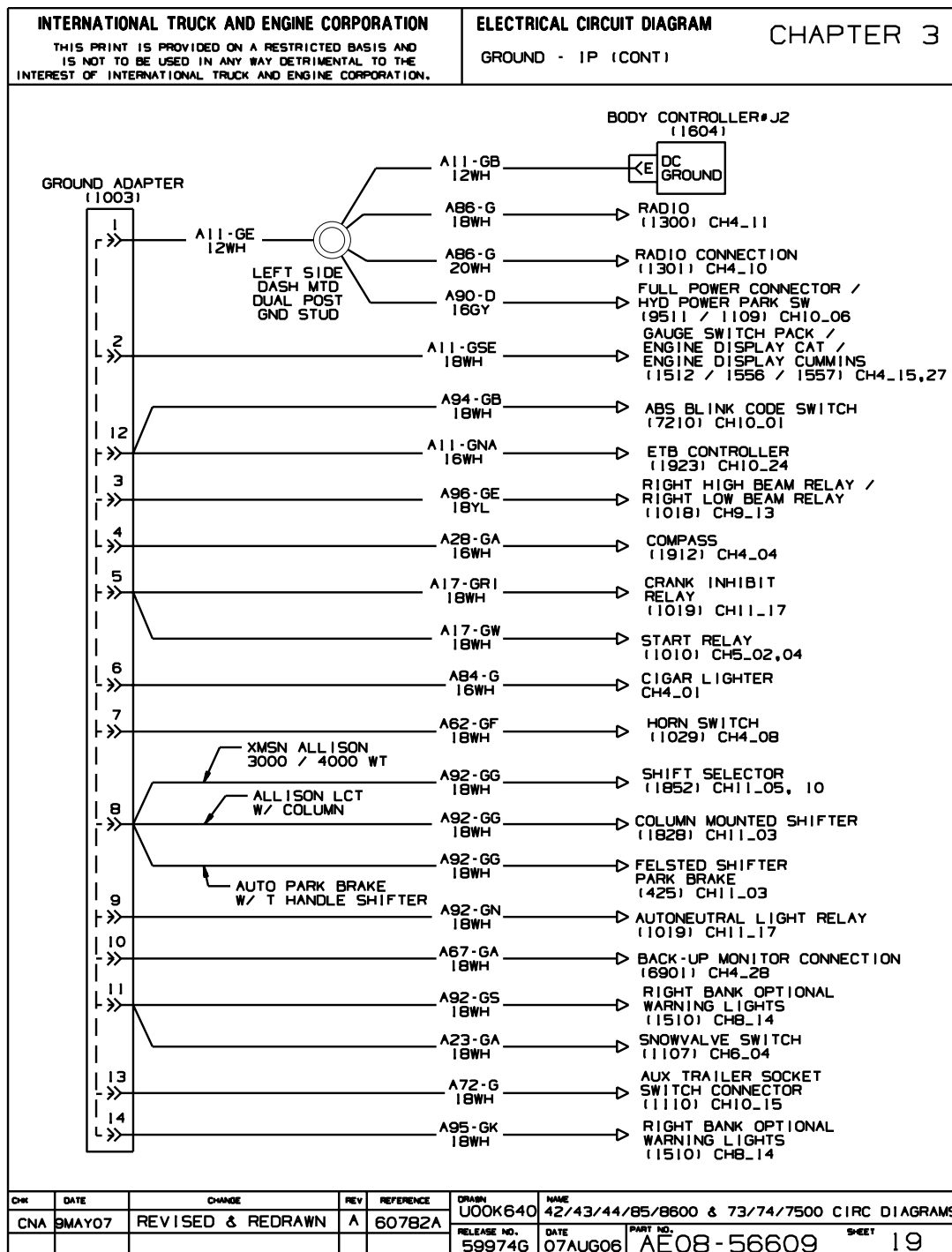


Figure 31 Ground — IP (Cont.)

3.20. GROUND — IP, P. 20

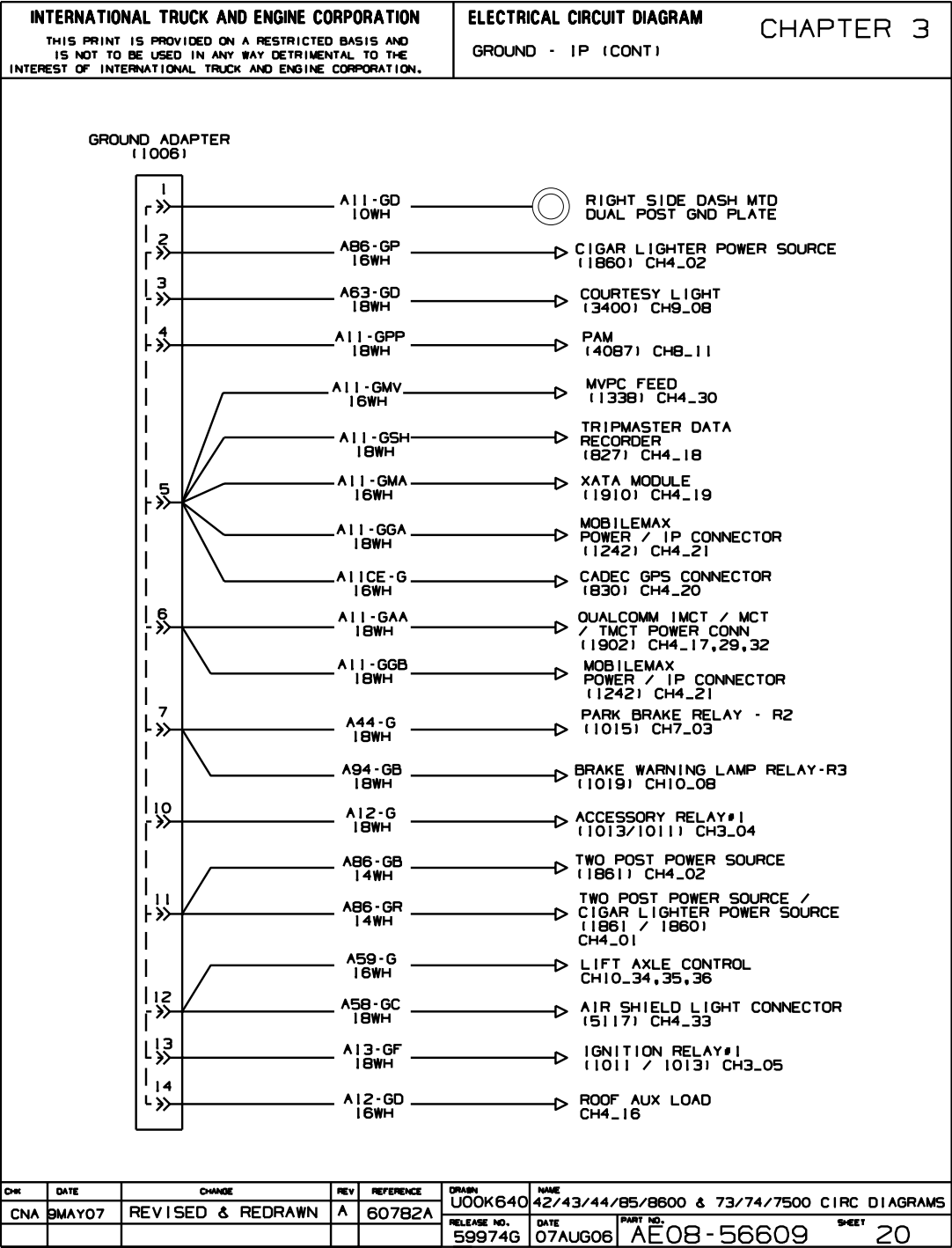


Figure 32 Ground — IP (Cont.)

3.21. GROUND — IP, P. 21

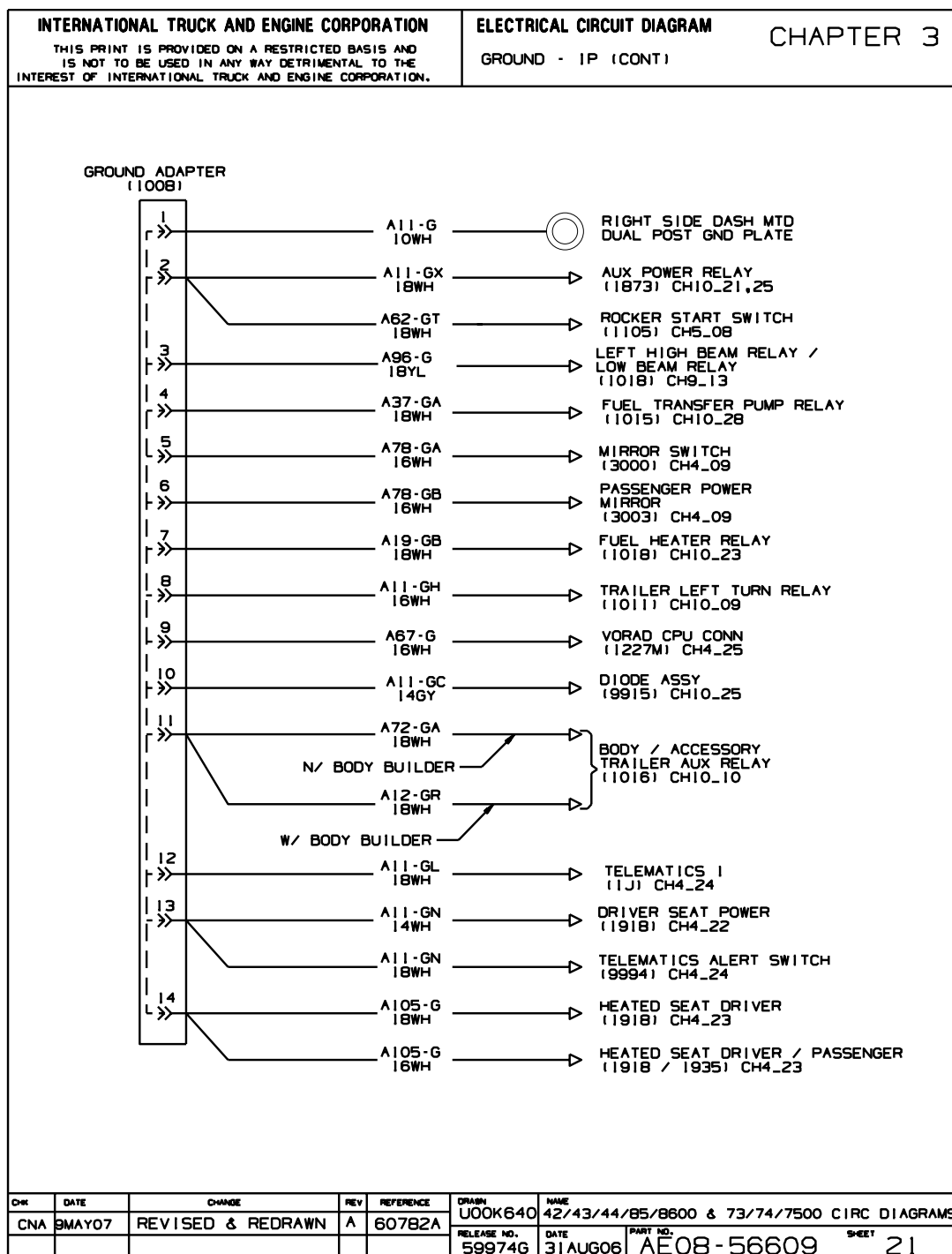


Figure 33 Ground — IP (Cont.)

3.22. ENGINE GROUND, P. 22

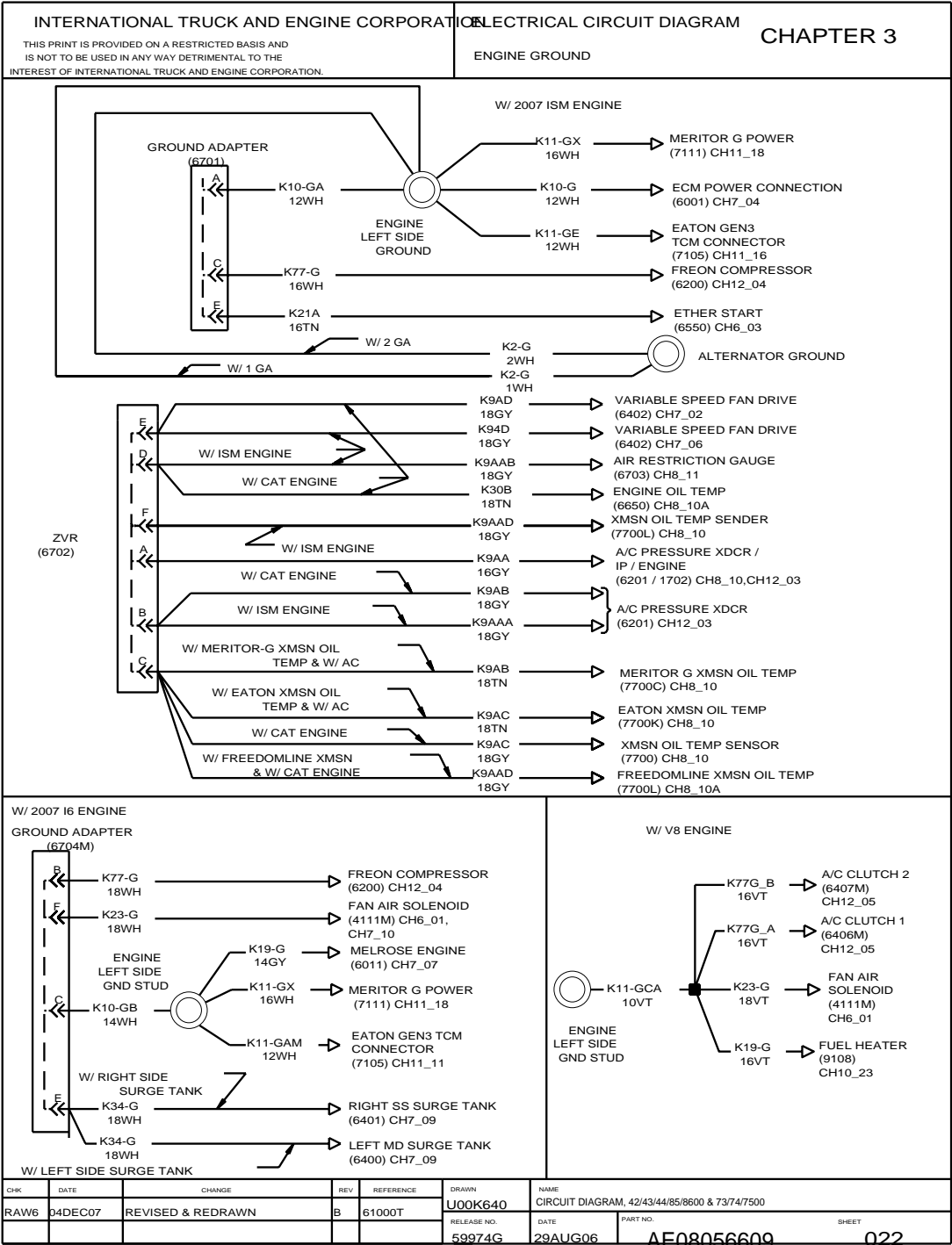


Figure 34 Engine Ground

3.23. ENGINE GROUND, P. 23

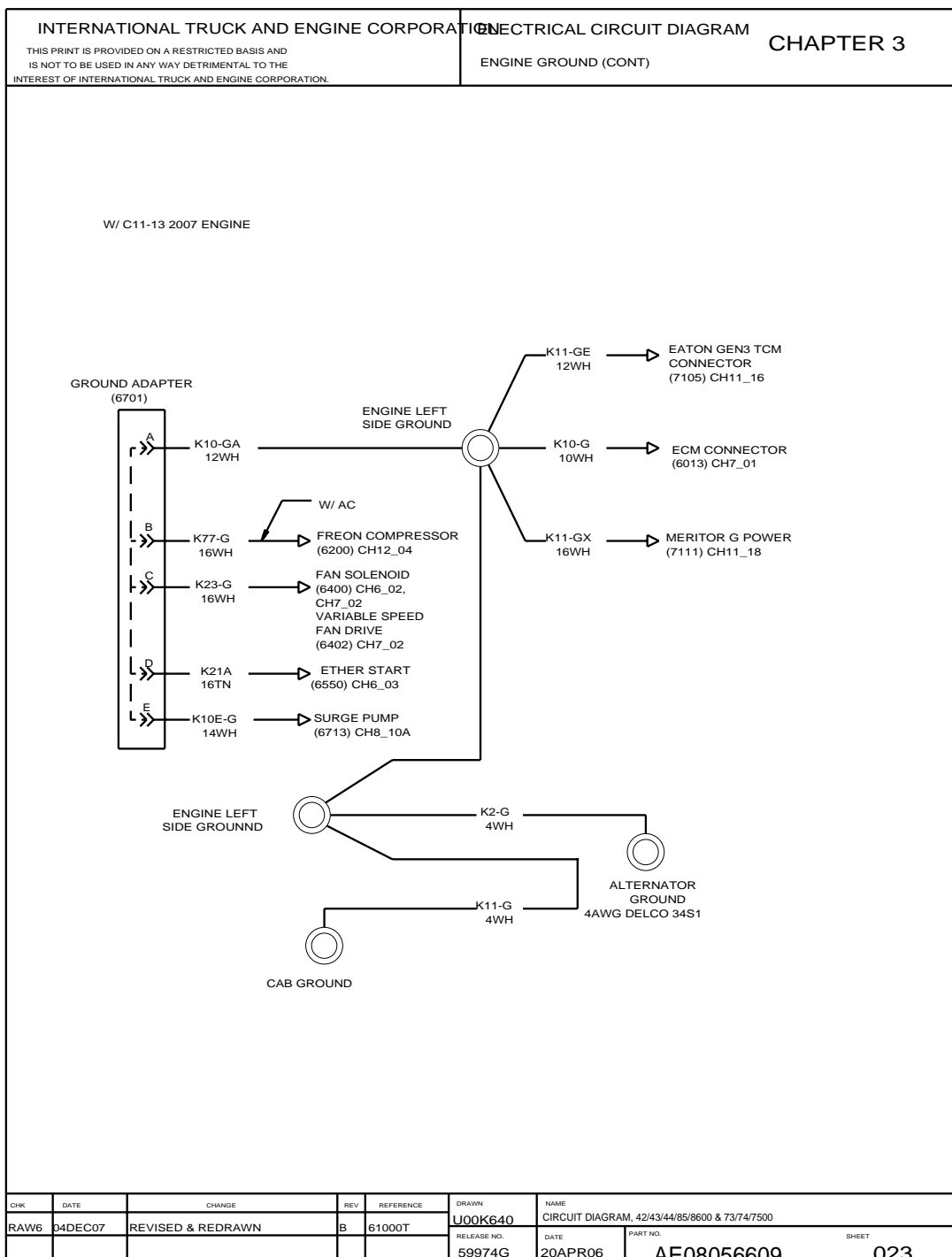


Figure 35 Engine Ground (Cont.)

3.24. GROUND — CHASSIS, P. 24

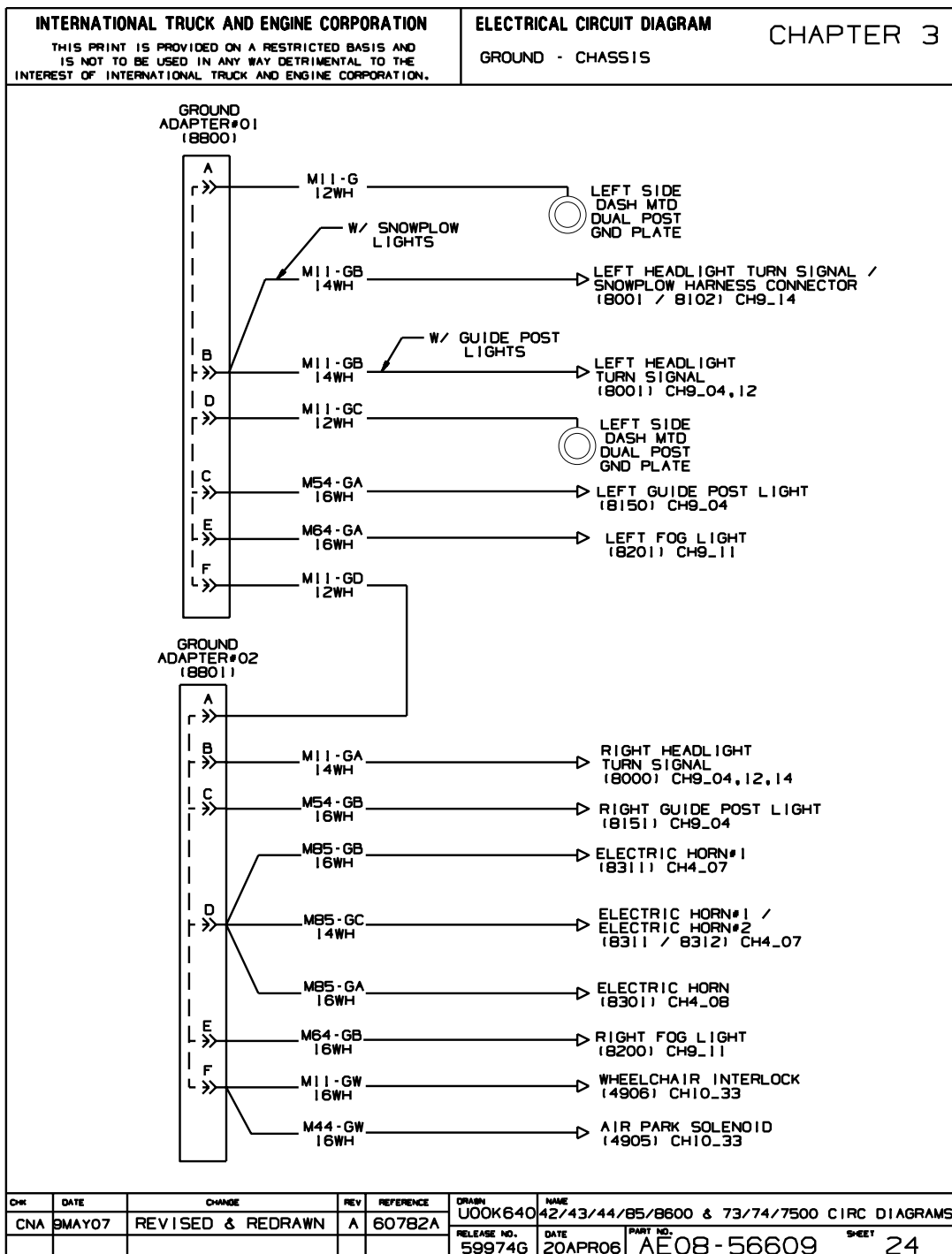


Figure 36 Ground — Chassis

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

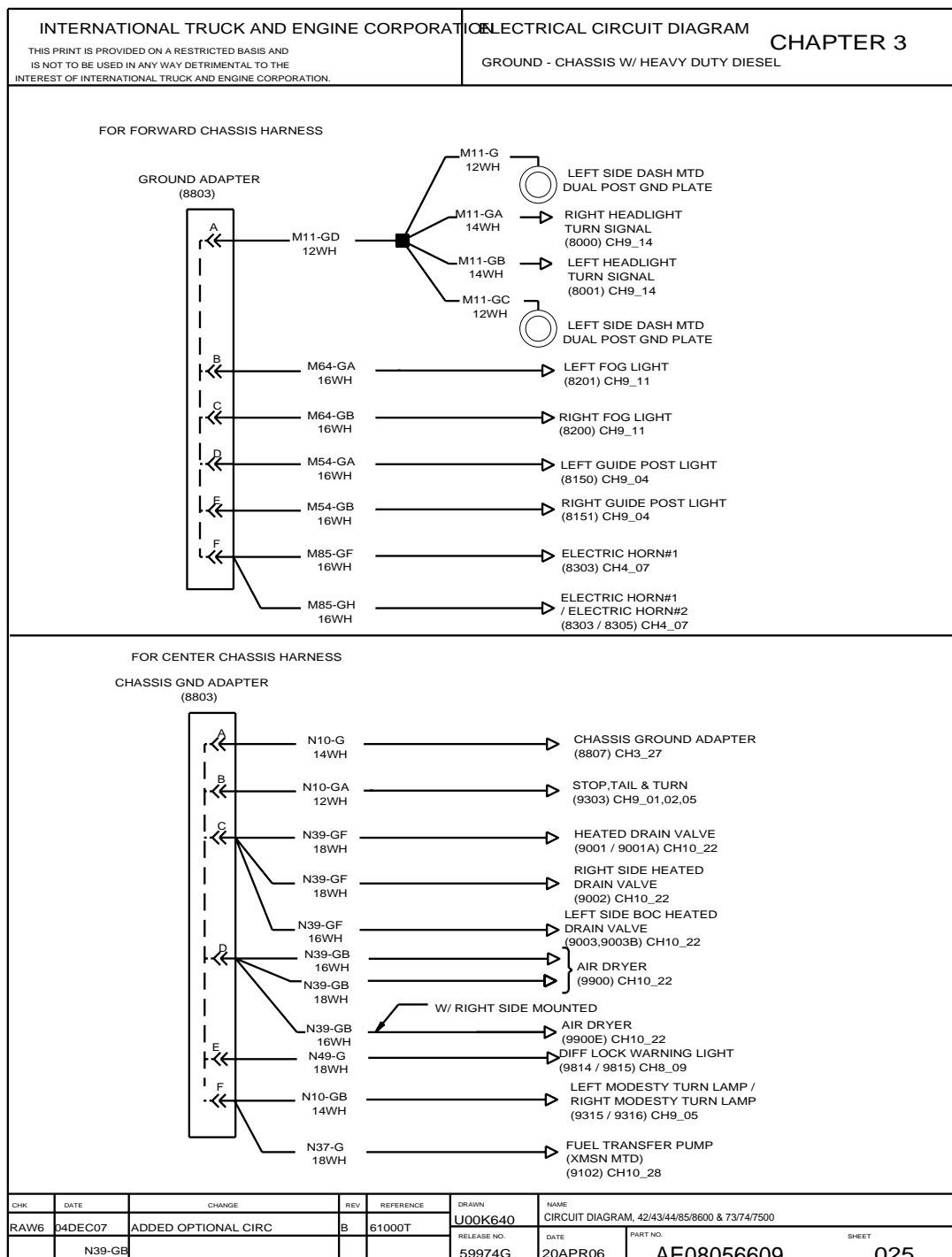


Figure 37 Ground — Chassis with Heavy Duty Diesel

3.26. GROUND — CHASSIS, P. 26

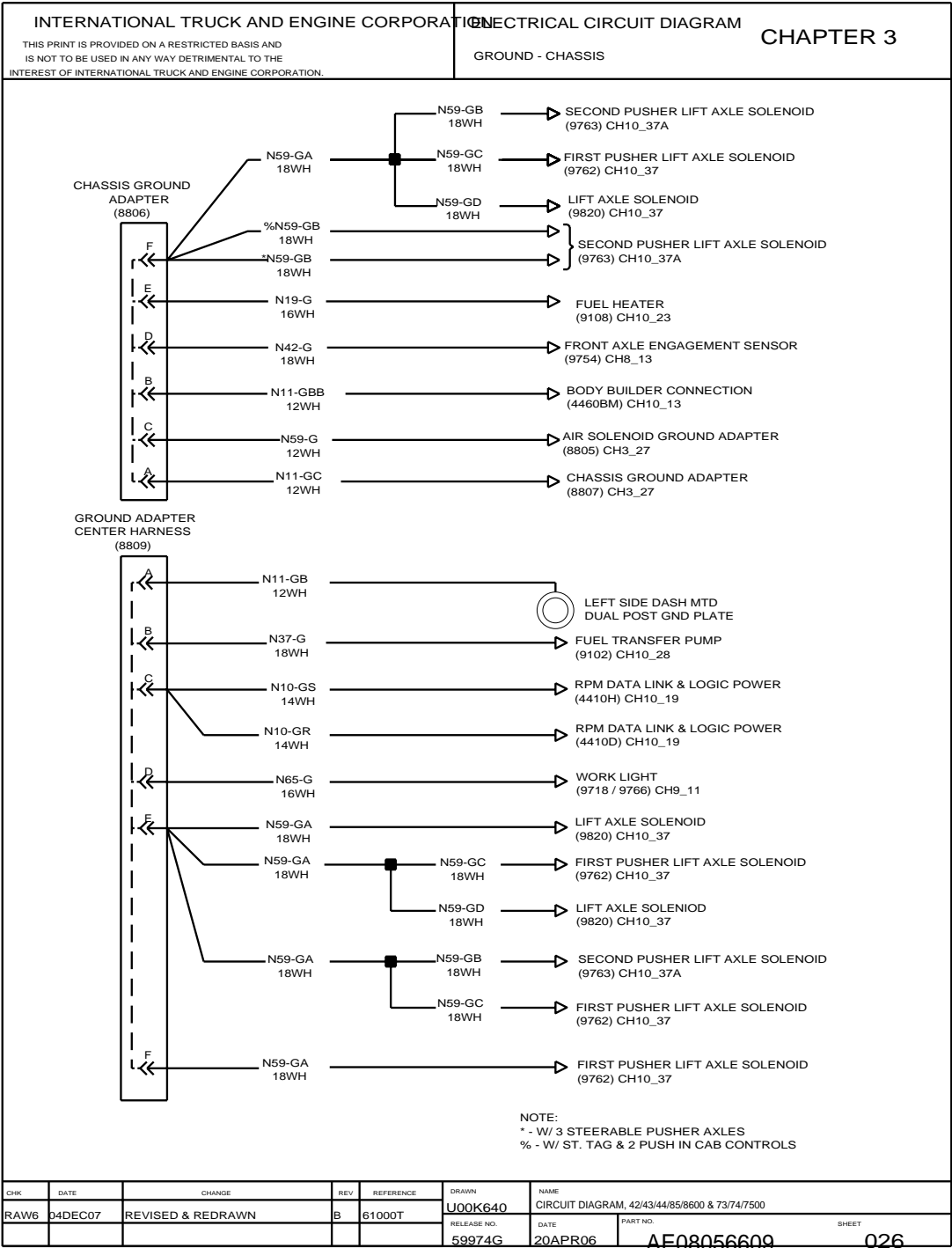


Figure 38 Ground — Chassis

3.27. ZERO VOLT REFERENCE, P. 27

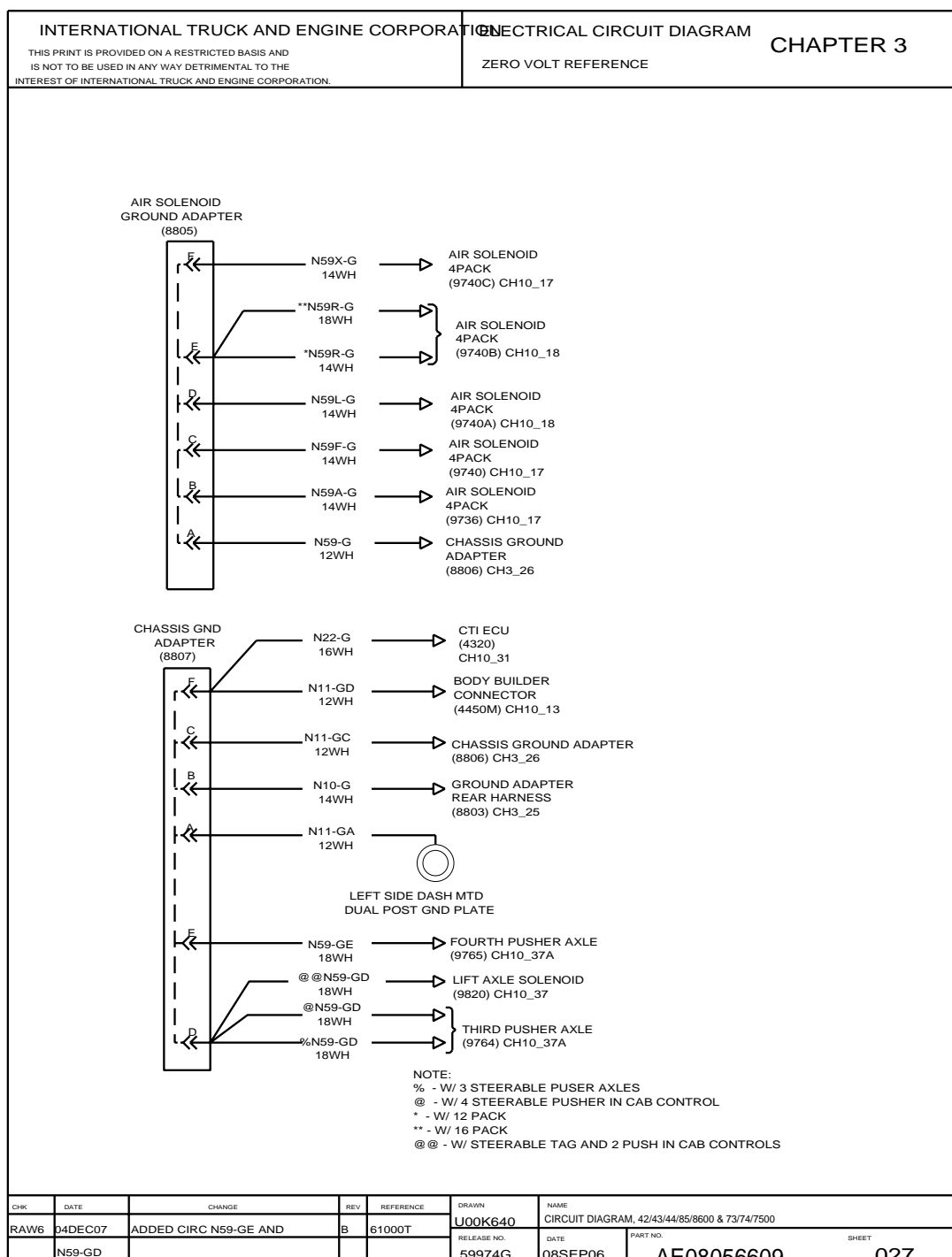
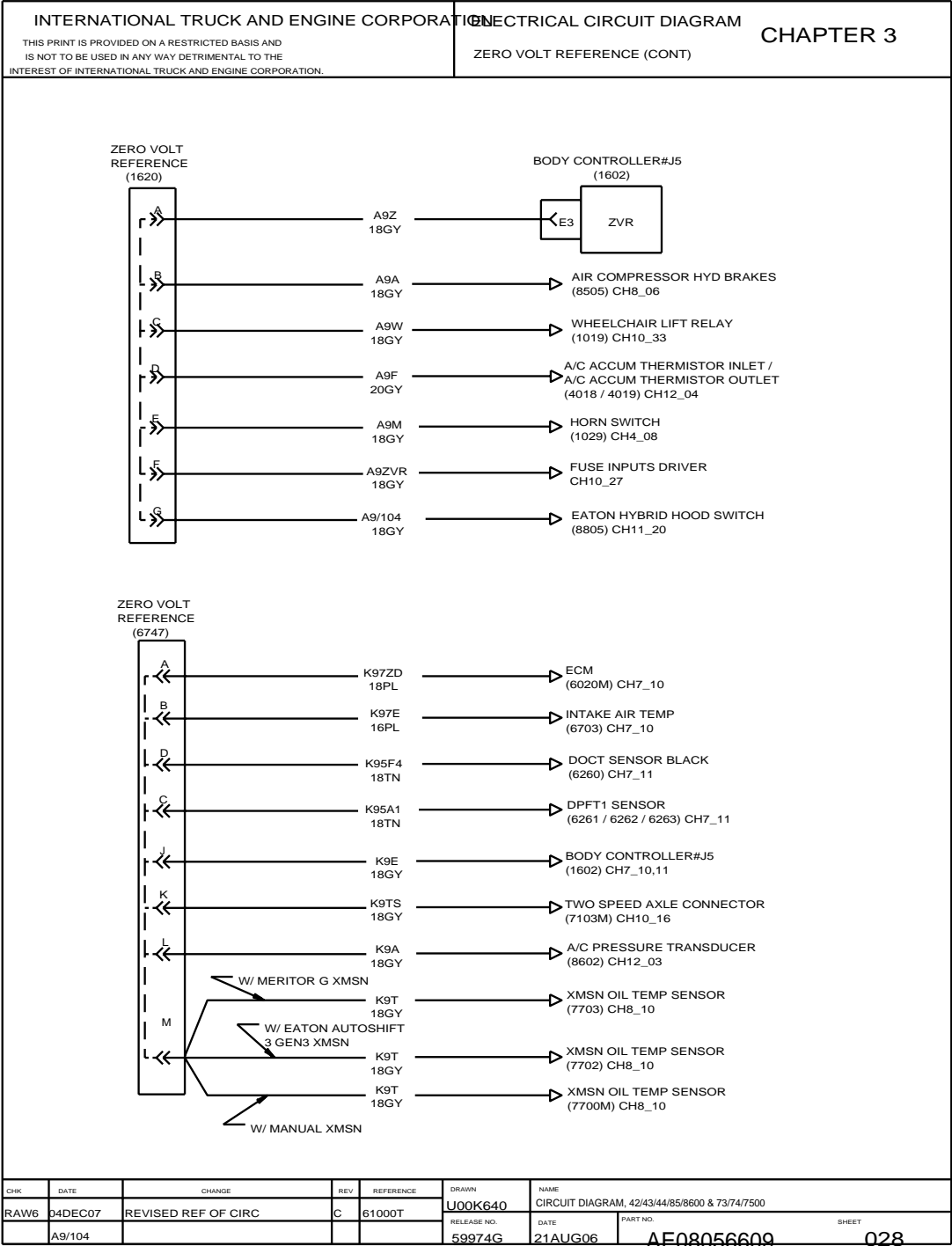


Figure 39 Zero Volt Reference

3.28. ZERO VOLT REFERENCE, P. 28



3.29. GROUND — CHASSIS, P. 29

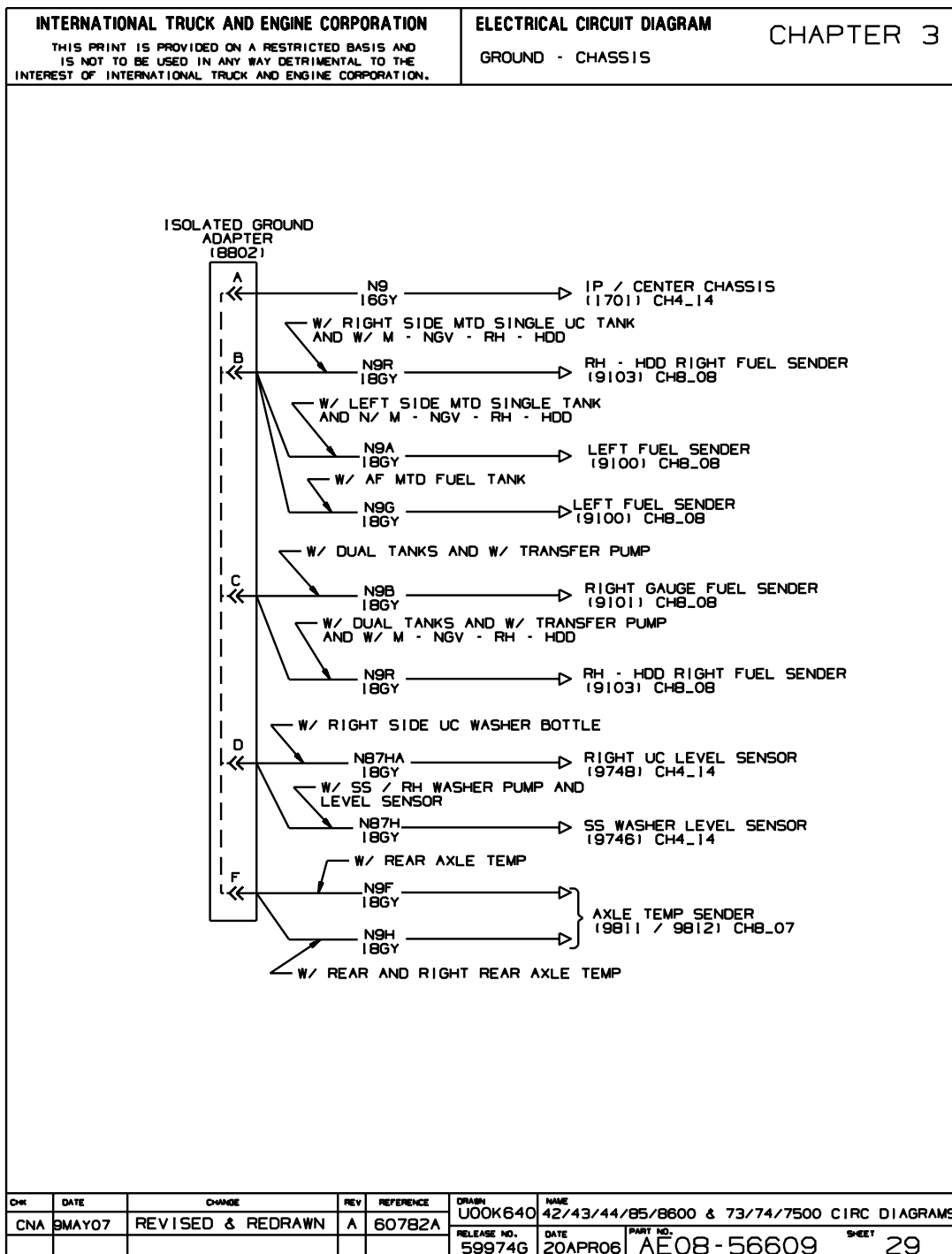


Figure 41 Ground — Chassis

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

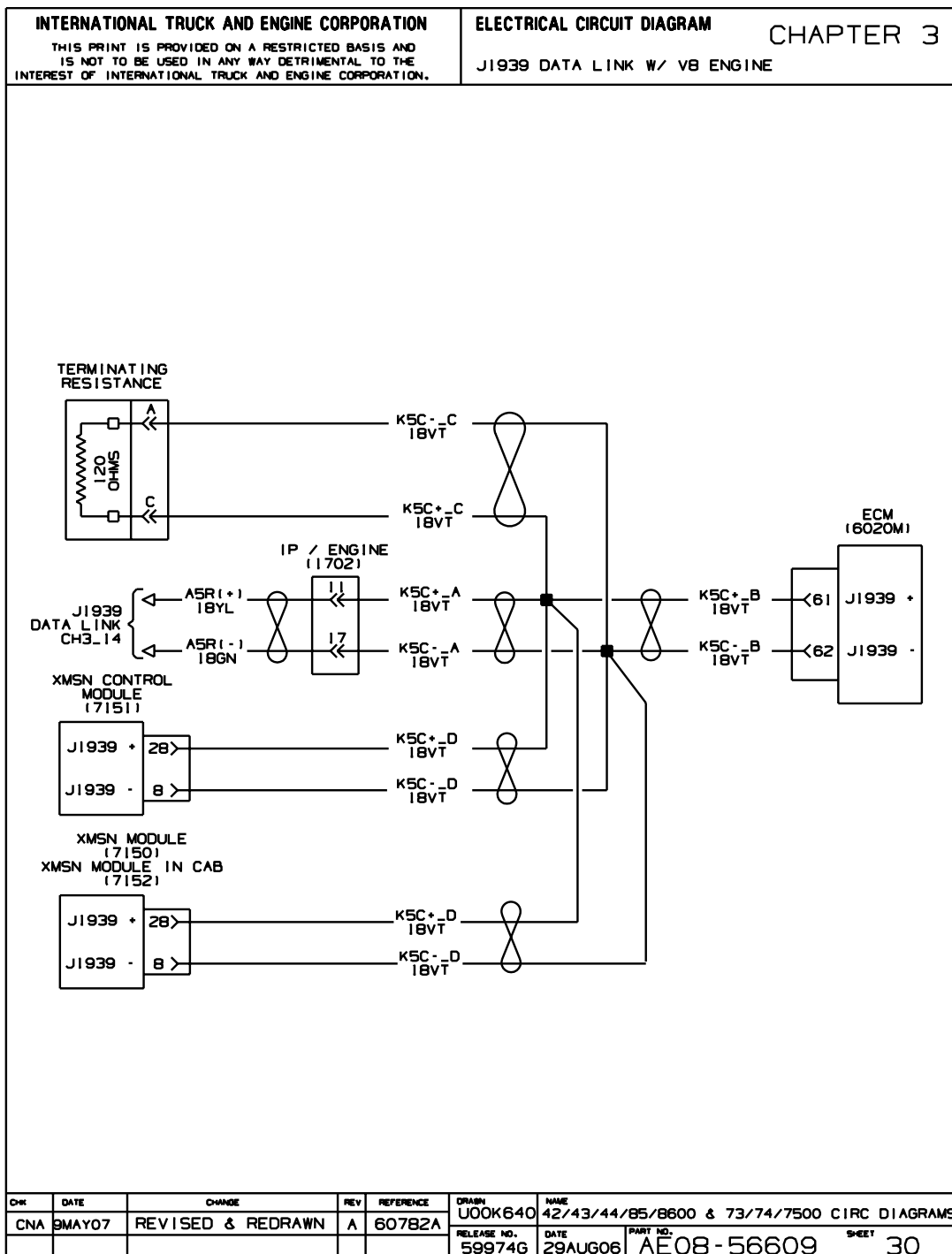


Figure 42 J1939 Data Link with V8 Engine

4. CAB ACCESSORIES (CHAPTER 4)

4.1. CIGAR LIGHTER AND POWER FEED, P. 1

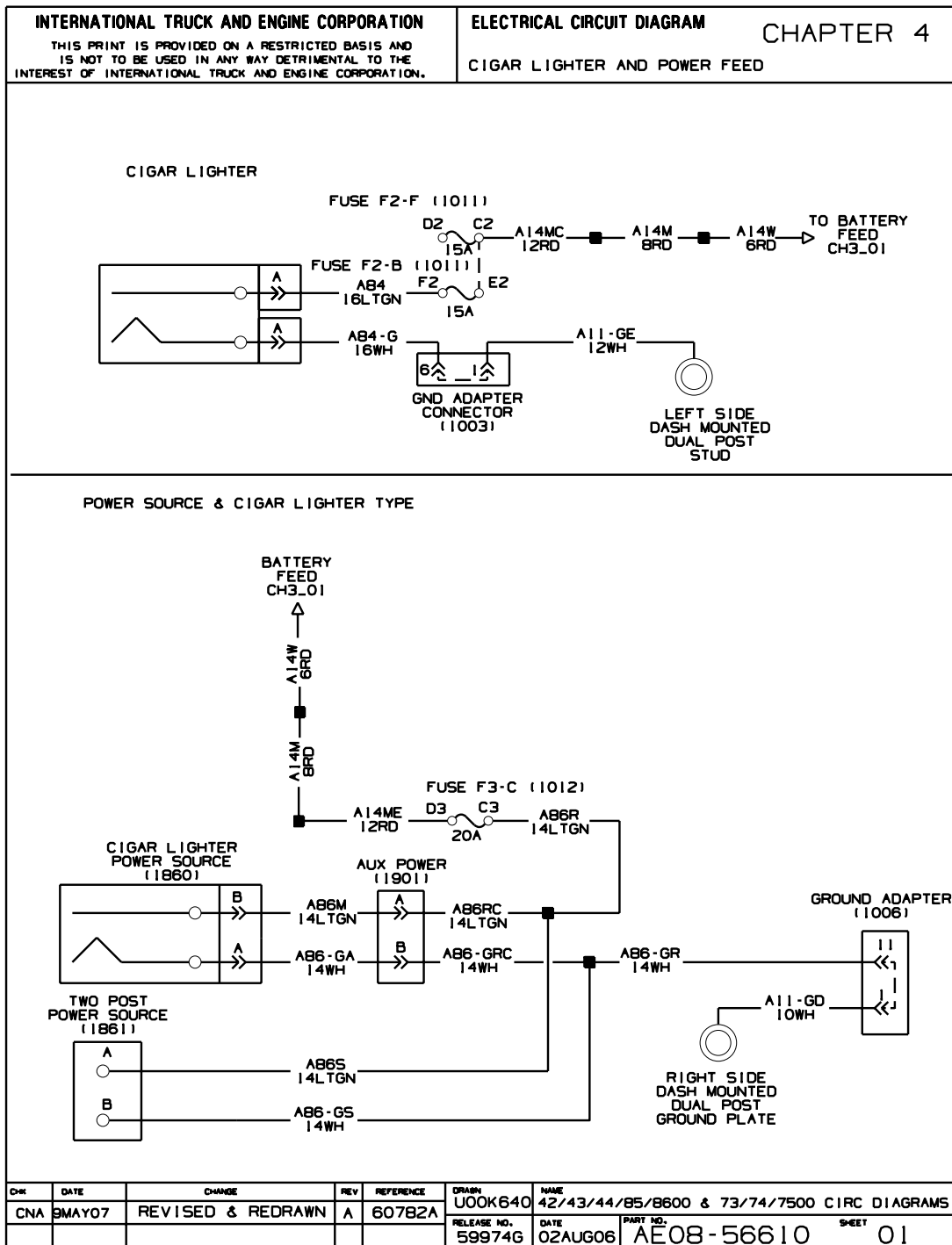


Figure 43 Cigar Lighter and Power Feed

4.2. CIGAR LIGHTER AND POWER FEED, P. 2

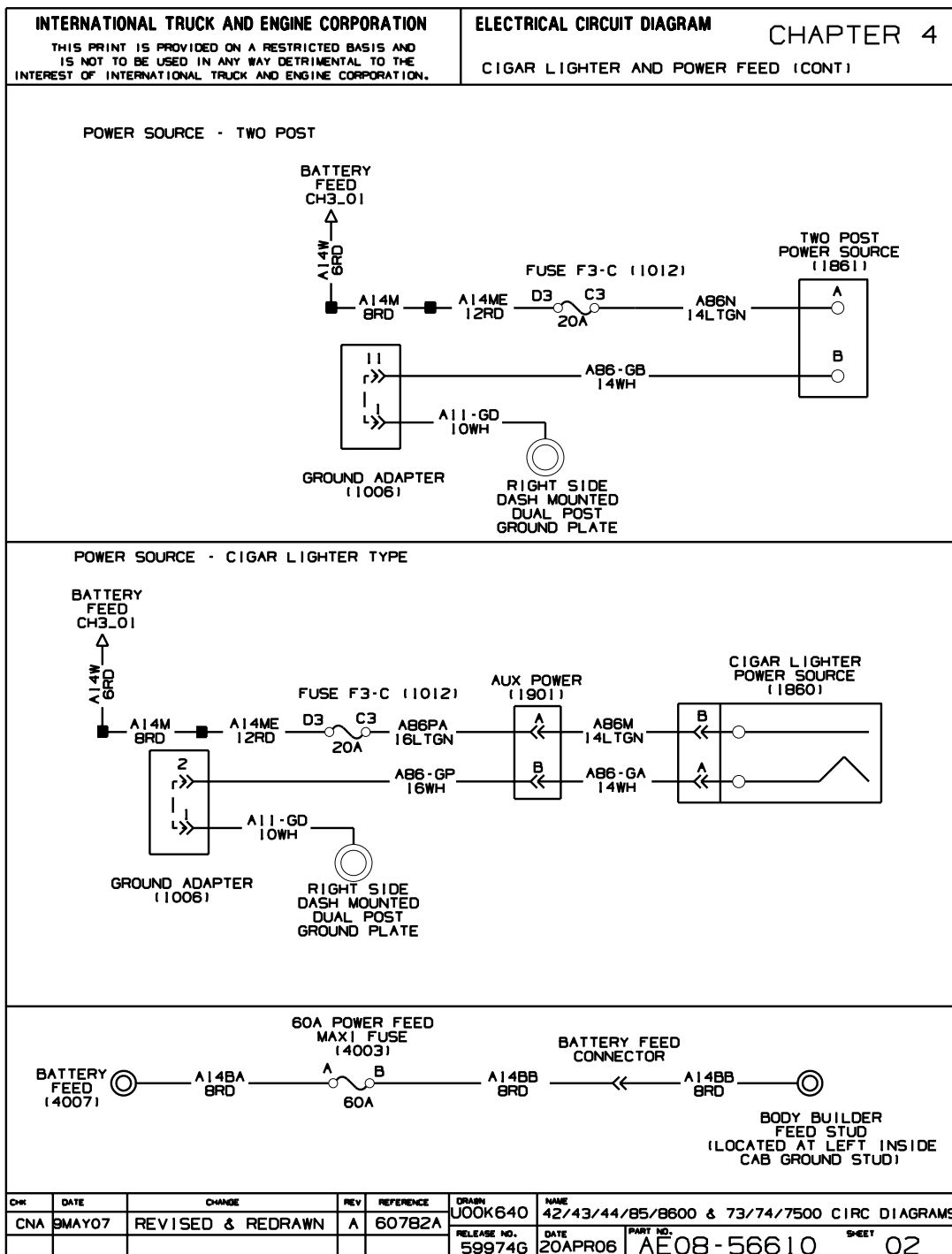


Figure 44 Cigar Lighter and Power Feed

4.3. CB POWER RADIO, P. 3

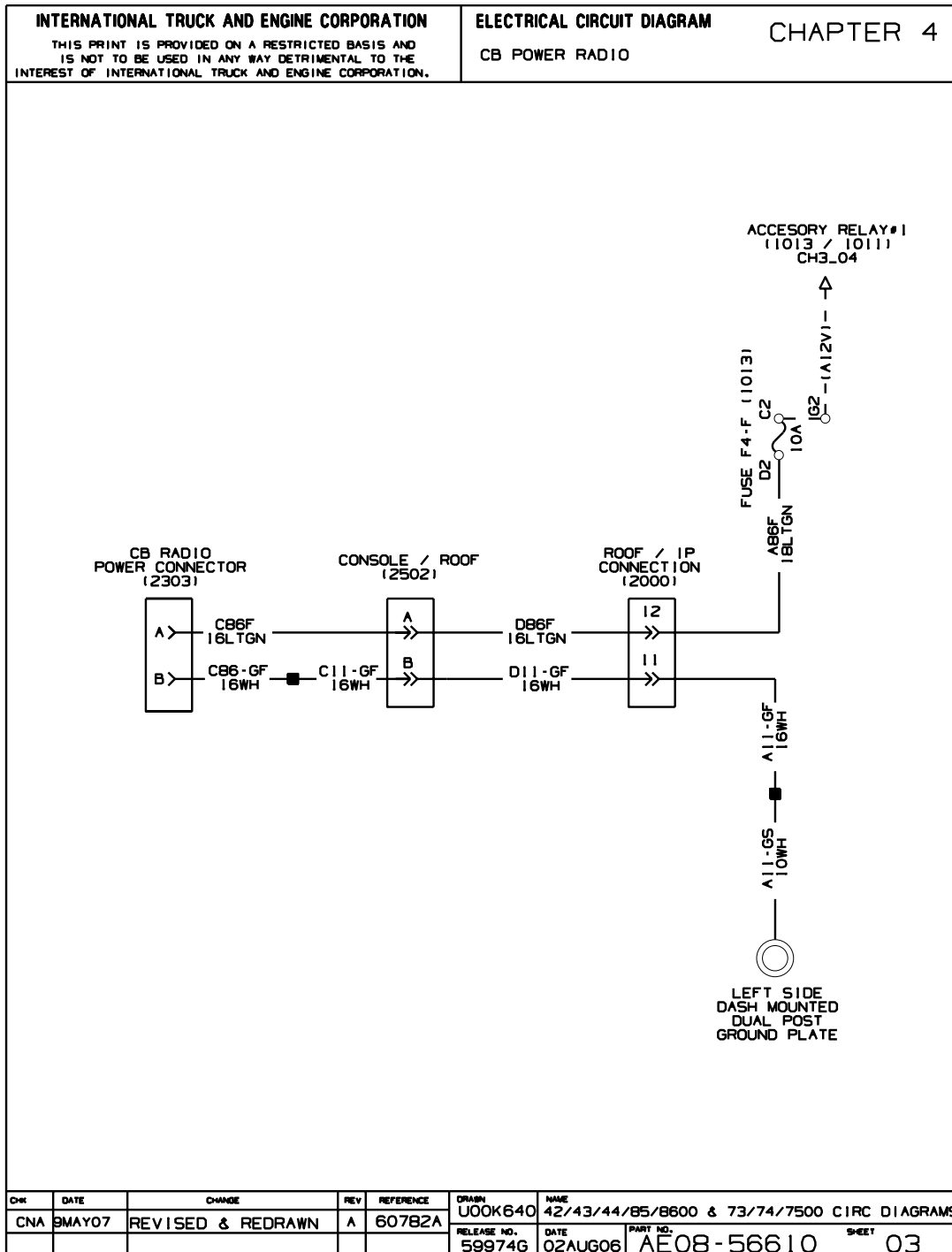


Figure 45 CB Power Radio

4.4. COMPASS AND TEMPERATURE DISPLAY, P. 4

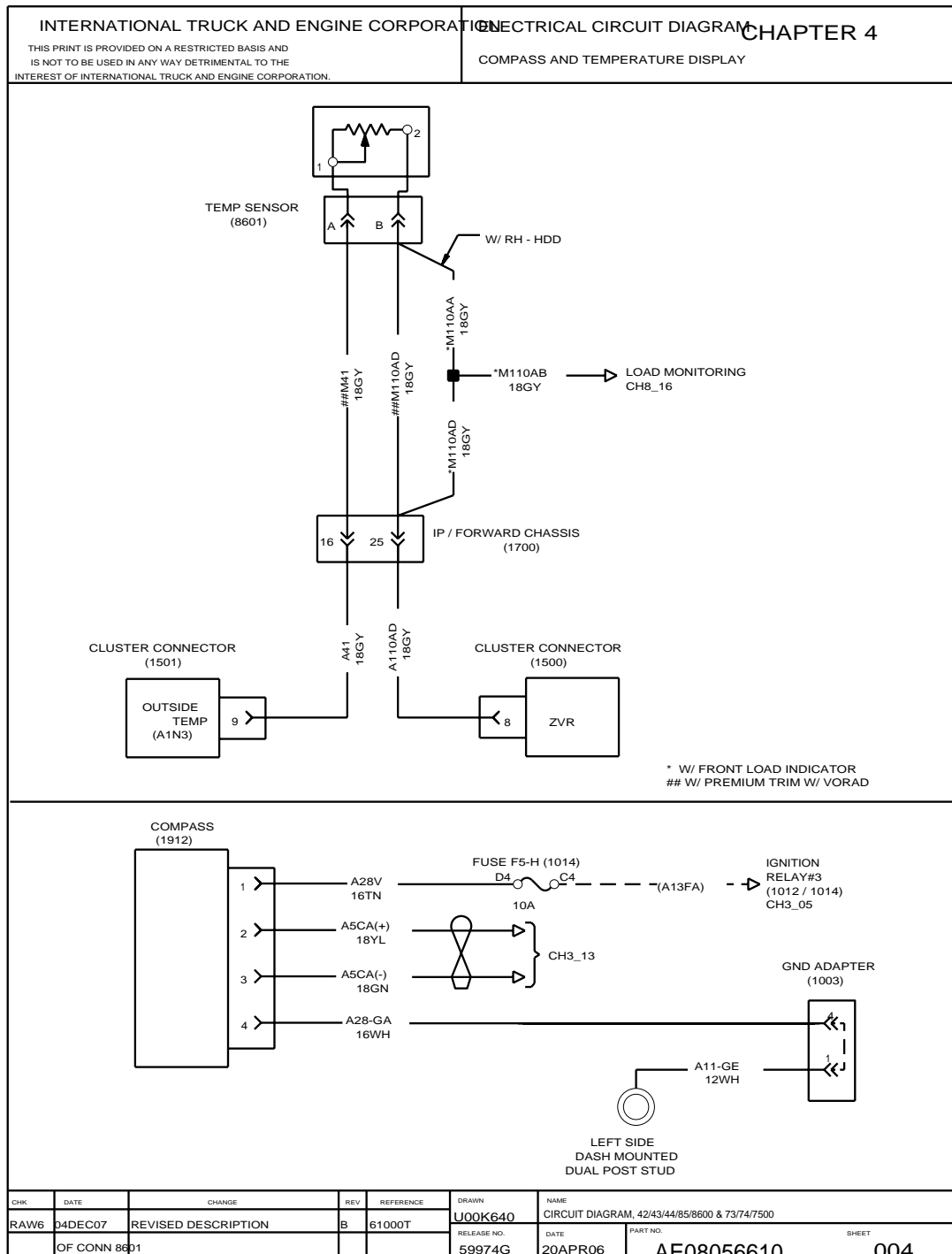


Figure 46 Compass and Temperature Display

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

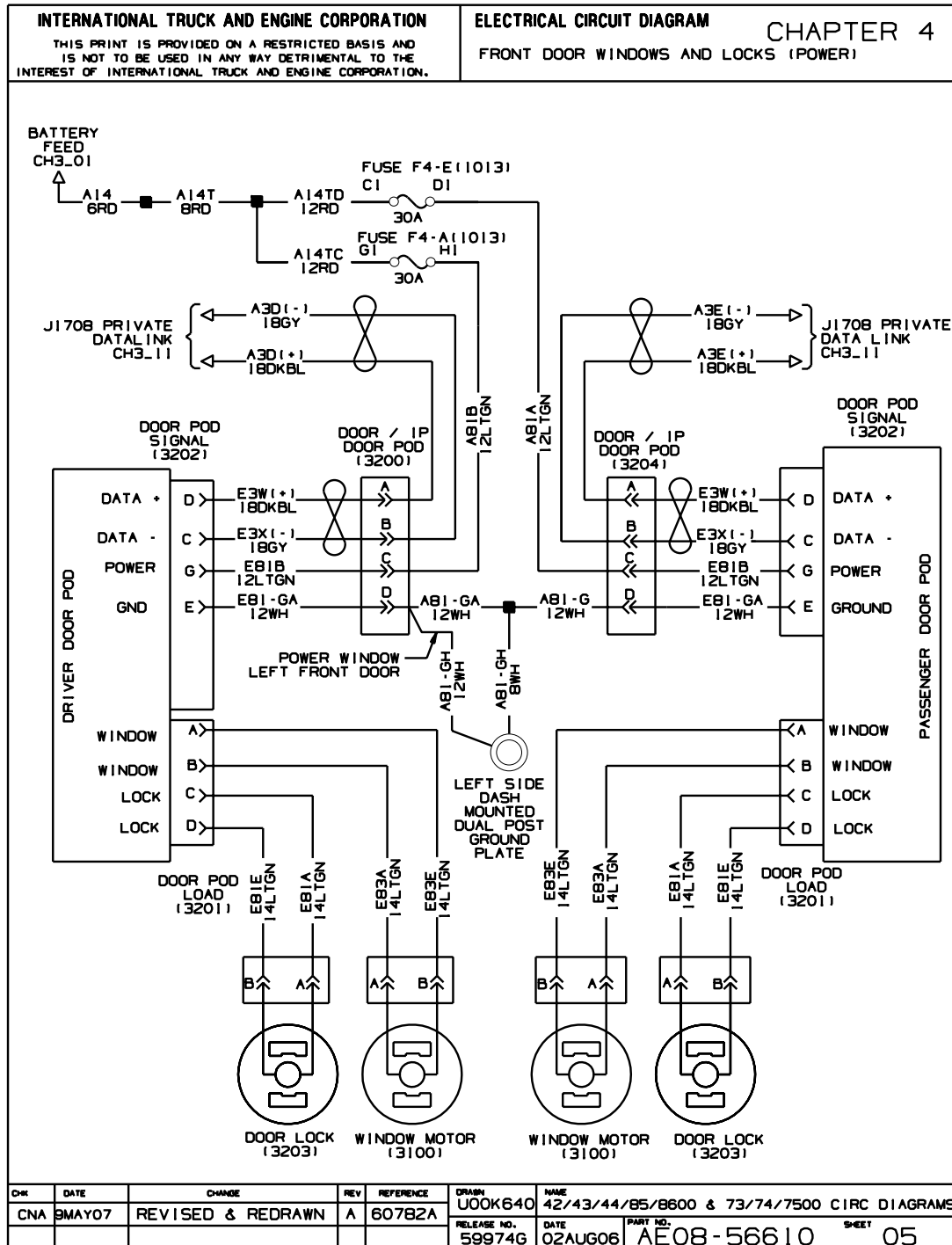


Figure 47 Front Door Windows and Locks (Power)

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

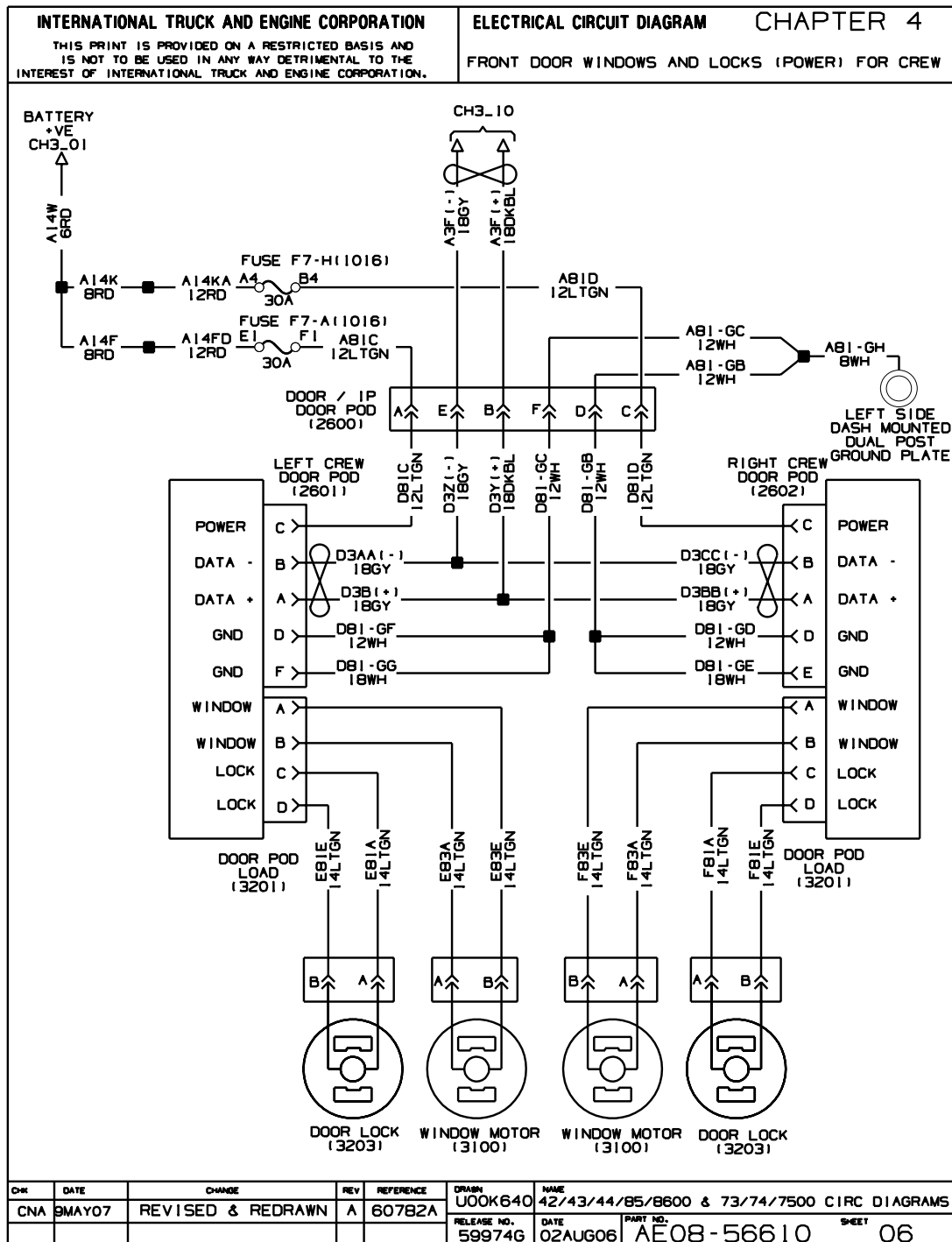


Figure 48 Front Door Windows and Locks (Power) for Crew

4.7. HORN, ELECTRIC AND AIR, P. 7

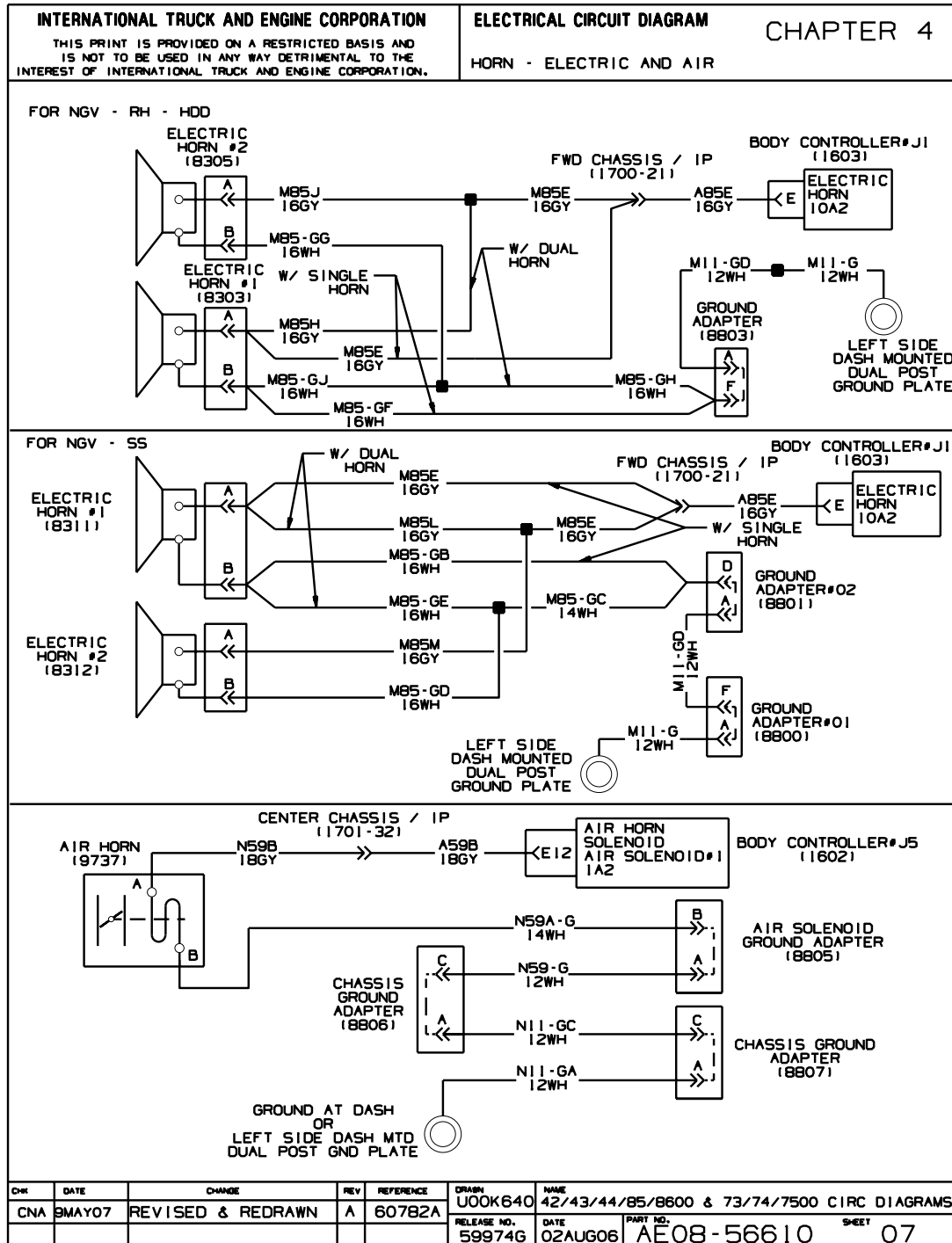


Figure 49 Horn, Electric and Air

4.8. HORN, ELECTRIC AND AIR, P. 8

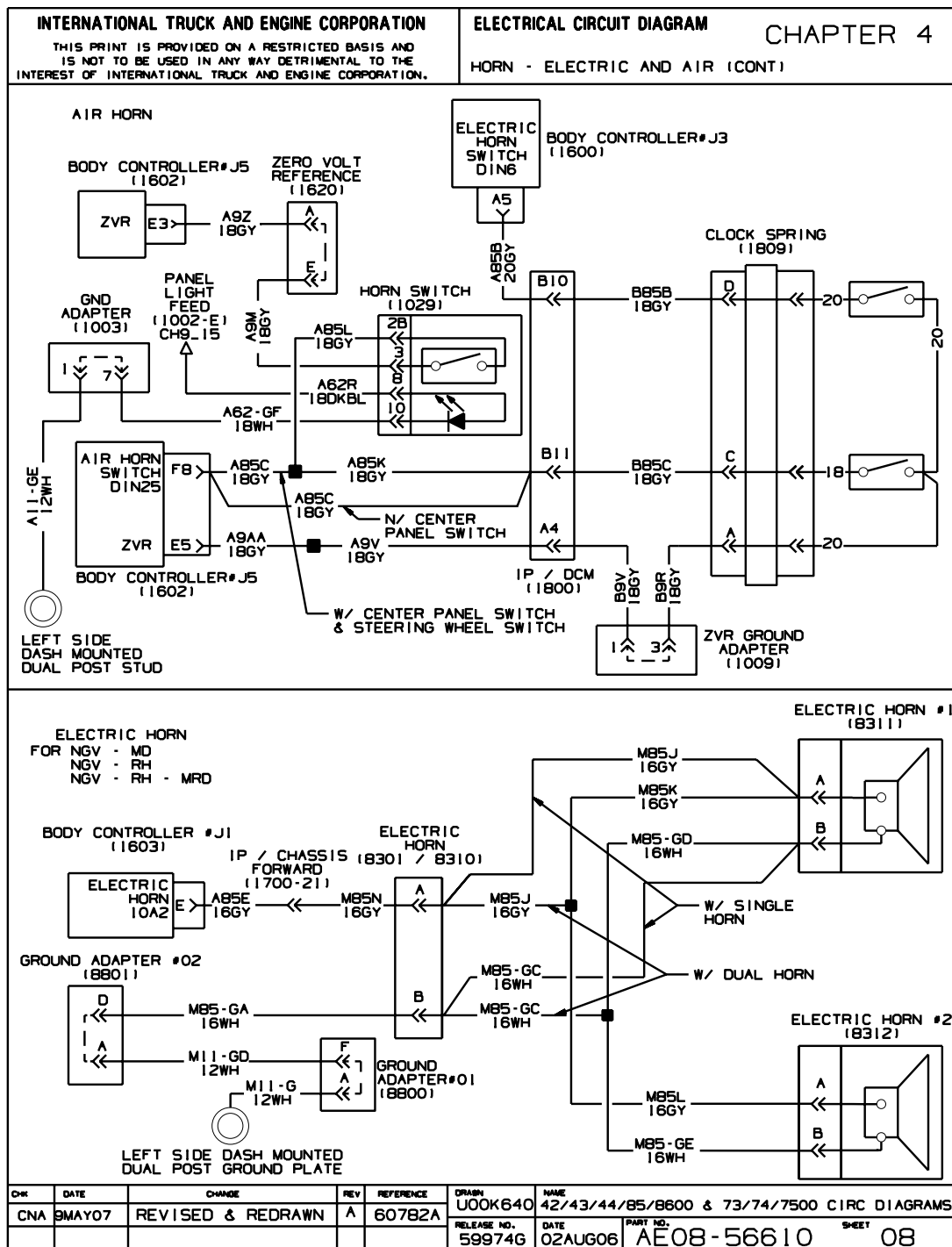


Figure 50 Horn, Electric and Air

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

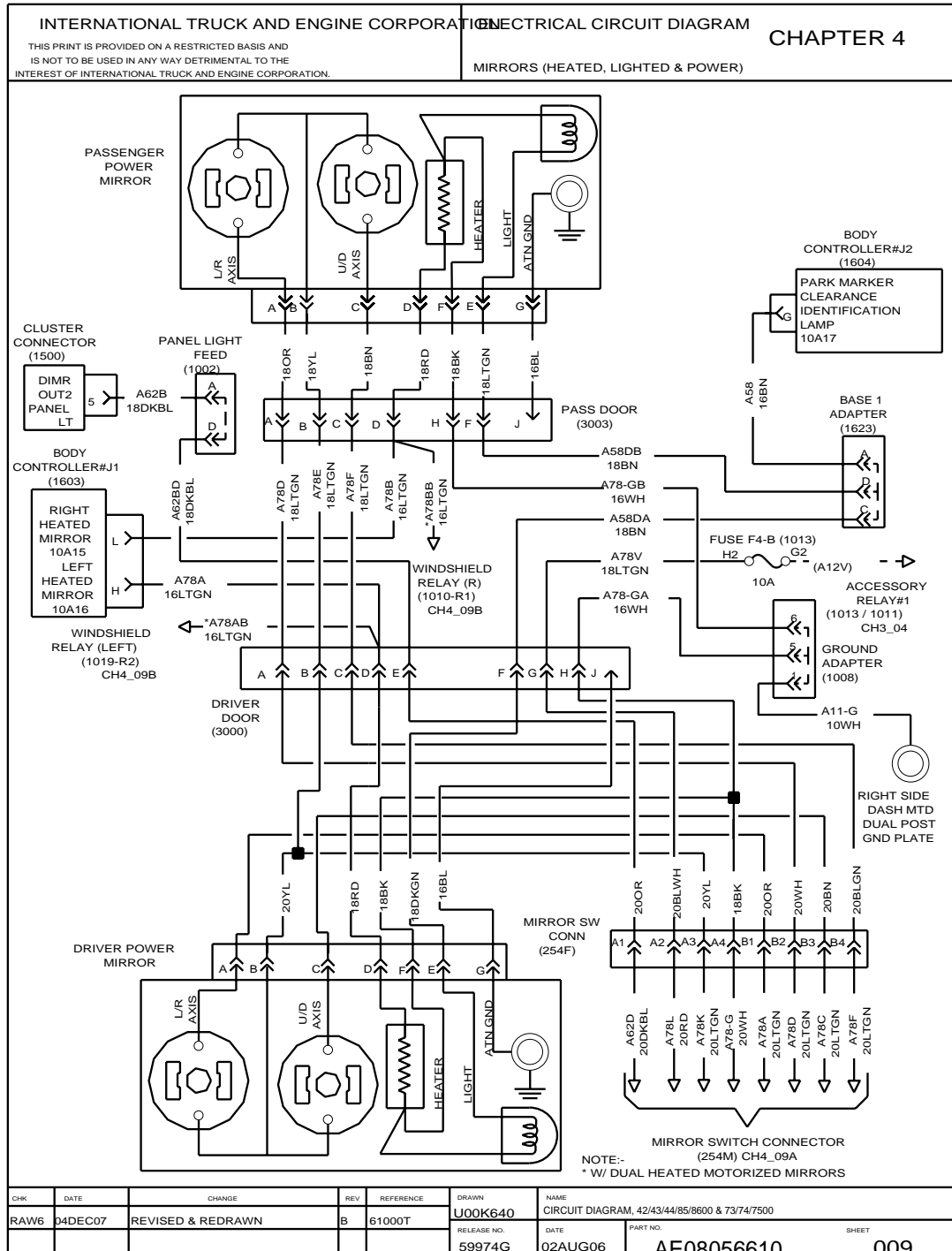


Figure 51 Mirrors (Heated, Lighted and Power)

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

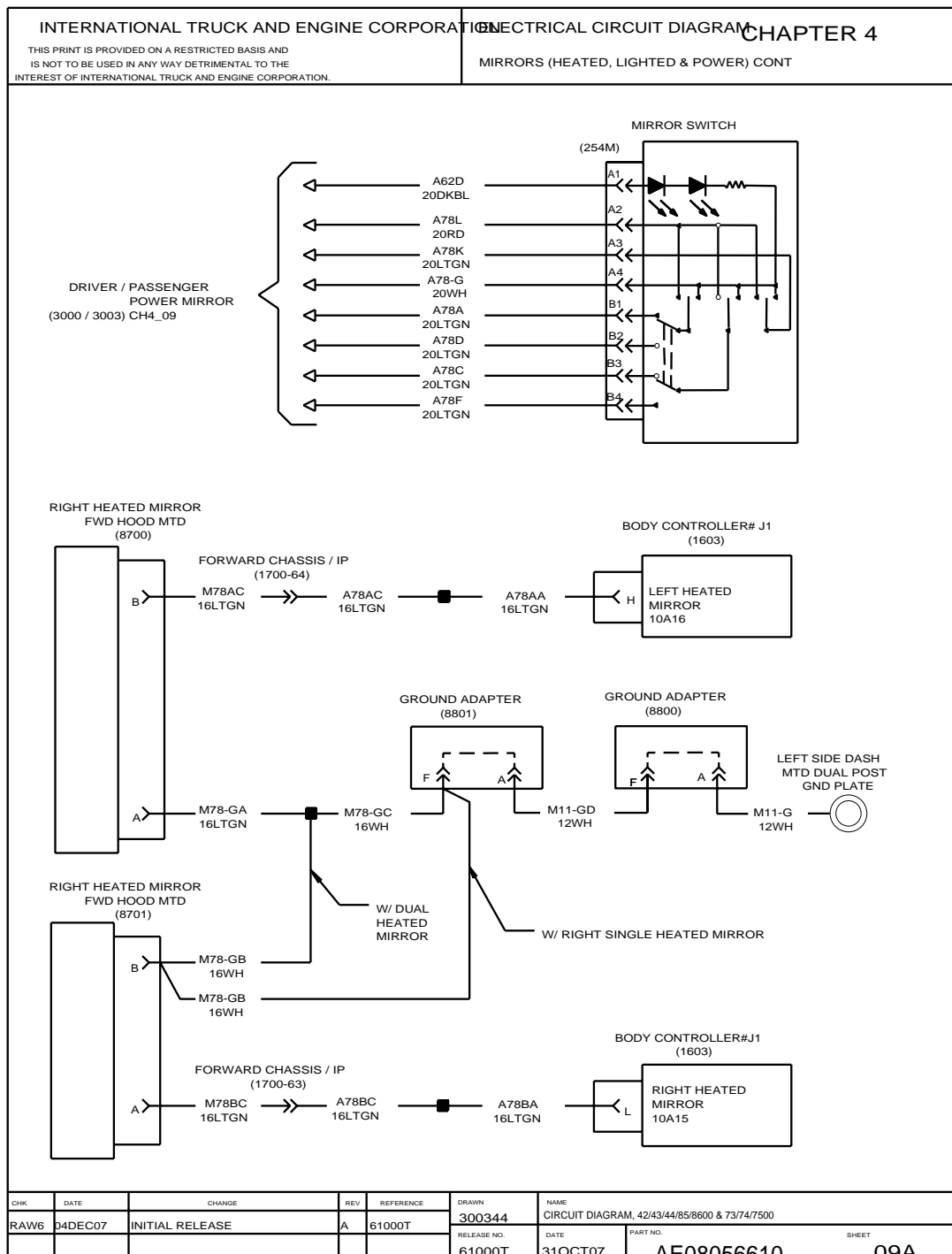


Figure 52 Mirrors (Heated, Lighted and Power)

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

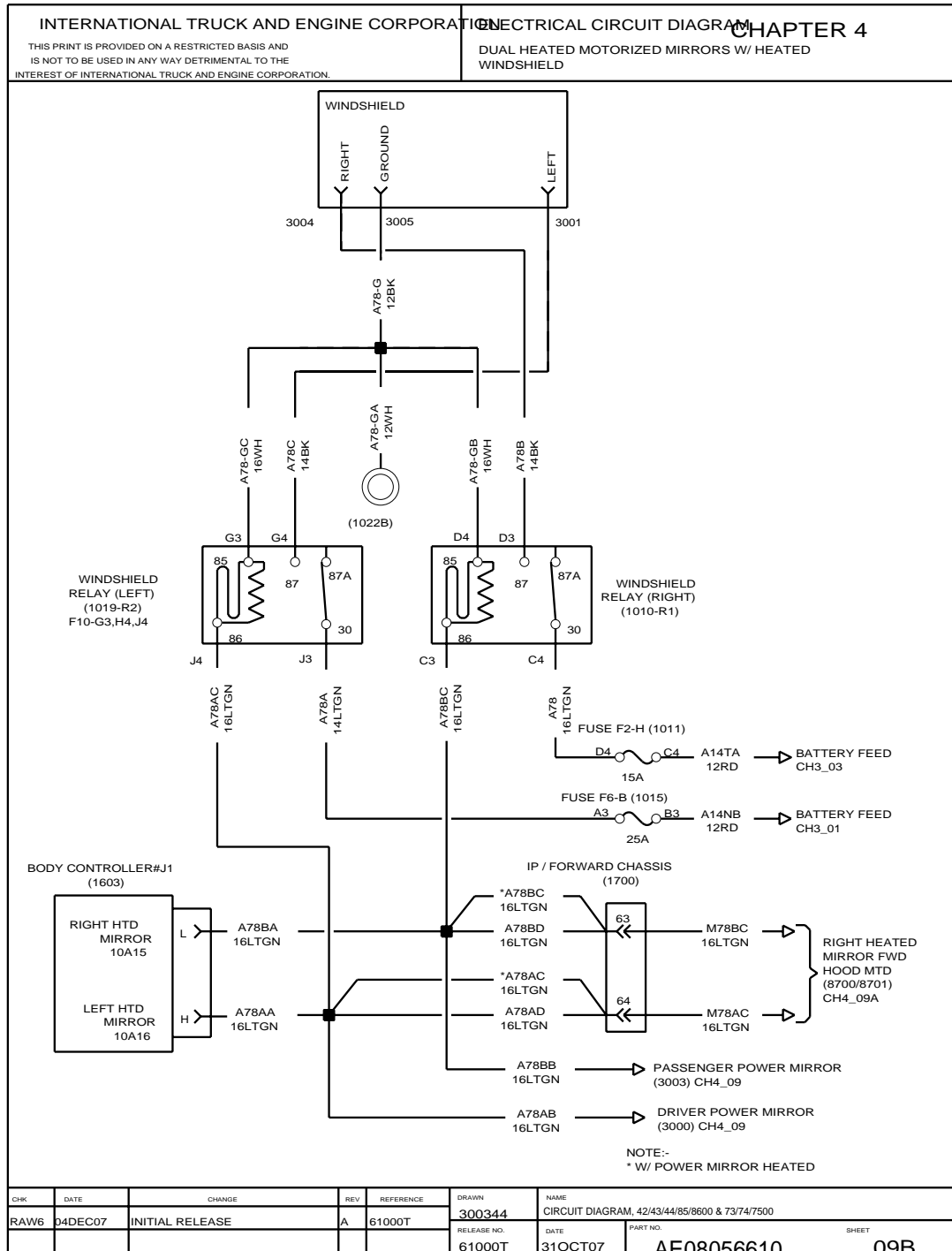


Figure 53 Dual Heated Motorized Mirrors with Heated Windshield

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

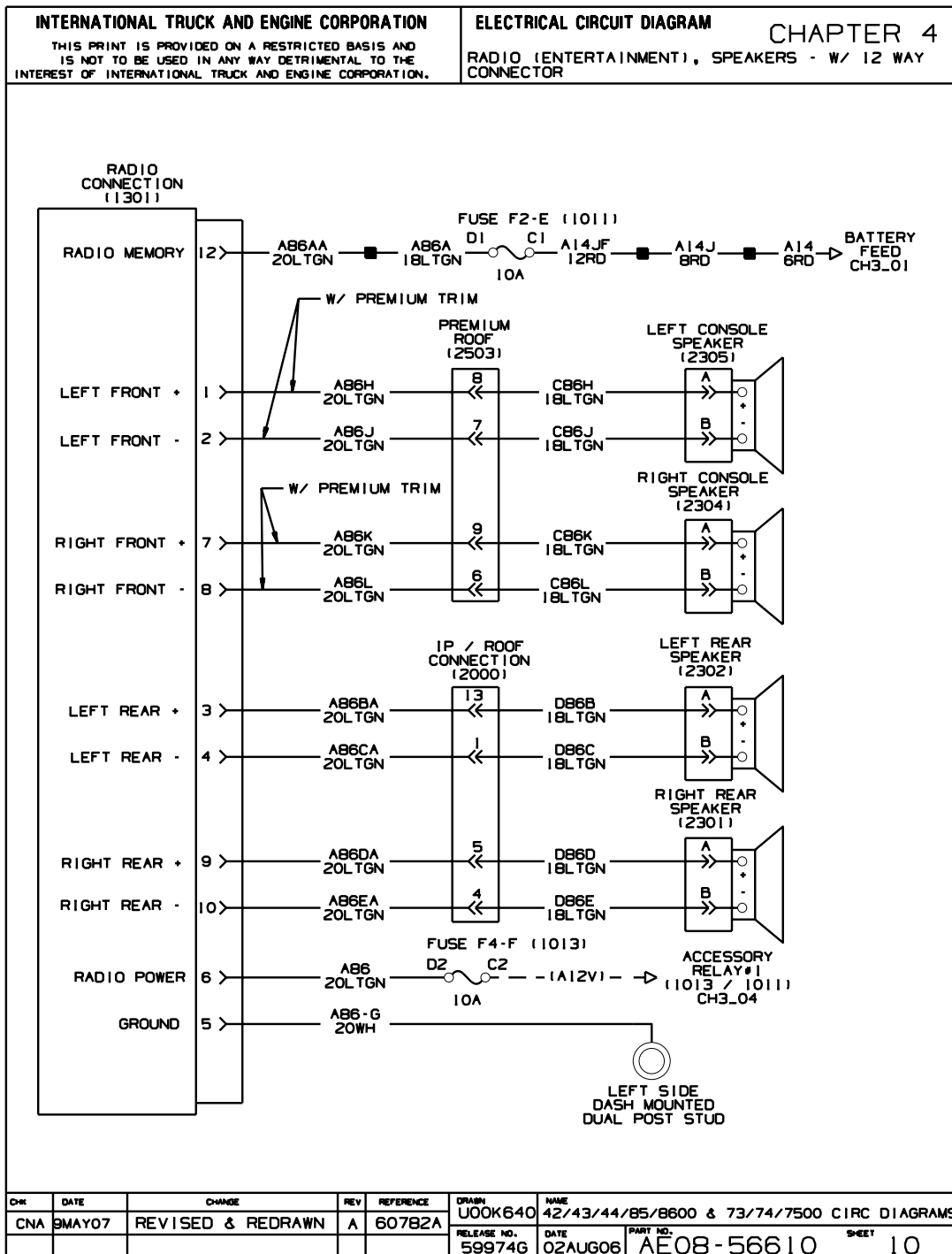


Figure 54 Radio (Entertainment), Speakers with 12 Way Conn

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

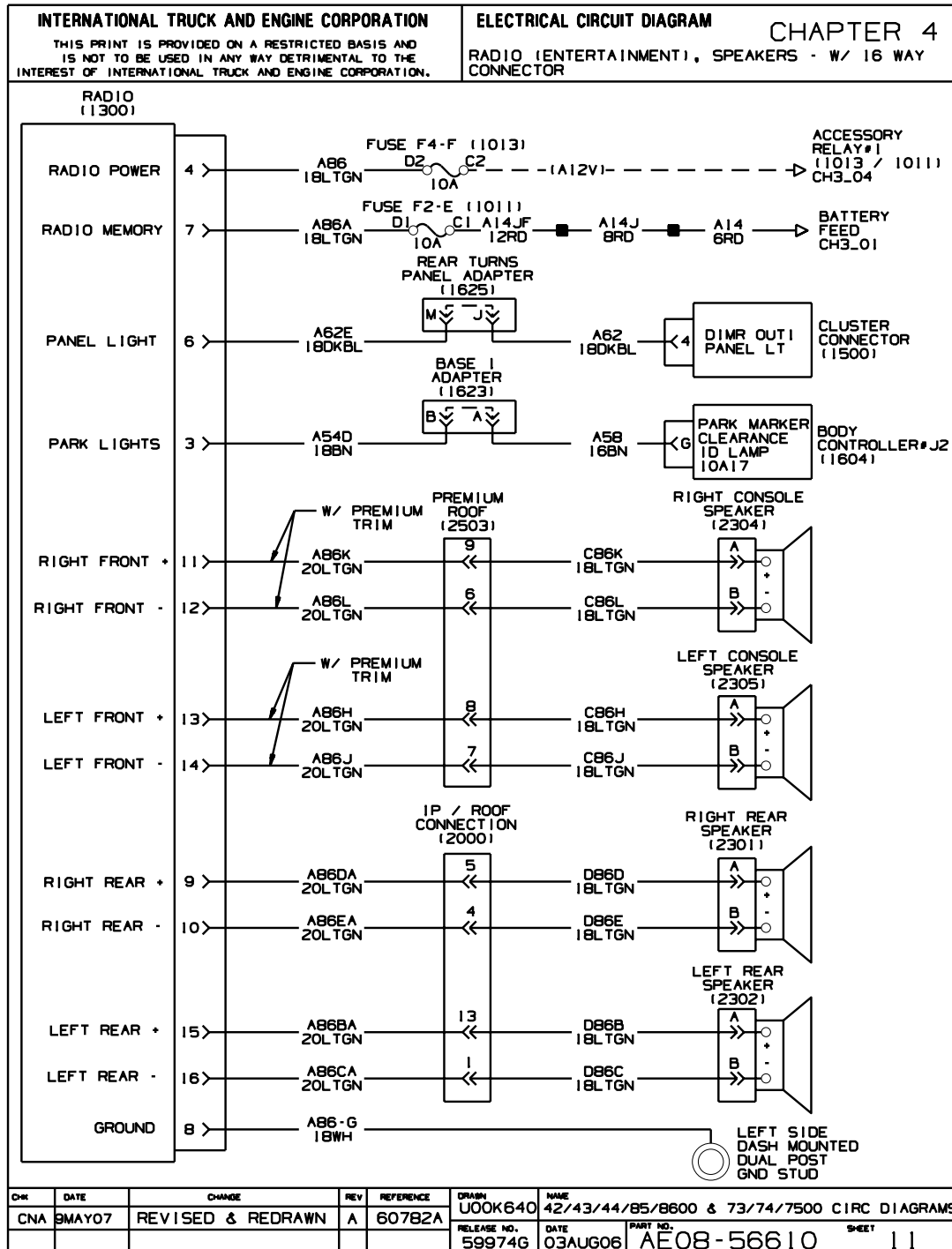


Figure 55 Radio (Entertainment), Speakers with 16 Way Connector

4.14. 2-WAY RADIO, P. 12

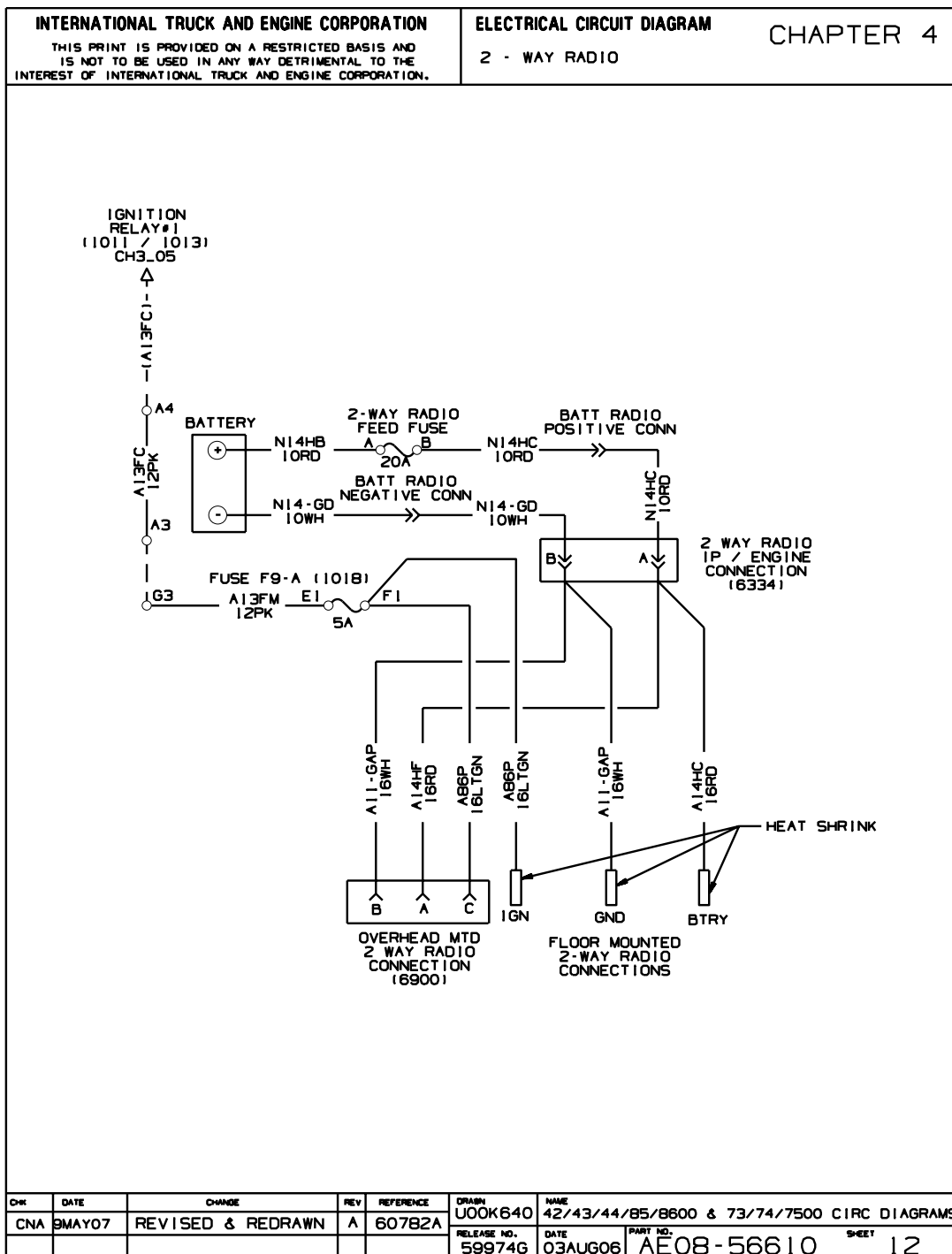


Figure 56 2-Way Radio

4.15. WINDSHIELD WIPER, P. 13

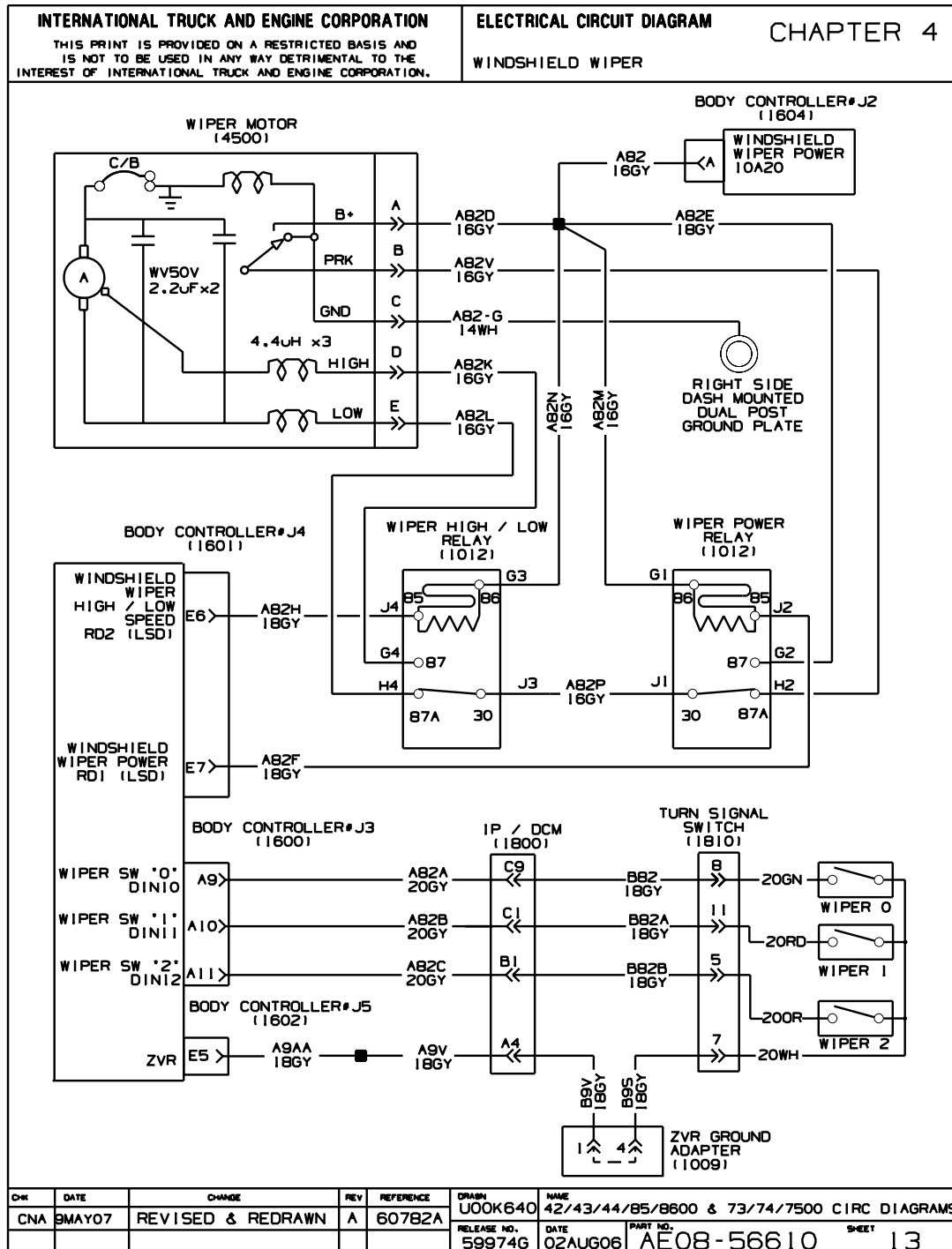


Figure 57 Windshield Wiper

4.16. WASHER PUMP, P. 14

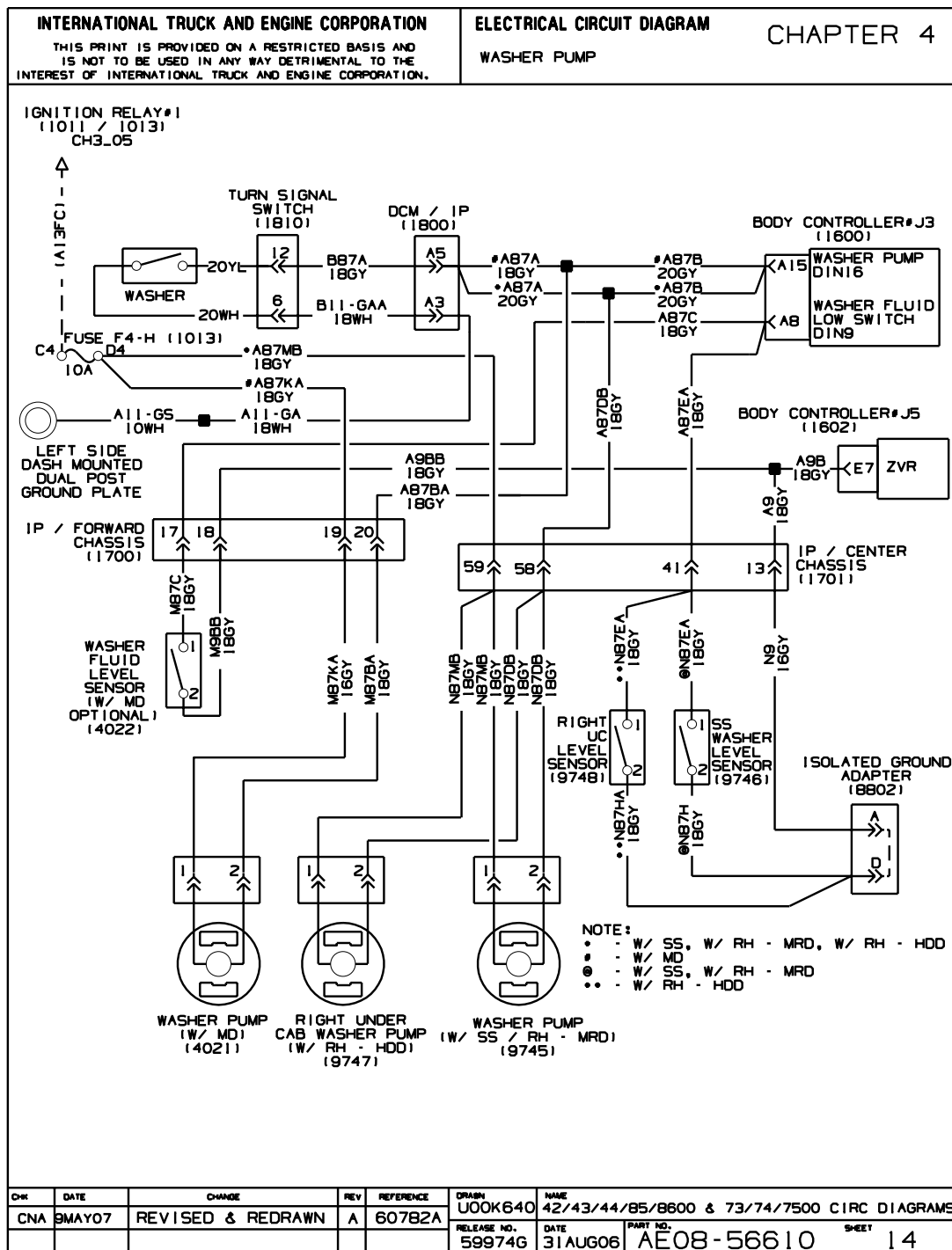


Figure 58 Washer Pump

4.17. SWITCH PACK OPTIONAL GAUGE PACK, P. 15

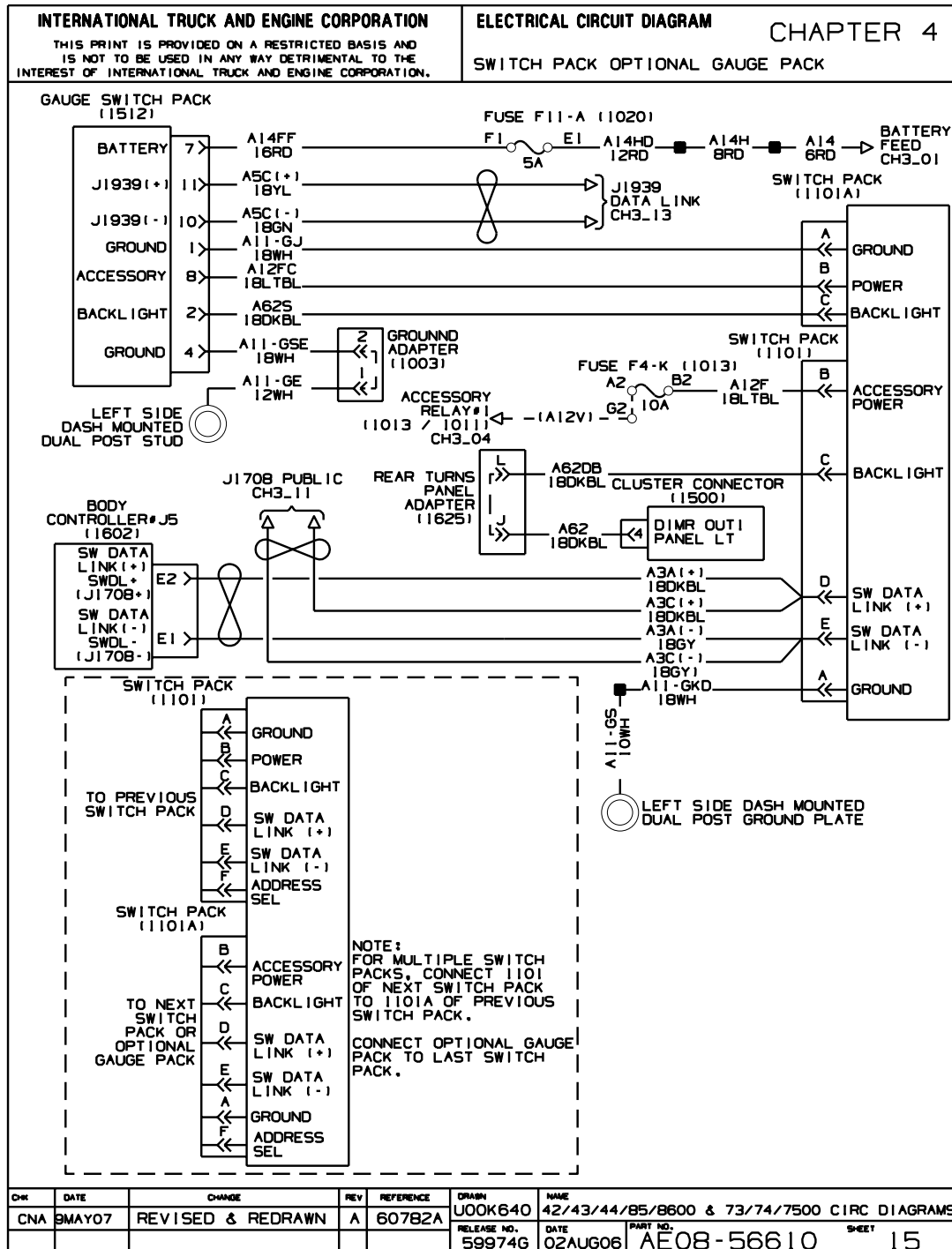


Figure 59 Switch Pack Optional Gauge Pack

4.18. ROOF AUXILIARY LOAD, P. 16

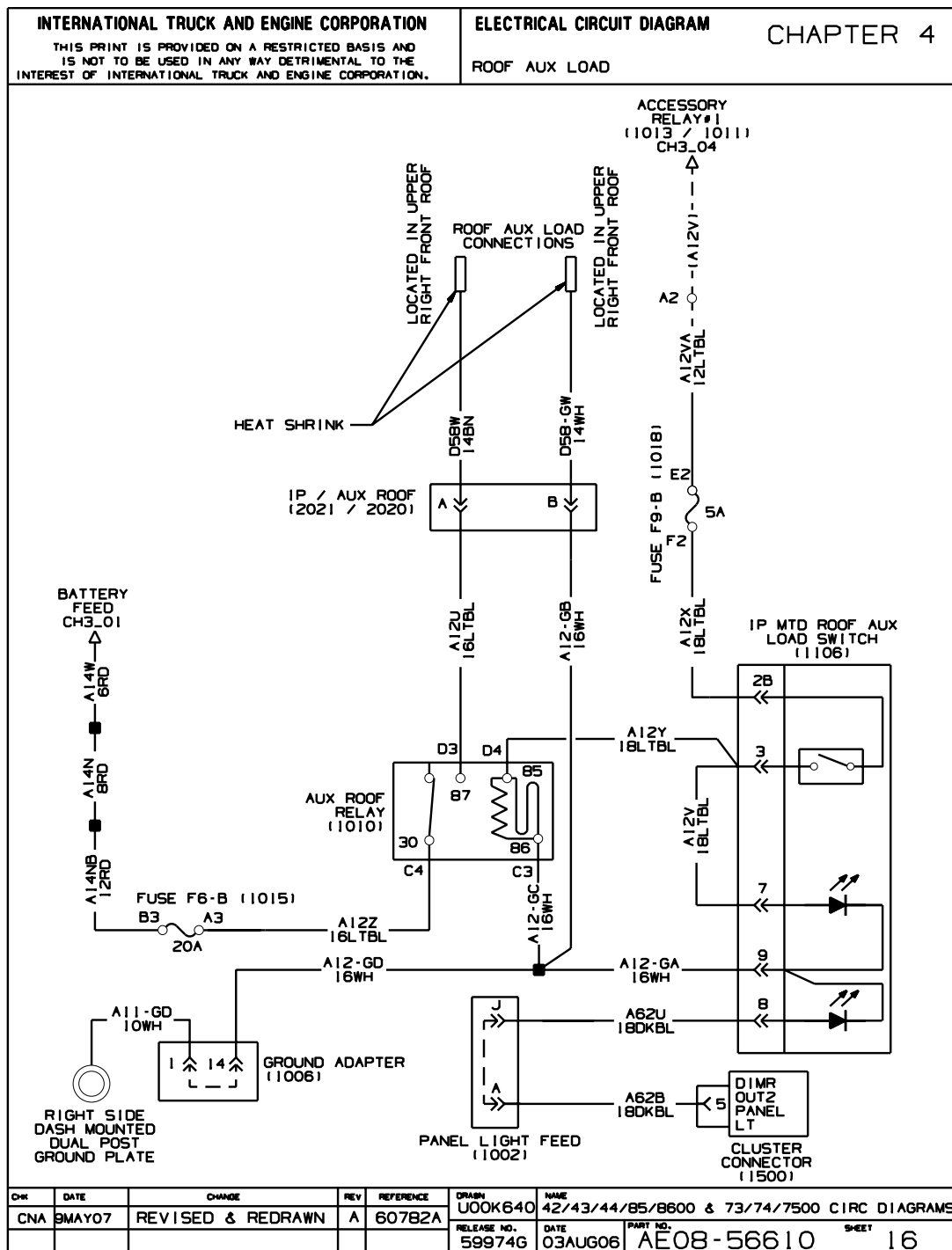


Figure 60 Roof Auxiliary Load

4.19. SATELLITE COMMUNICATION — QUALCOMM IMCT, P. 17

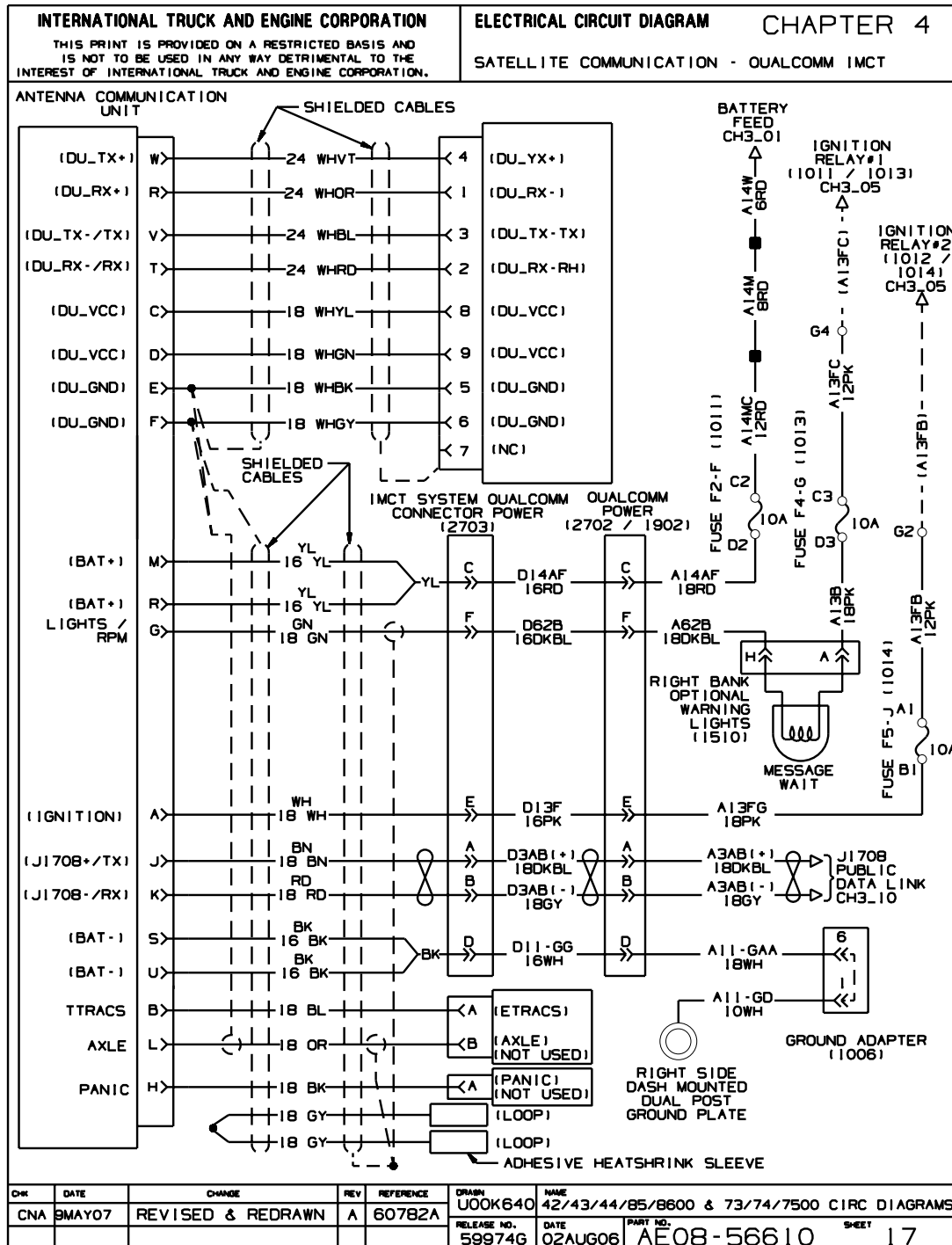


Figure 61 Satellite Communication — Qualcomm IMCT

4.20. SATELLITE COMMUNICATION — TRIPMASTER, P. 18

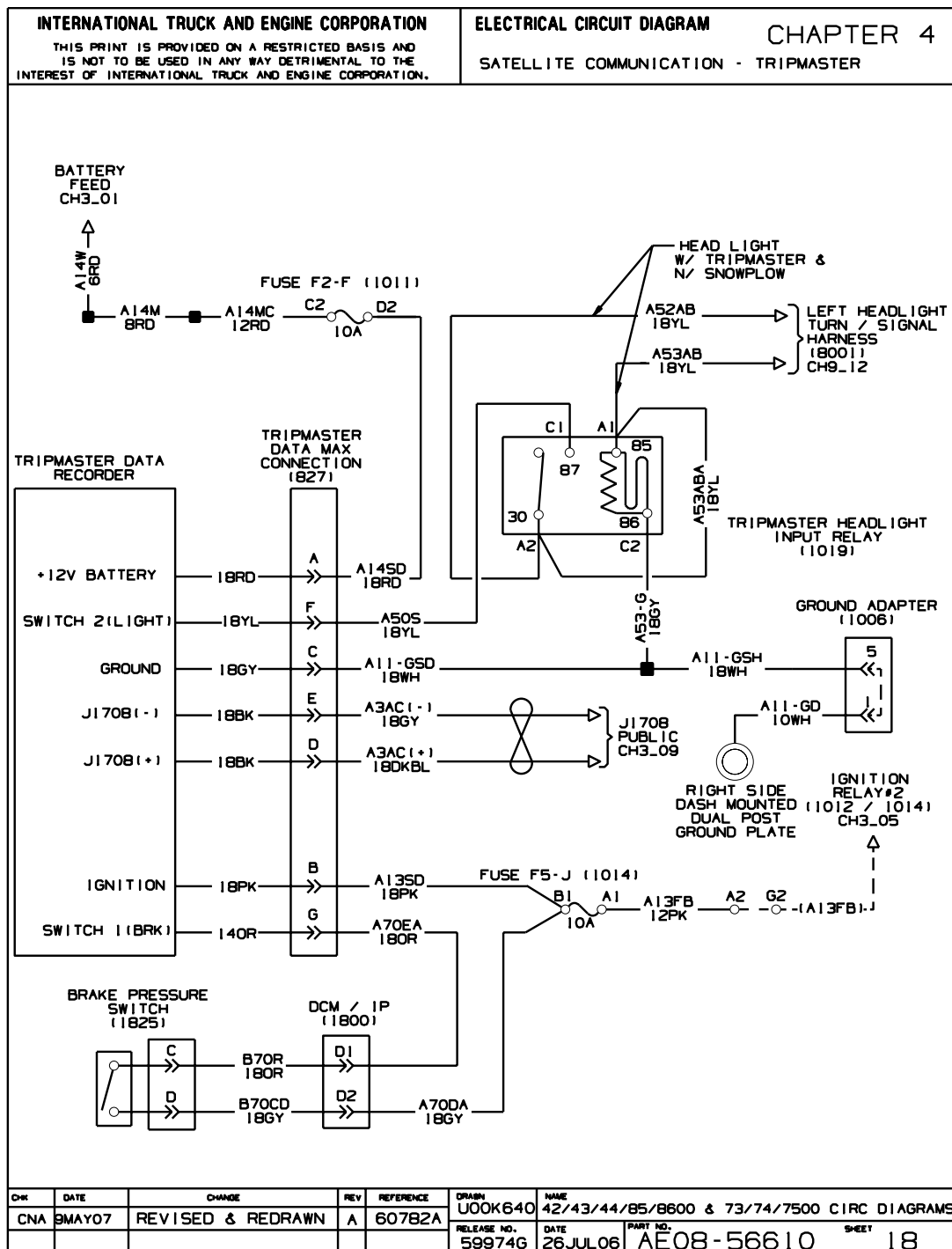


Figure 62 Satellite Communication — Tripmaster

4.21. COMPUTER PREWIRED — XATA SYSTEM, P. 19

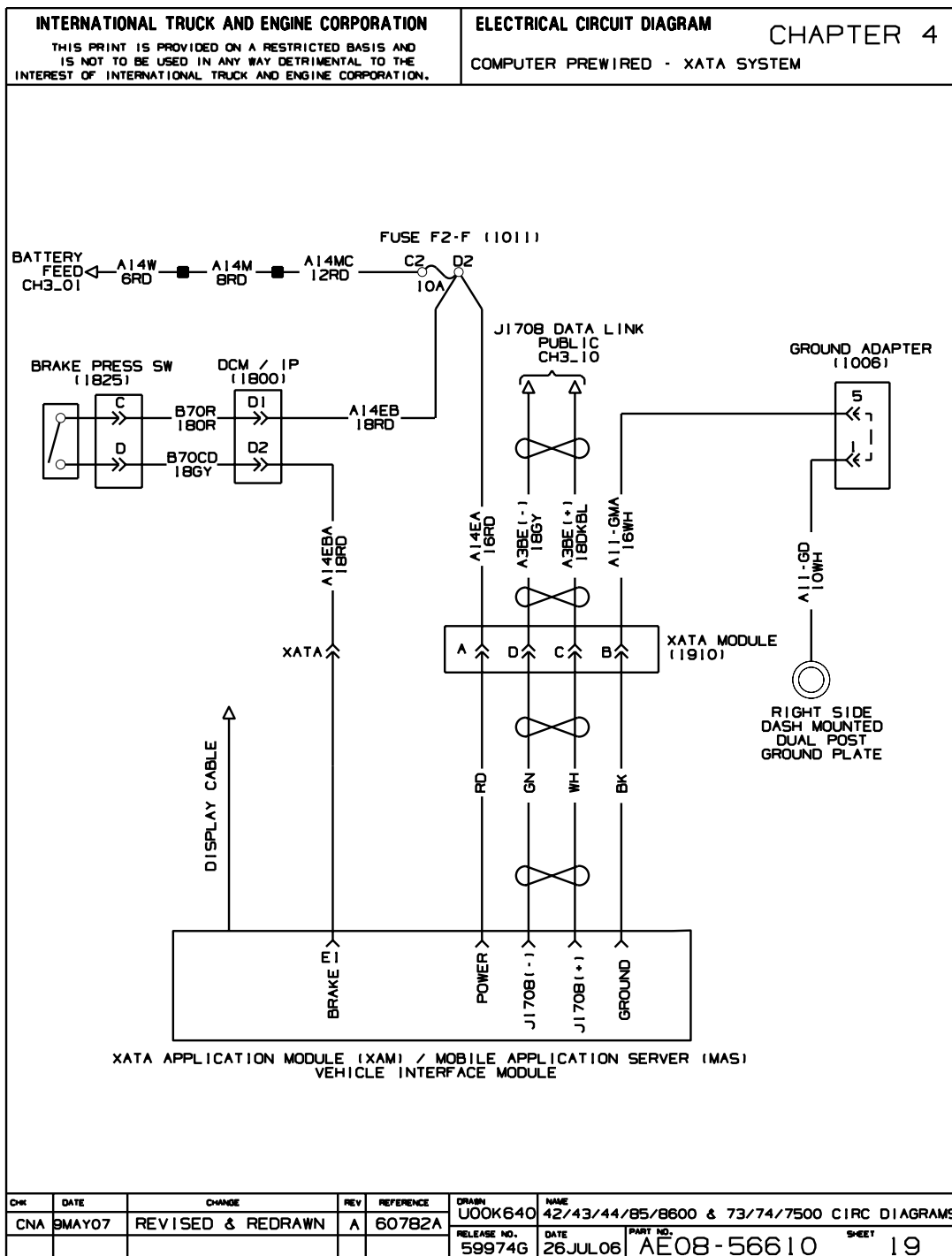


Figure 63 Computer Prewired — XATA System

4.22. CADEC GPS SYSTEM, P. 20

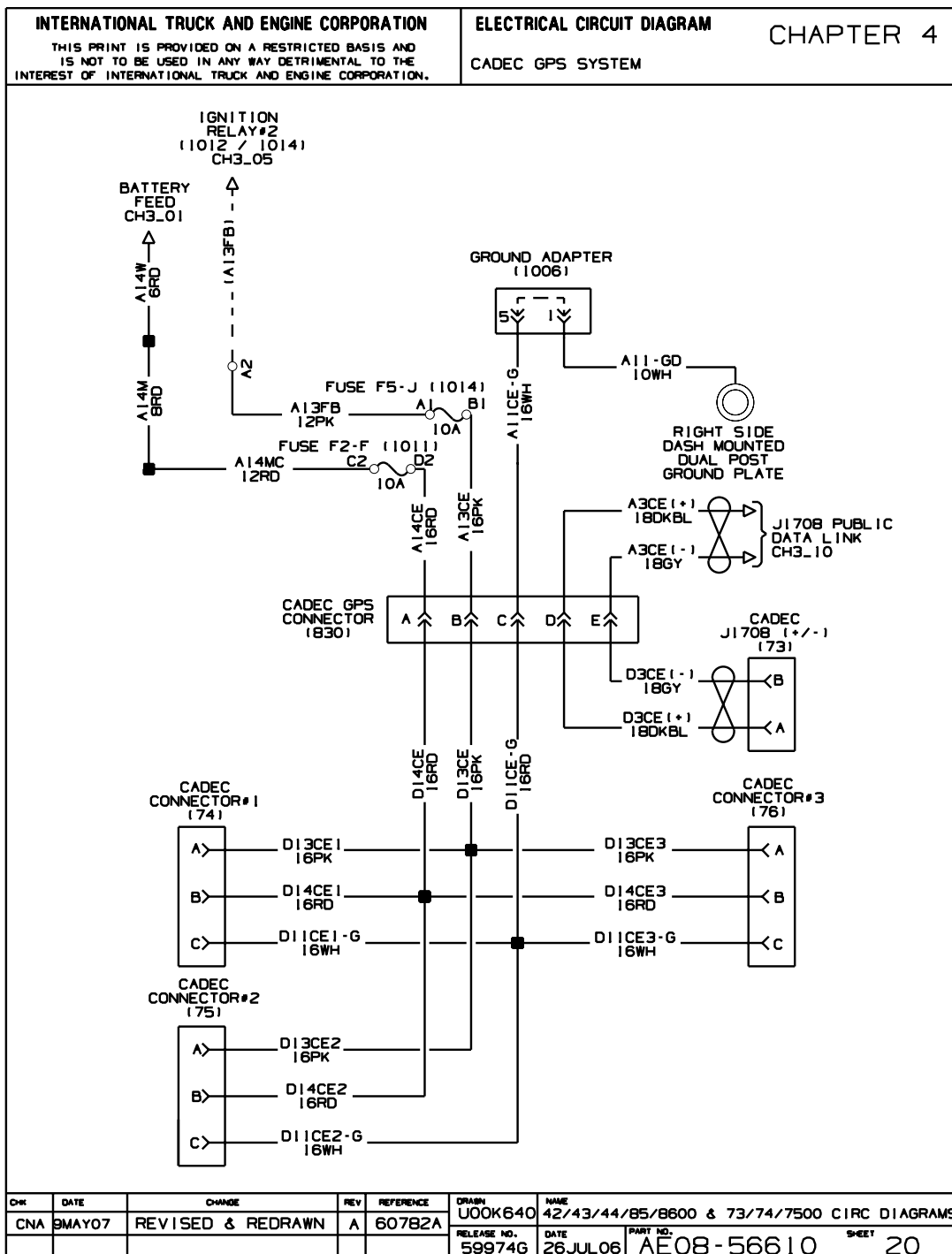
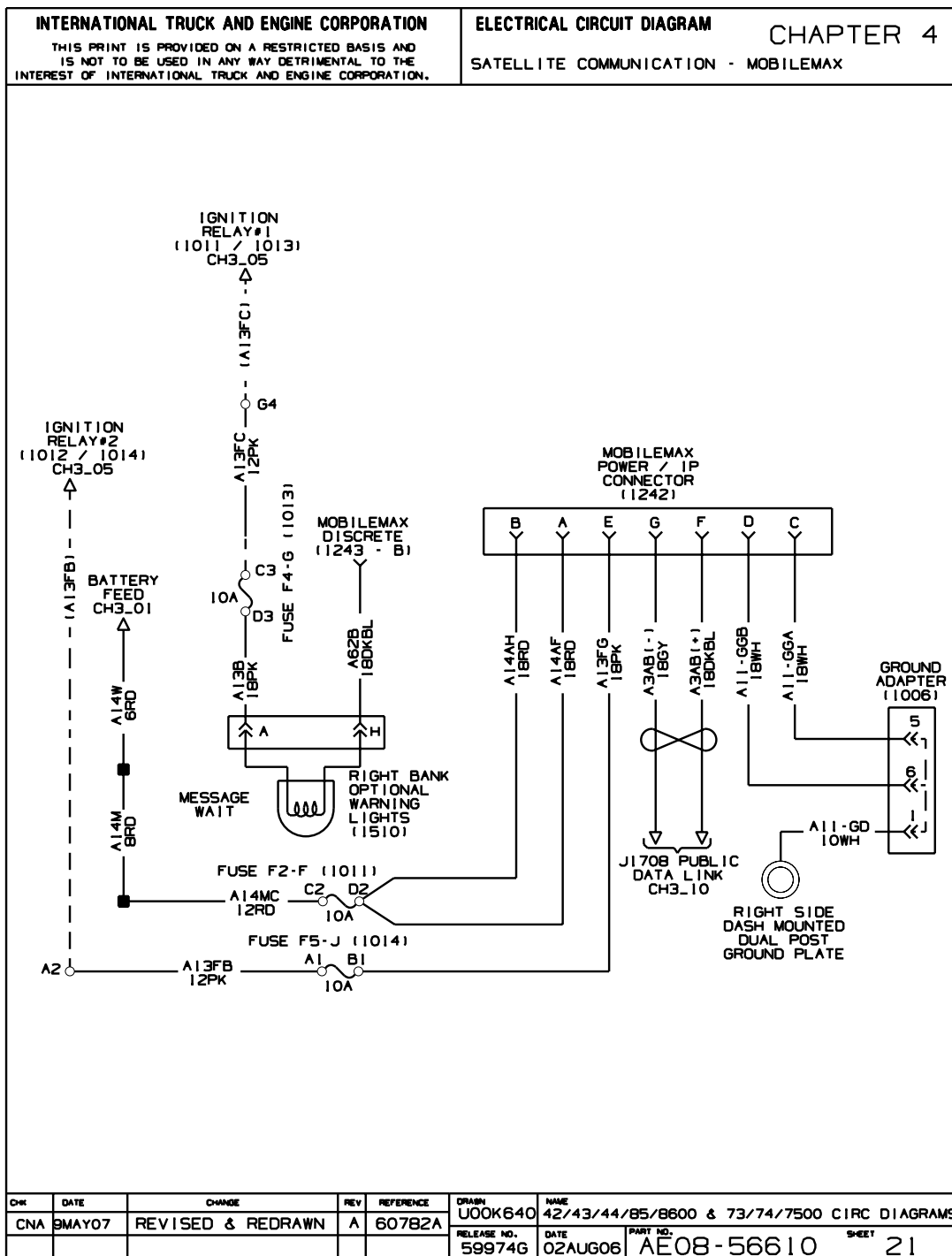


Figure 64 Cadec GPS System

4.23. SATELLITE COMMUNICATION — MOBILEMAX, P. 21



4.24. SELF CONTAINED AIR SEAT, P. 22

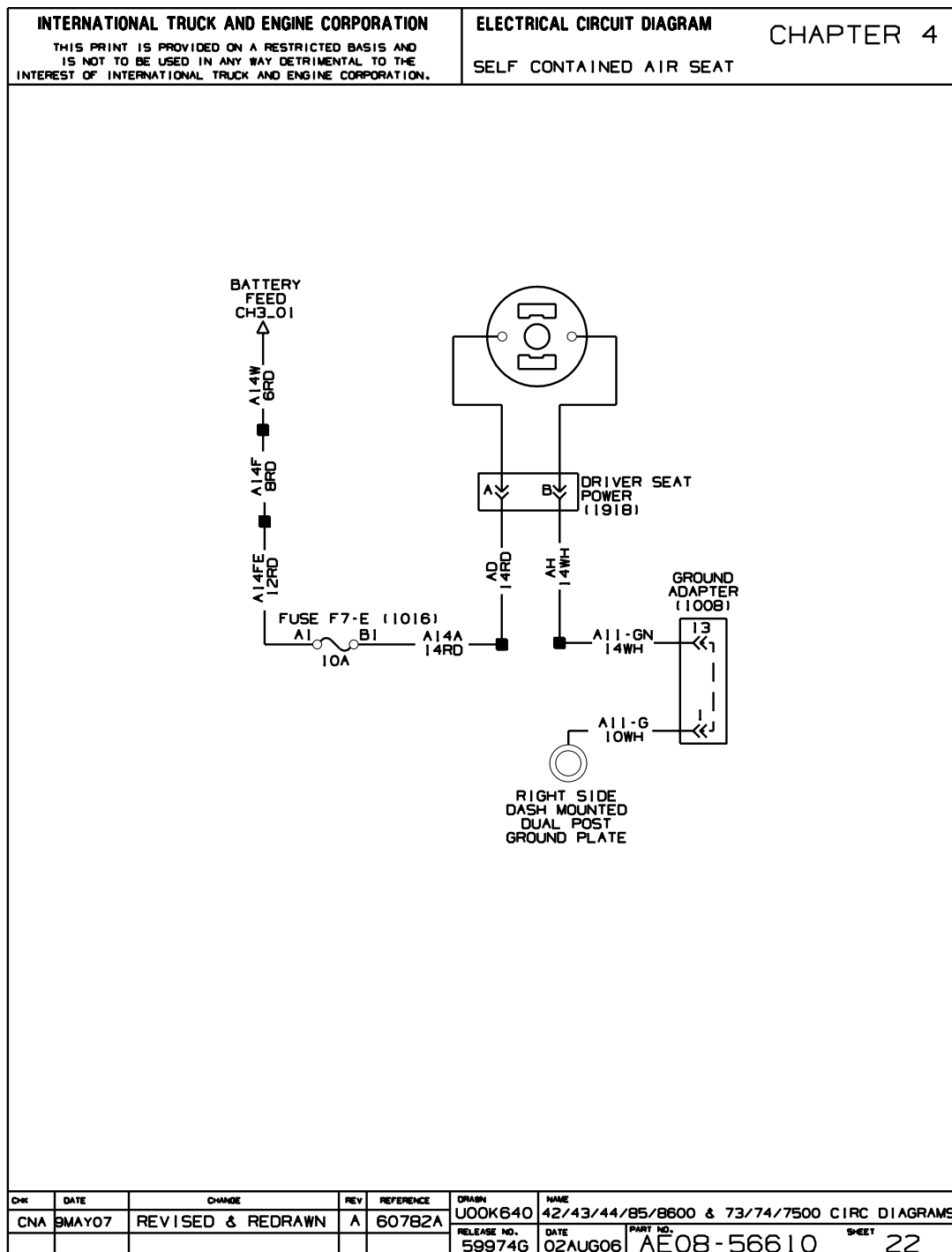


Figure 66 Self Contained Air Seat

4.25. HEATED SEATS, P. 23

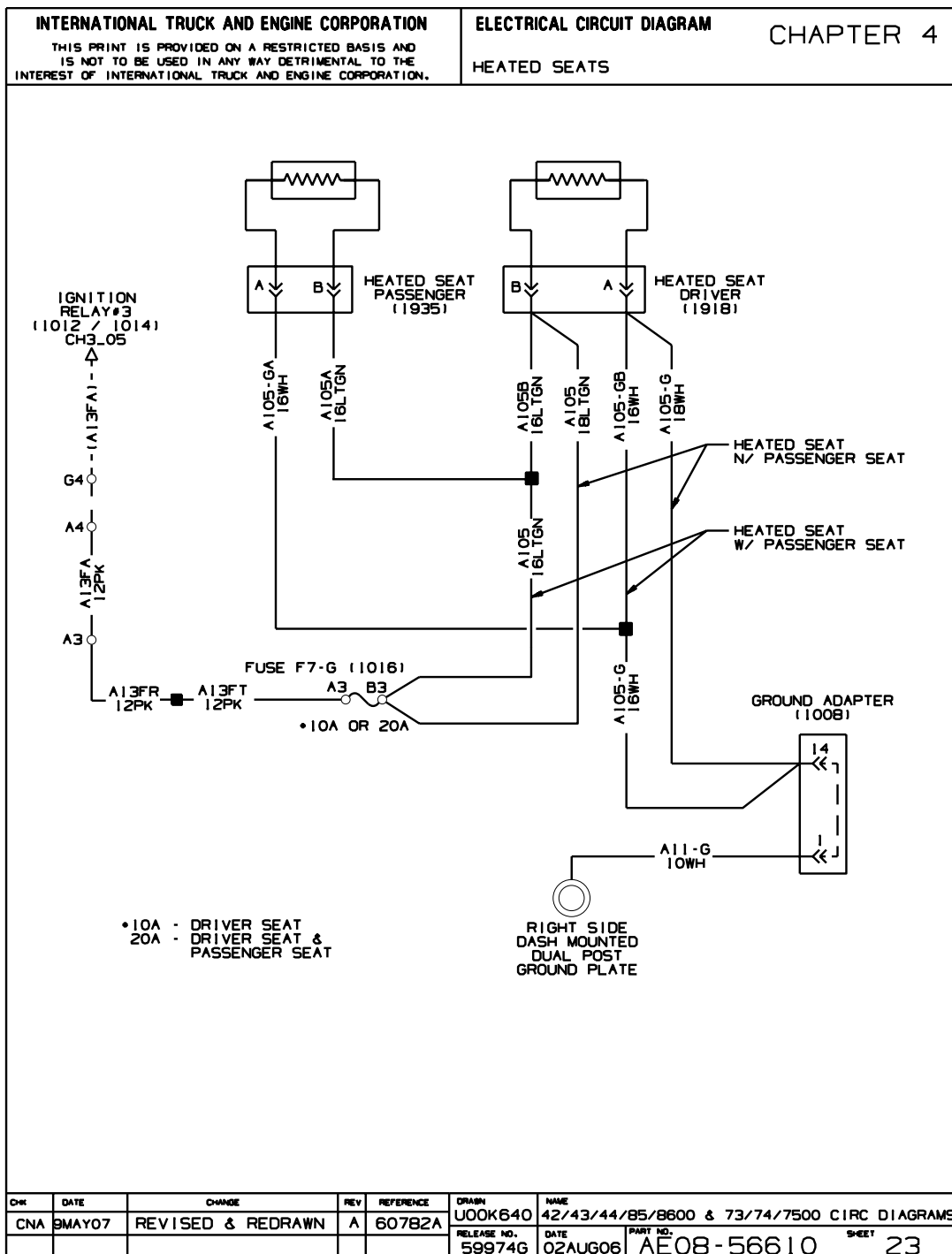


Figure 67 Heated Seats

4.26. TELEMATICS SYSTEM, P. 24

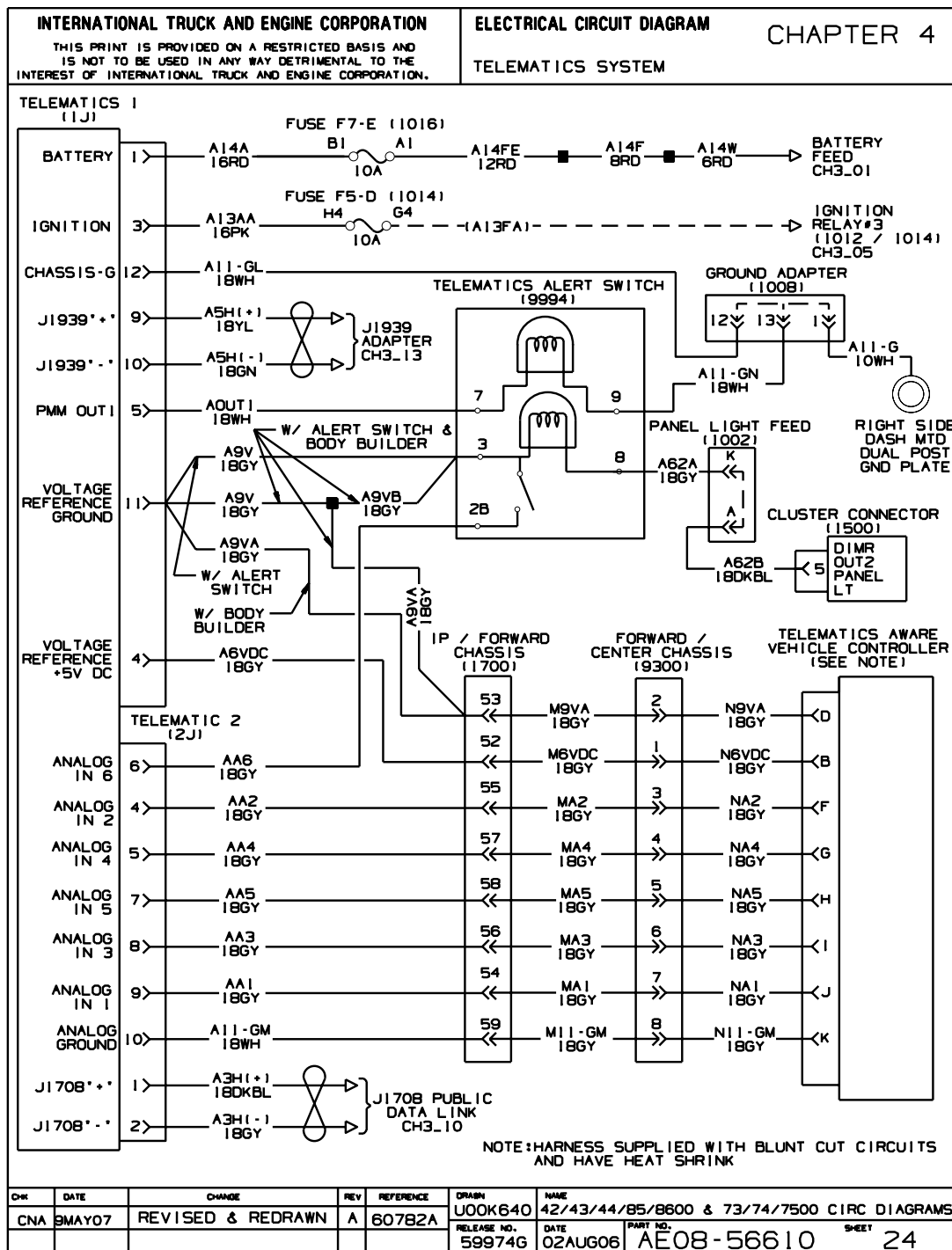


Figure 68 Telematics System

4.27. EATON VORAD COLLISION AVOIDANCE SYSTEM, P. 25

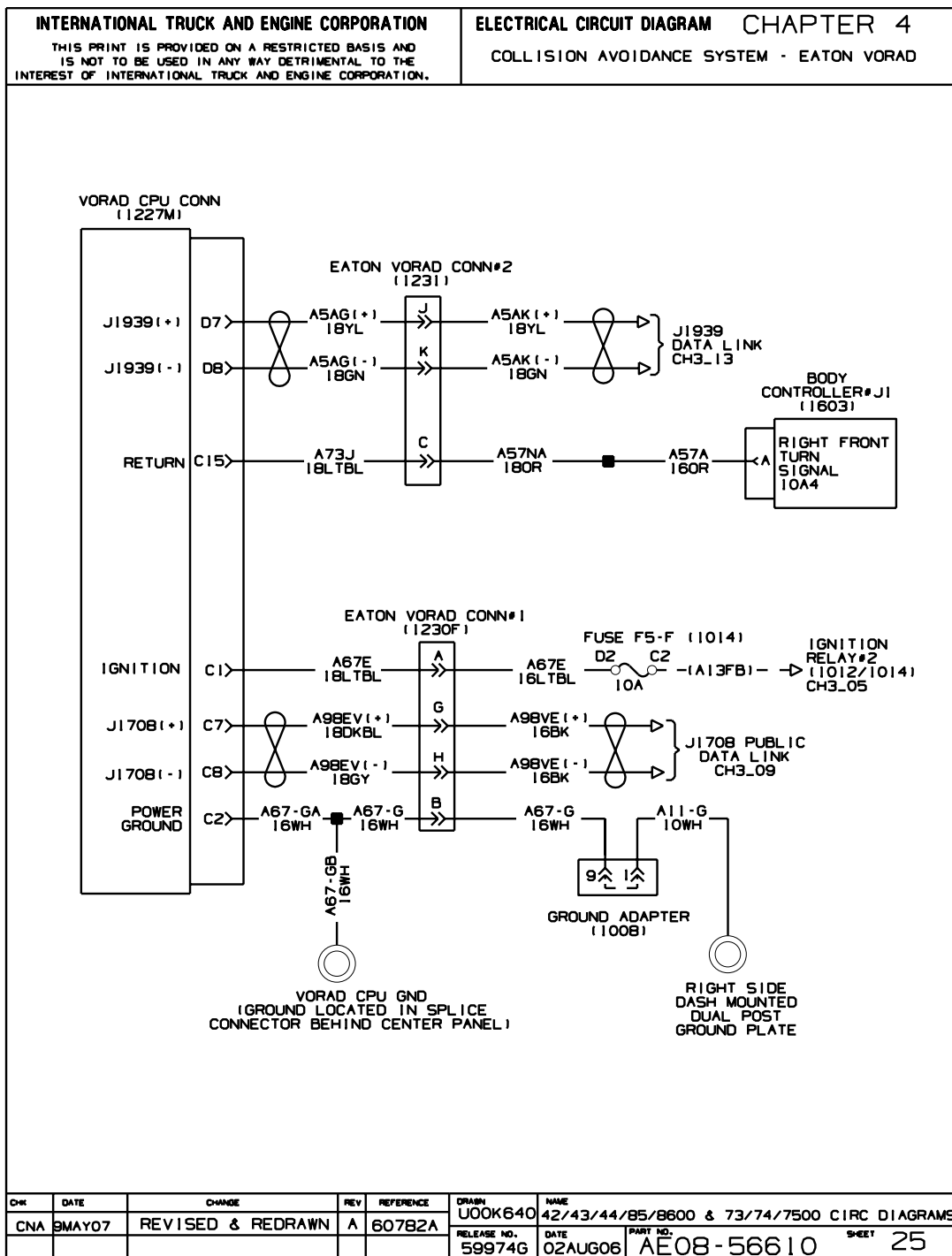


Figure 69 Eaton Vorad Collision Avoidance System

4.28. EATON VORAD COLLISION AVOIDANCE SYSTEM, P. 26

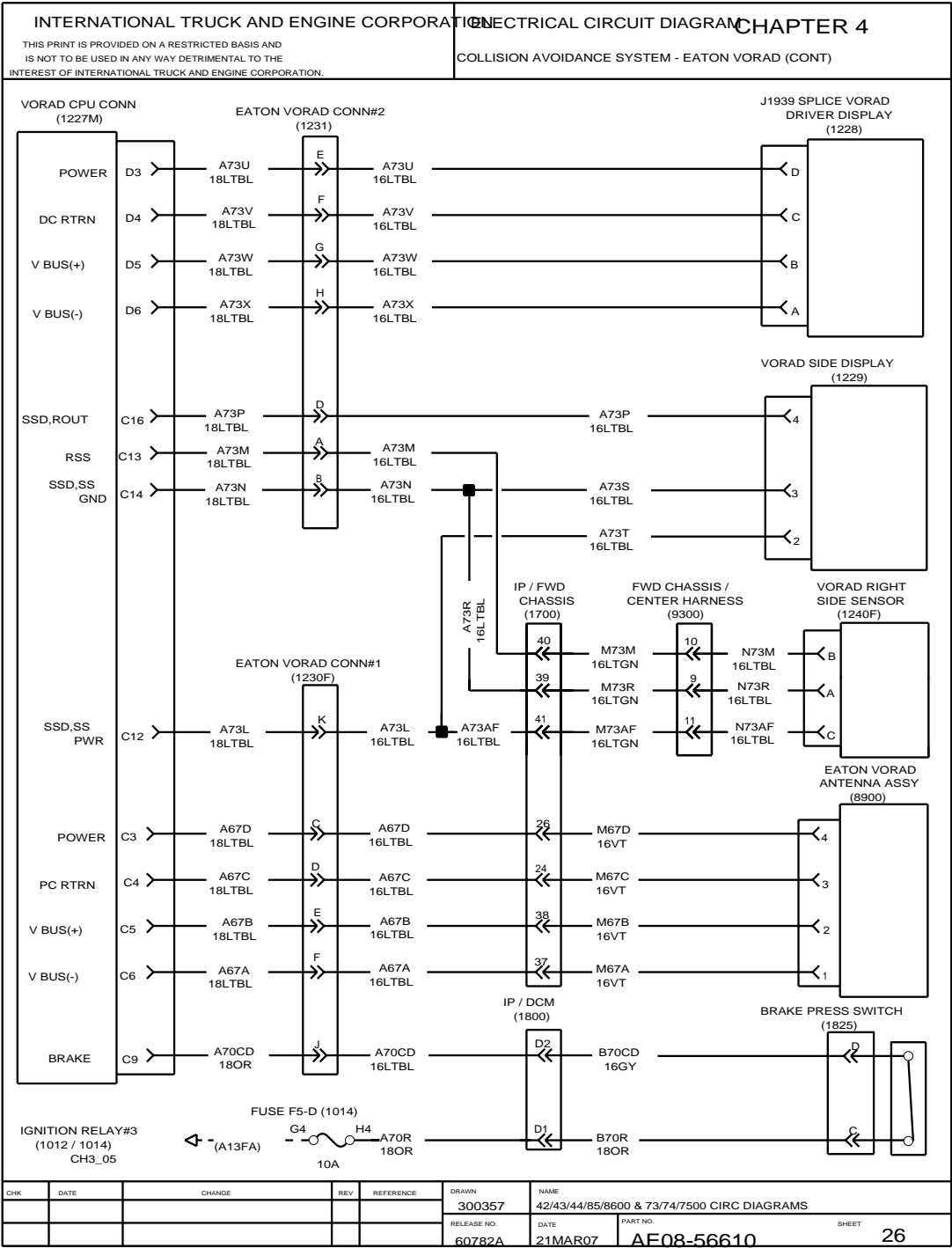


Figure 70 Eaton Vorad Collision Avoidance System

4.29. DRIVER DISPLAY, P. 27

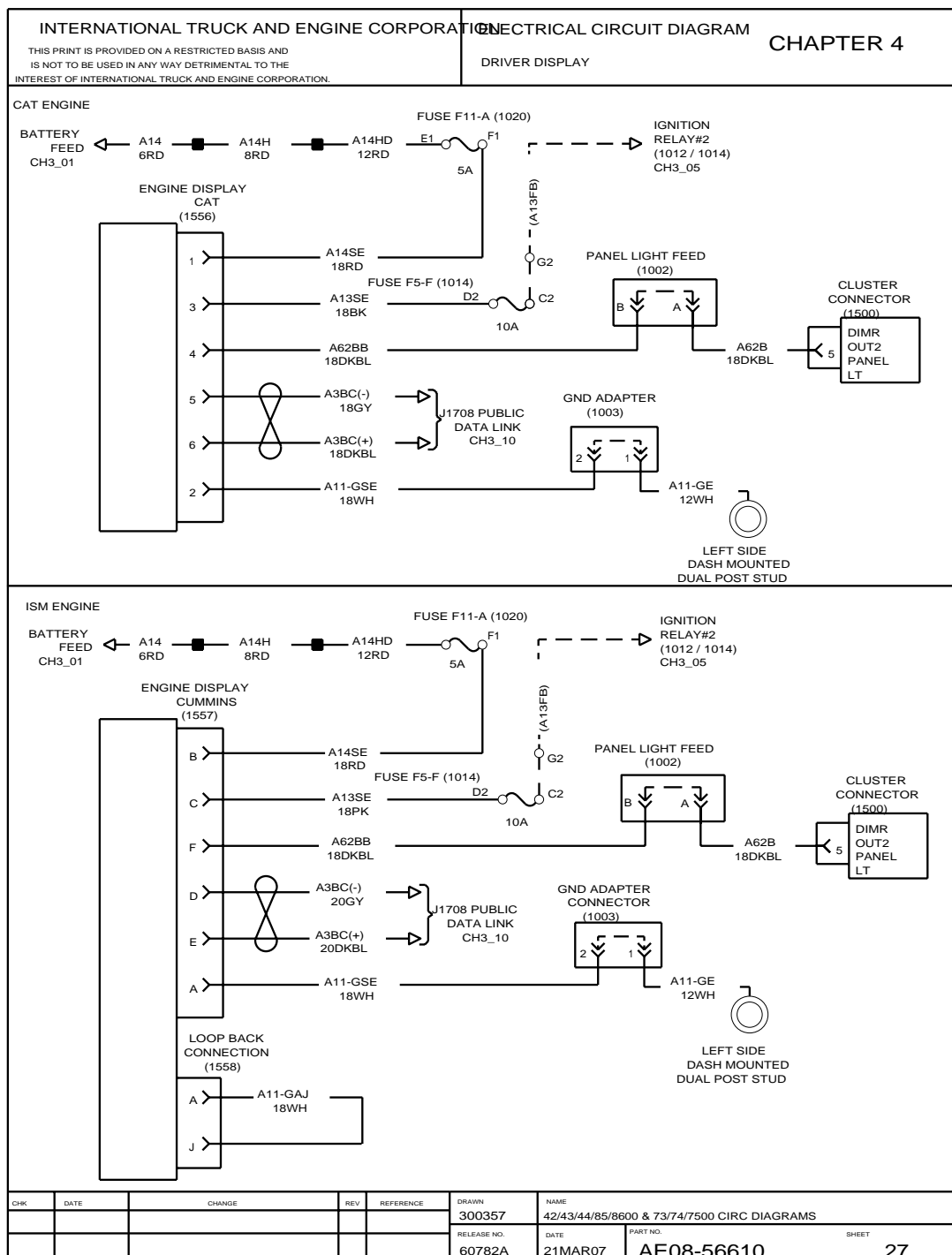


Figure 71 Driver Display

4.30. BACK-UP CAMERA, P. 28

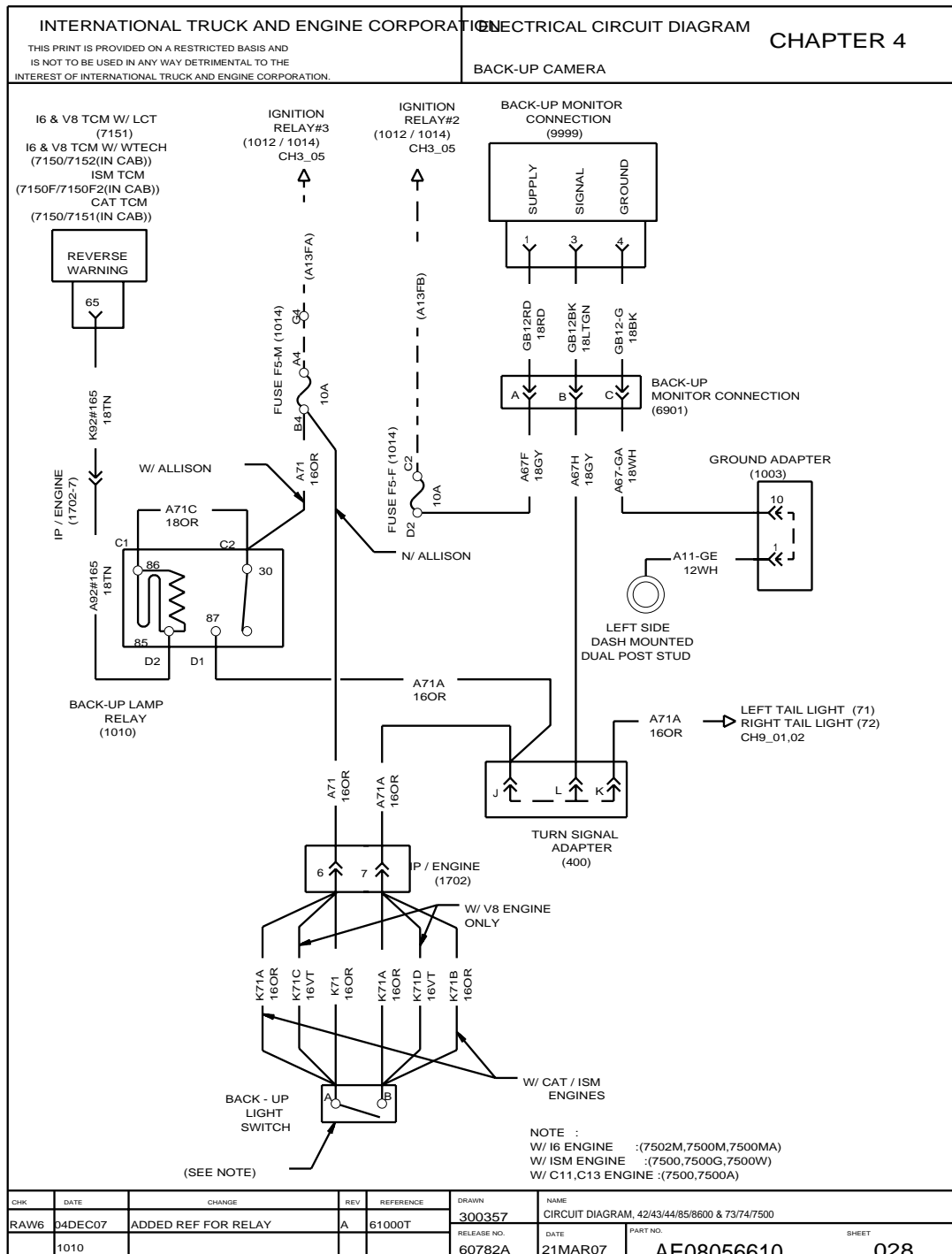


Figure 72 Back-Up Camera

4.31. SATELLITE COMMUNICATION — QUALCOMM MCT, P. 29

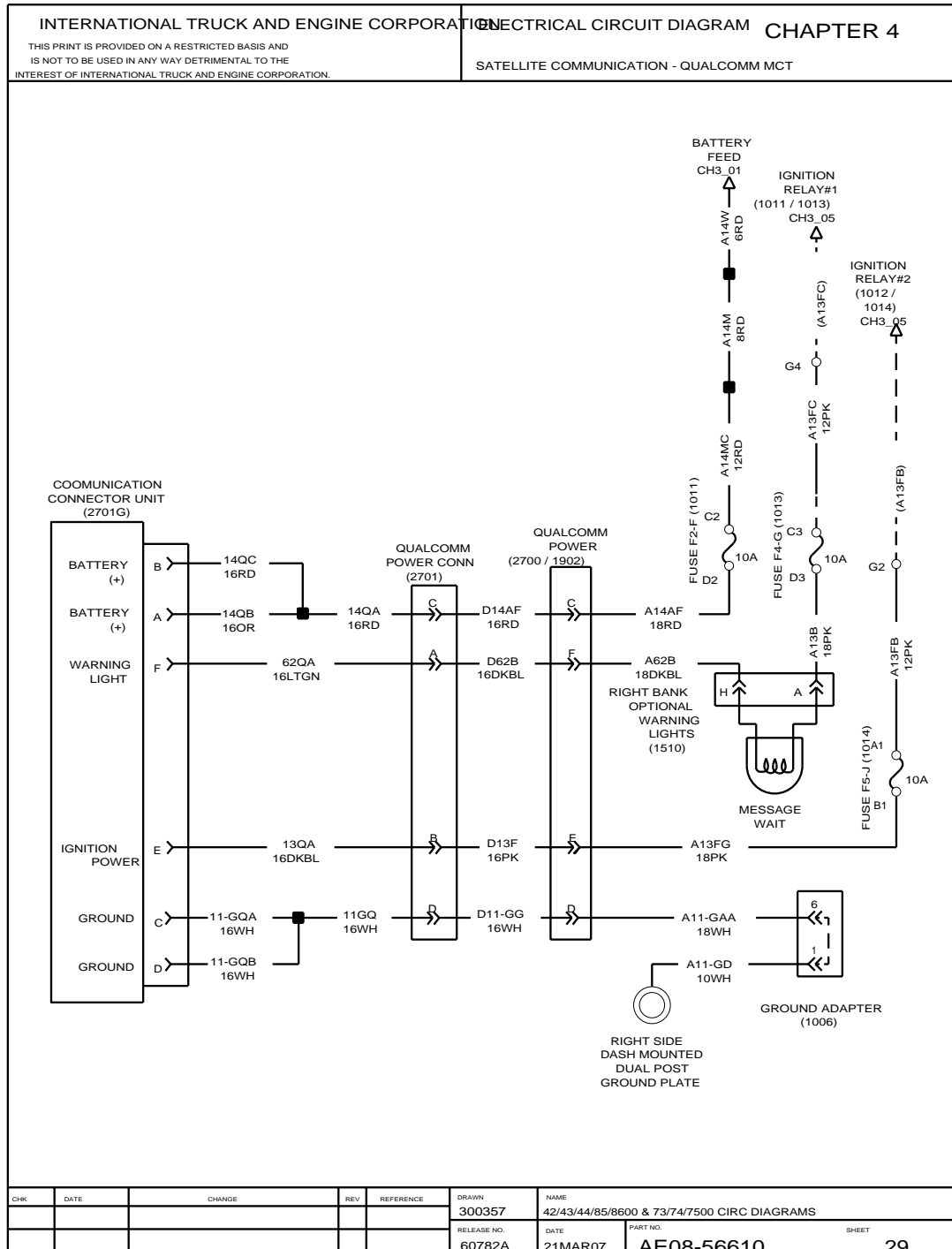
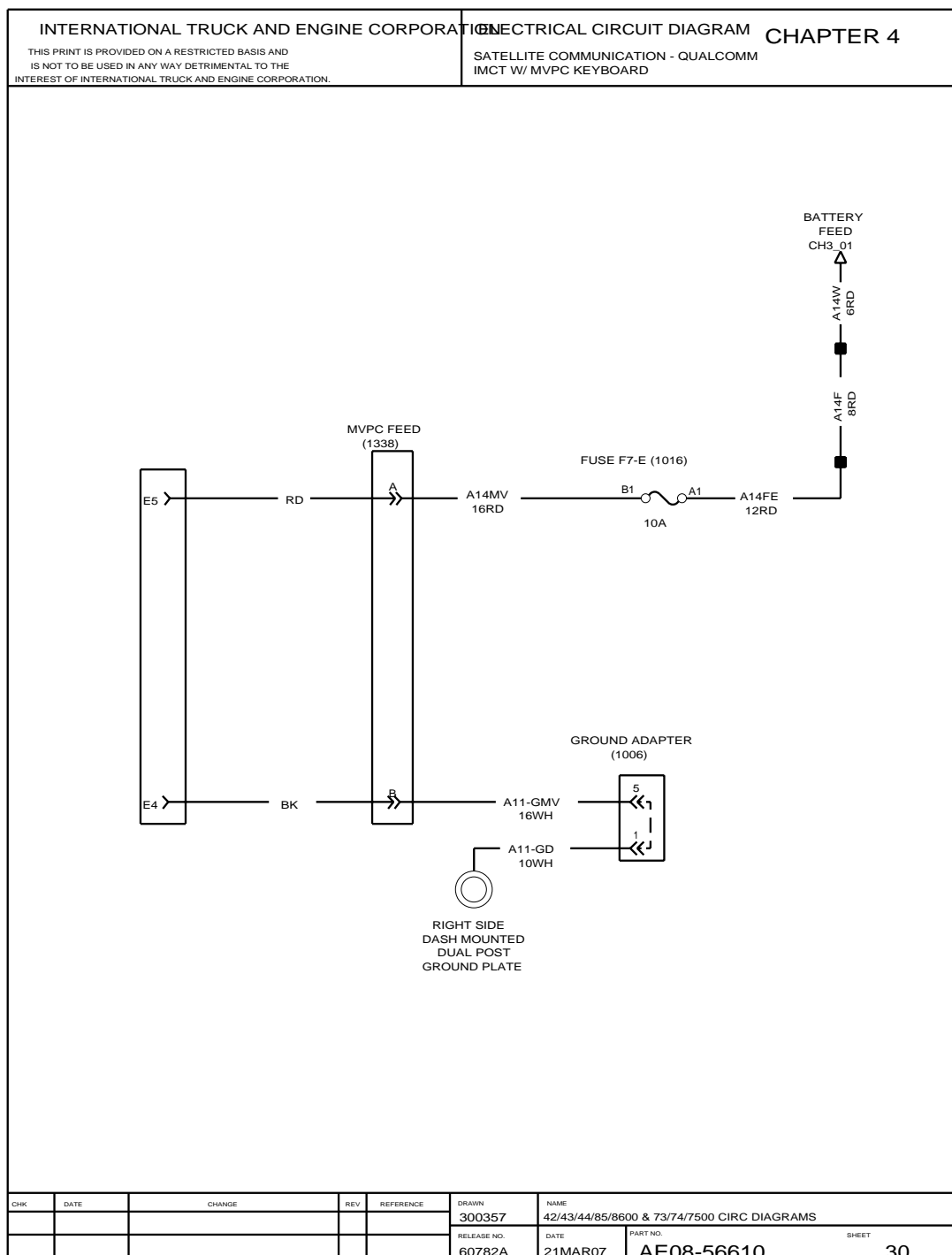


Figure 73 Satellite Communication — Qualcomm MCT

**4.32. SATELLITE COMMUNICATION — QUALCOMM MCT WITH MVPC KEYBOARD,
P. 30****Figure 74 Satellite Communication — Qualcomm MCT with MVPC Keyboard**

4.33. SATELLITE COMMUNICATION — QUALCOMM TMCT, P. 31

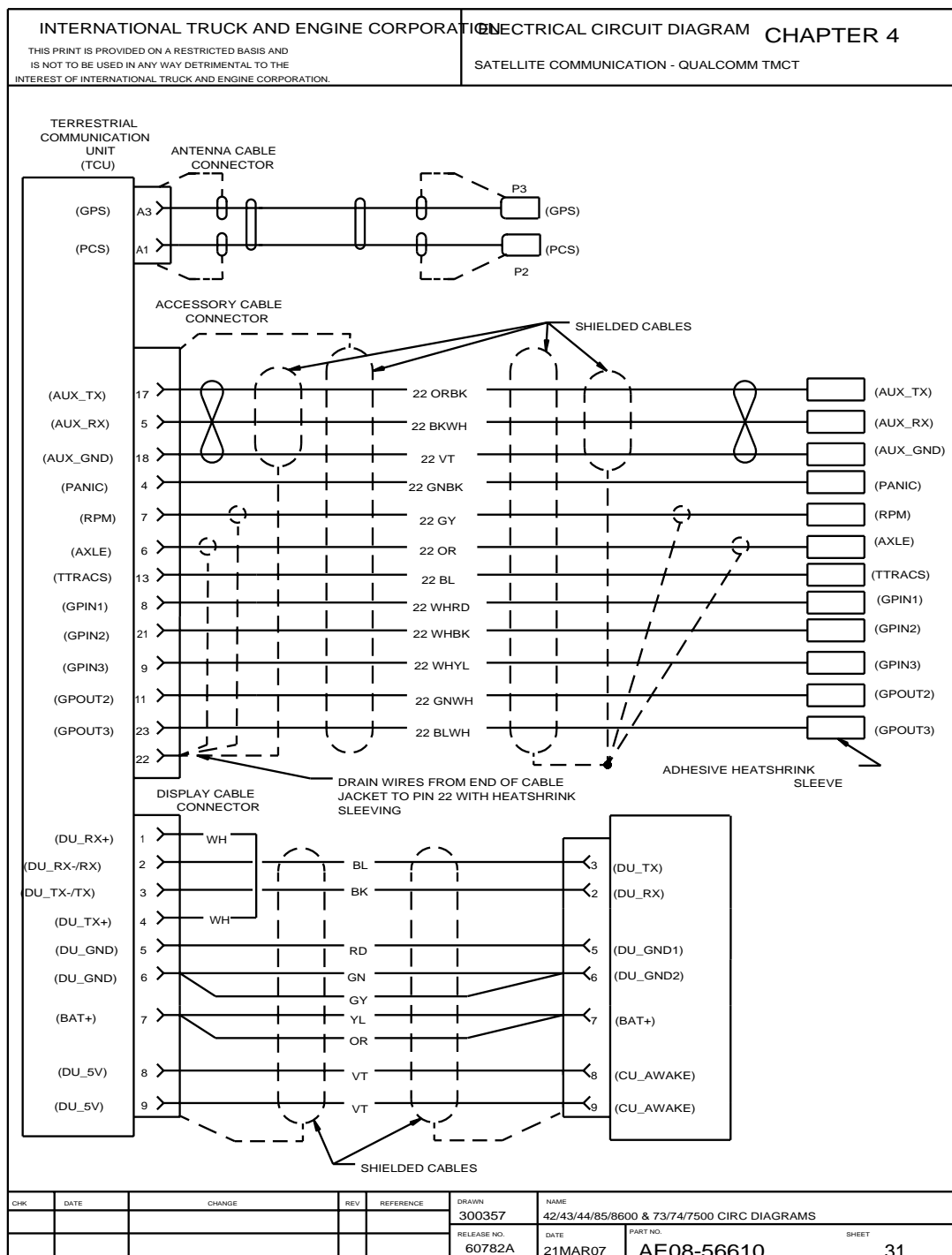


Figure 75 Satellite Communication — Qualcomm TMCT

4.34. SATELLITE COMMUNICATION — QUALCOMM TMCT, P. 32

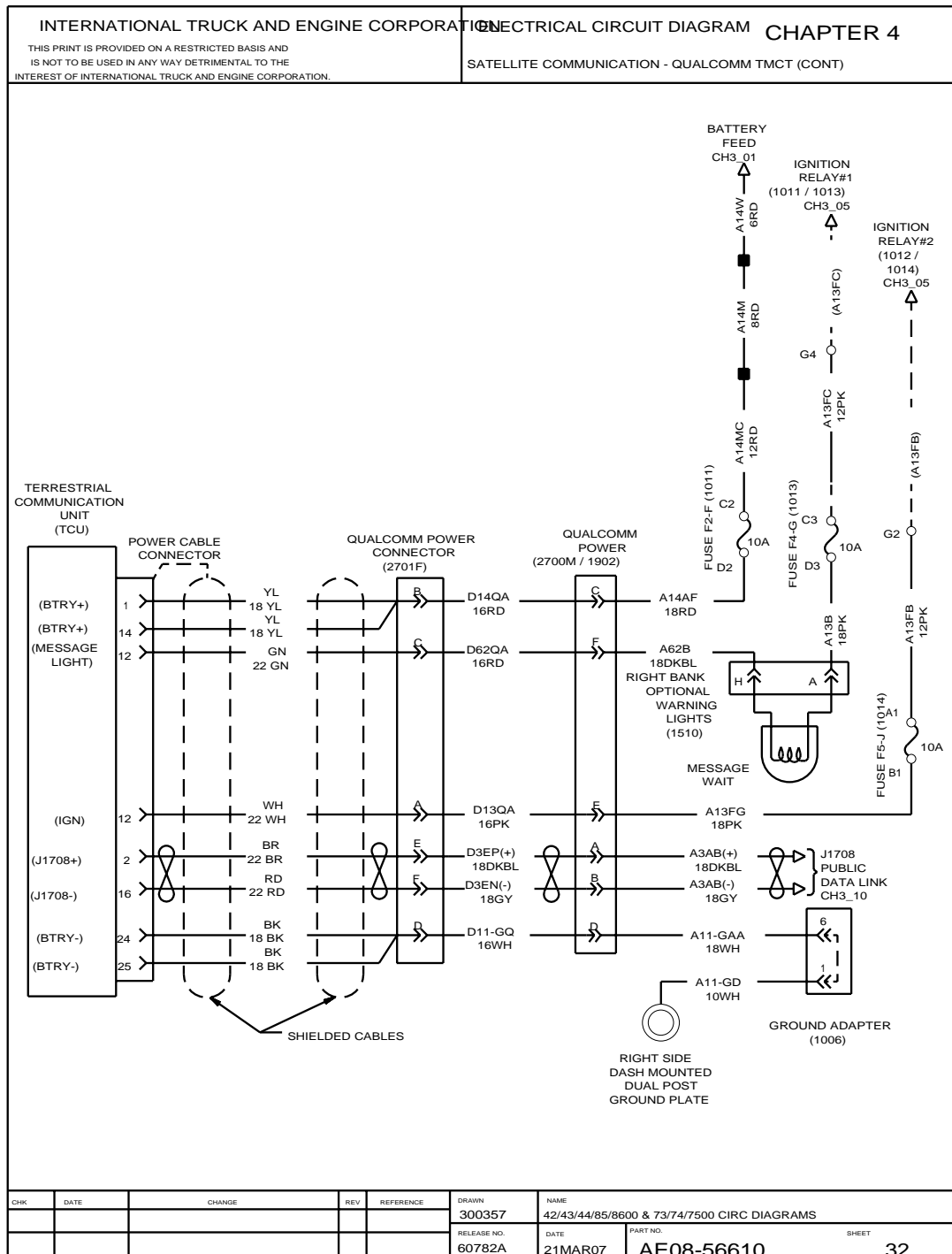


Figure 76 Satellite Communication — Qualcomm TMCT

4.35. AIR SHIELD LIGHT, P. 33

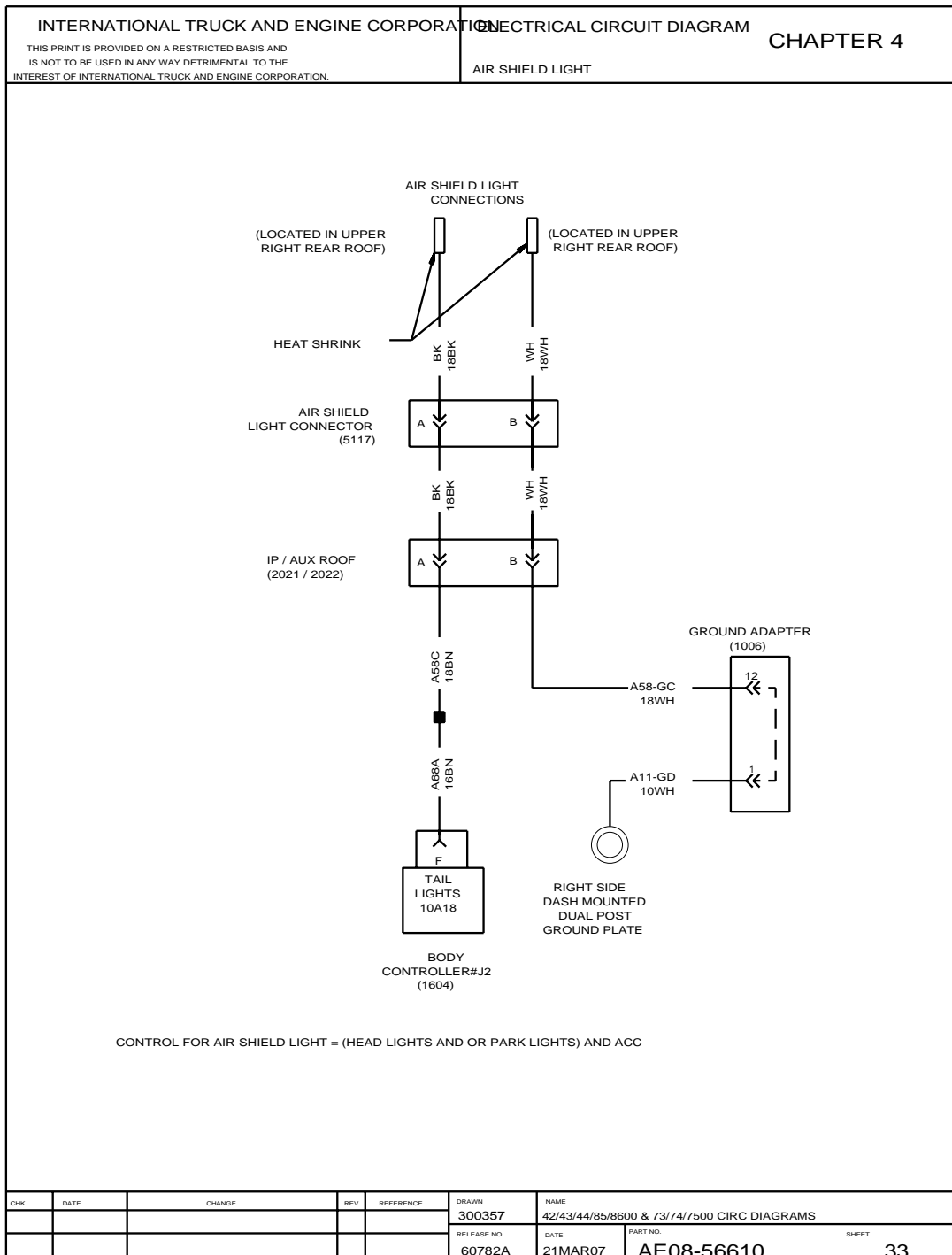


Figure 77 Air Shield Light

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

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

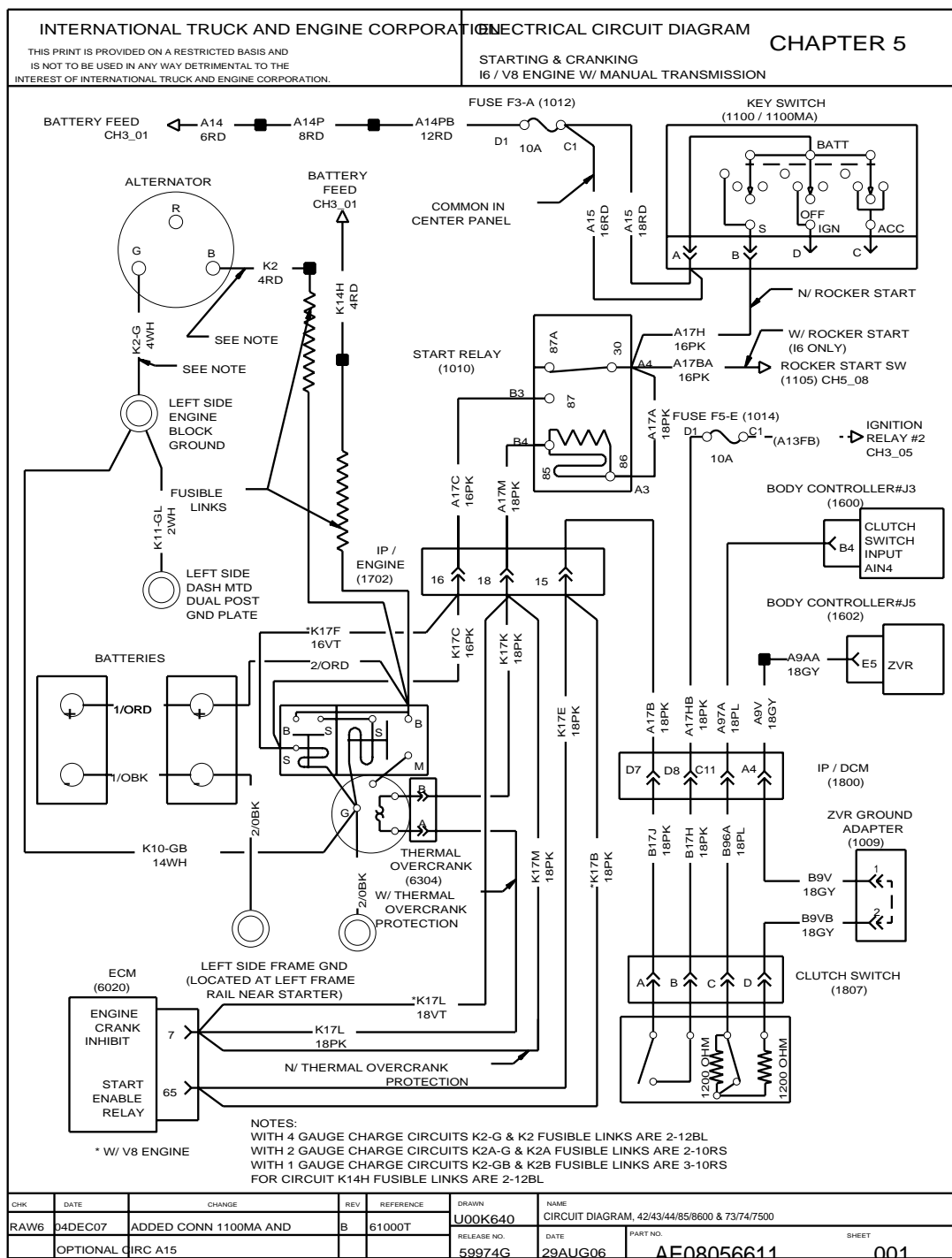


Figure 78 I6 / V8 Engines with Manual Transmission

5.2. CAT — CUMMINS ENGINES WITH MANUAL TRANSMISSION, P. 2

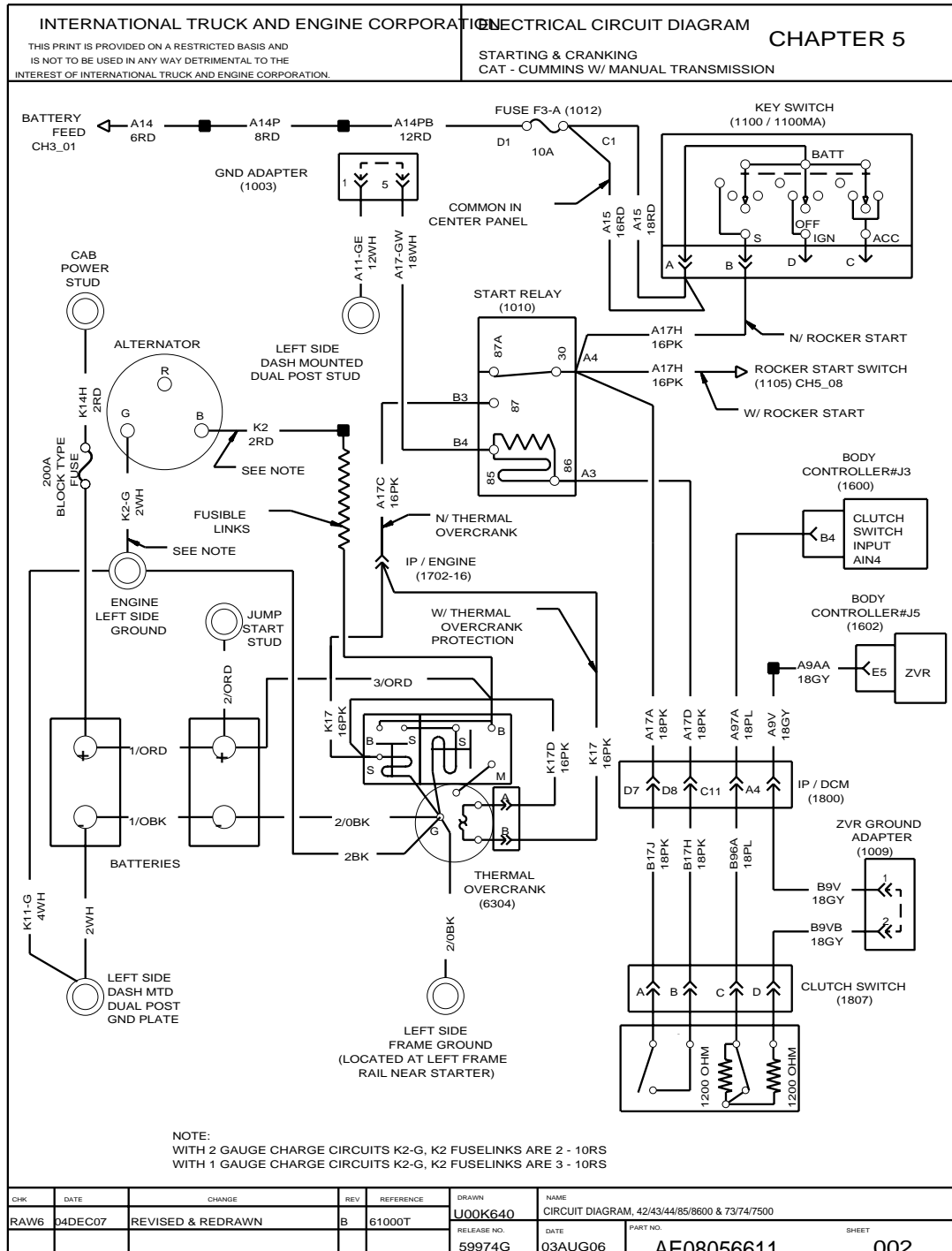


Figure 79 Cat — Cummins Engines with Manual Transmission

5.3. I6 / V8 ENGINES WITH ALLISON TRANSMISSION, P. 3

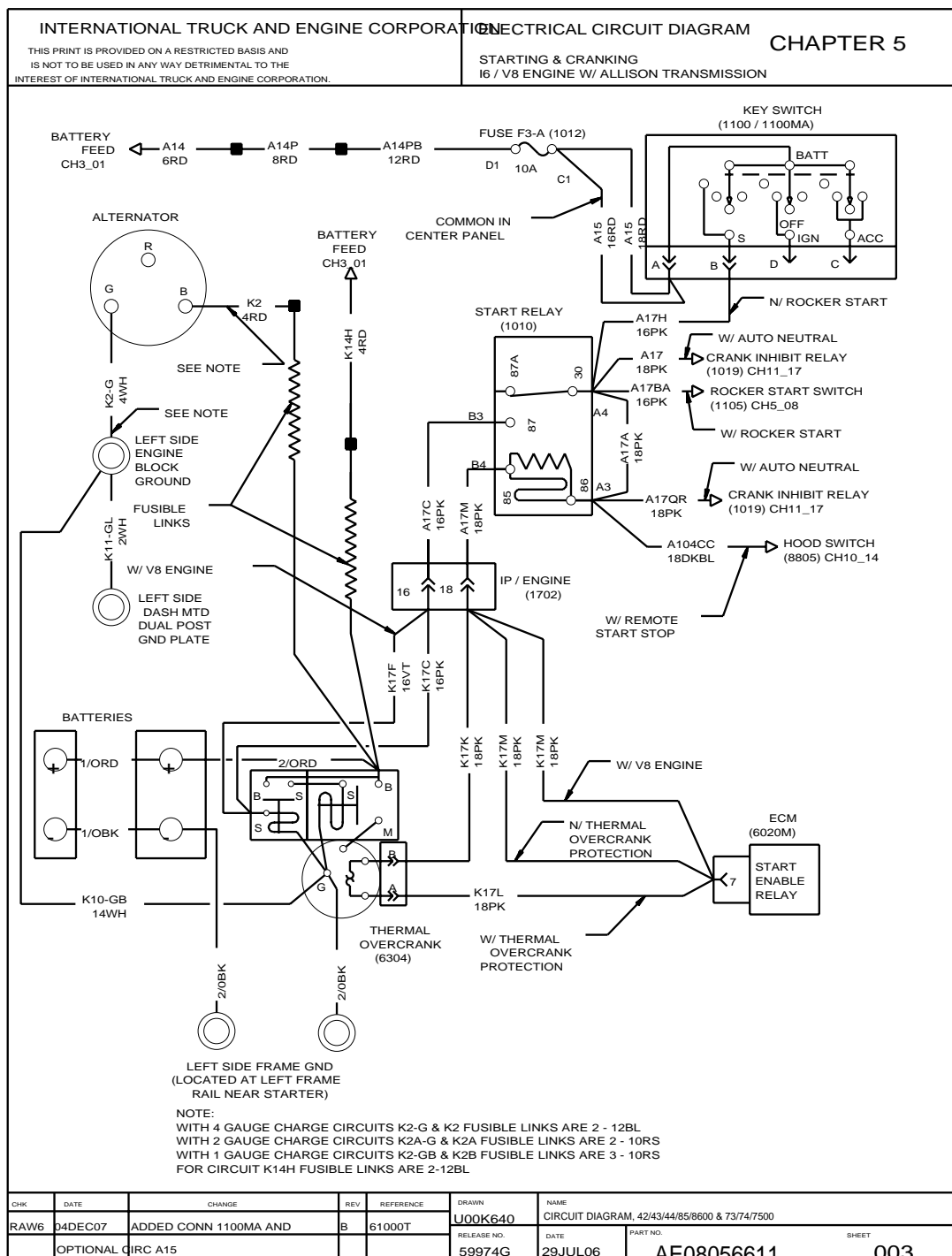


Figure 80 I6 / V8 Engines with Allison Transmission

5.4. CAT — CUMMINS ENGINES WITH ALLISON TRANSMISSION, P. 4

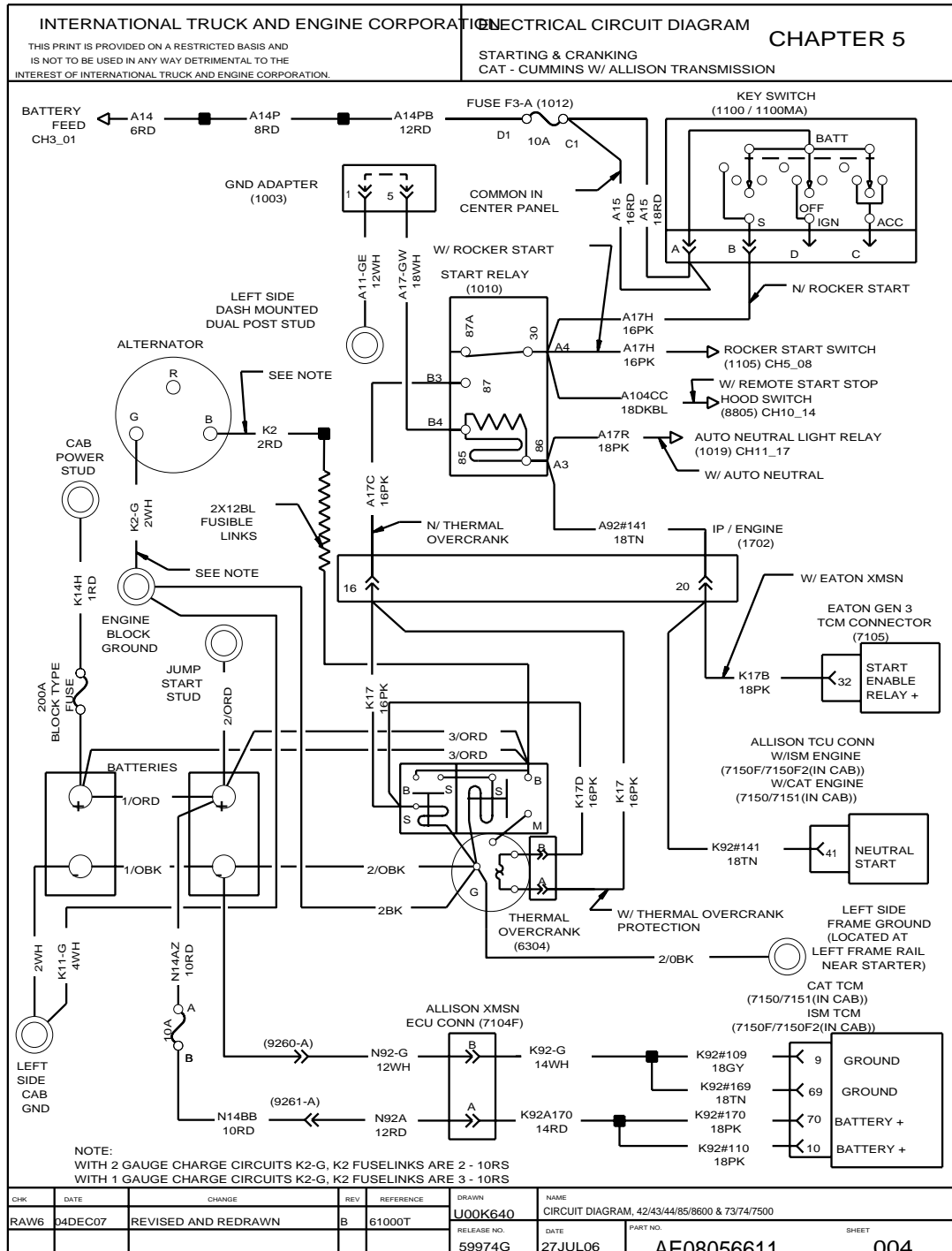


Figure 81 Cat — Cummins Engines with Allison Transmission

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

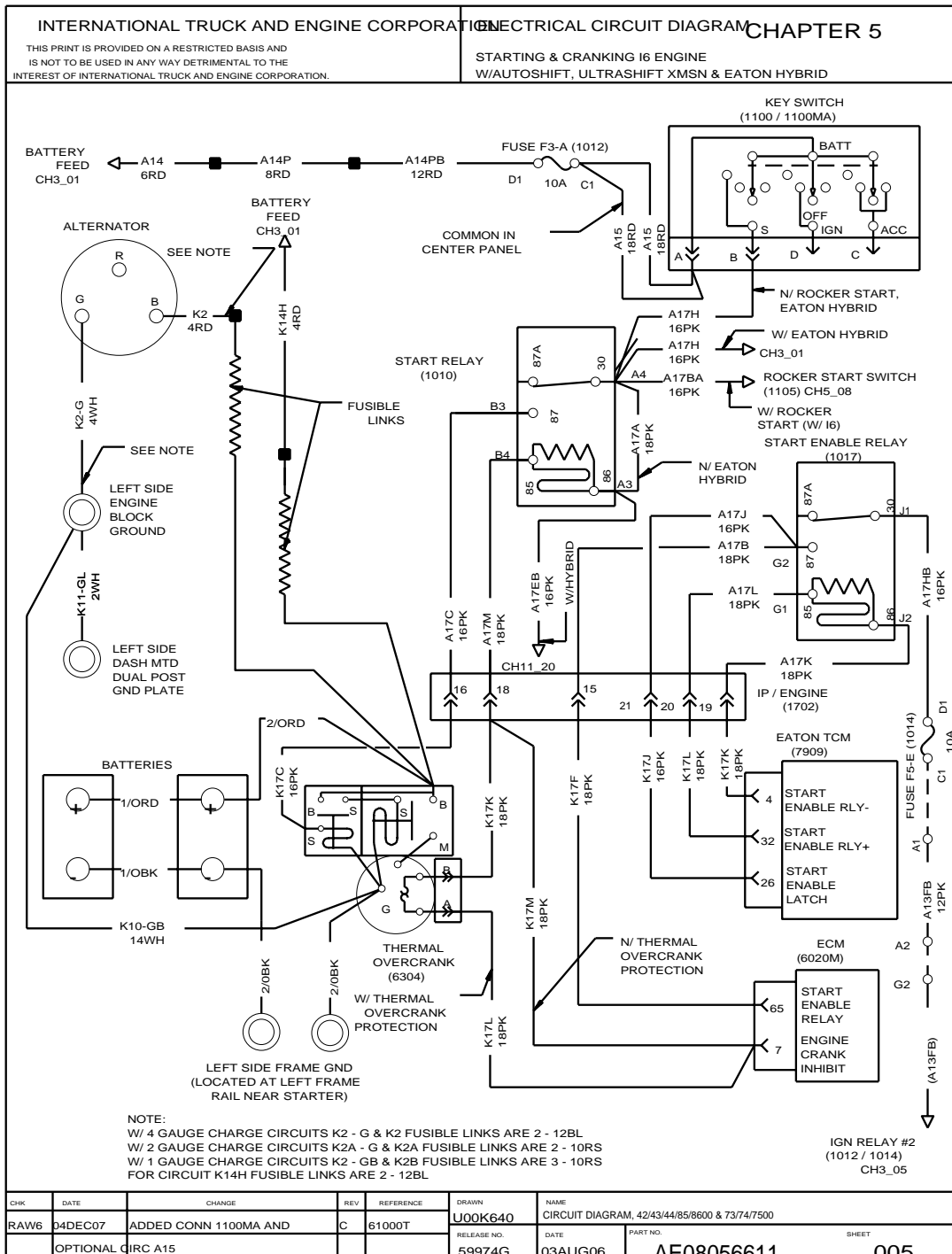


Figure 82 I6 Engine with Autoshift, Ultrashift, and Eaton Hybrid Transmission

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

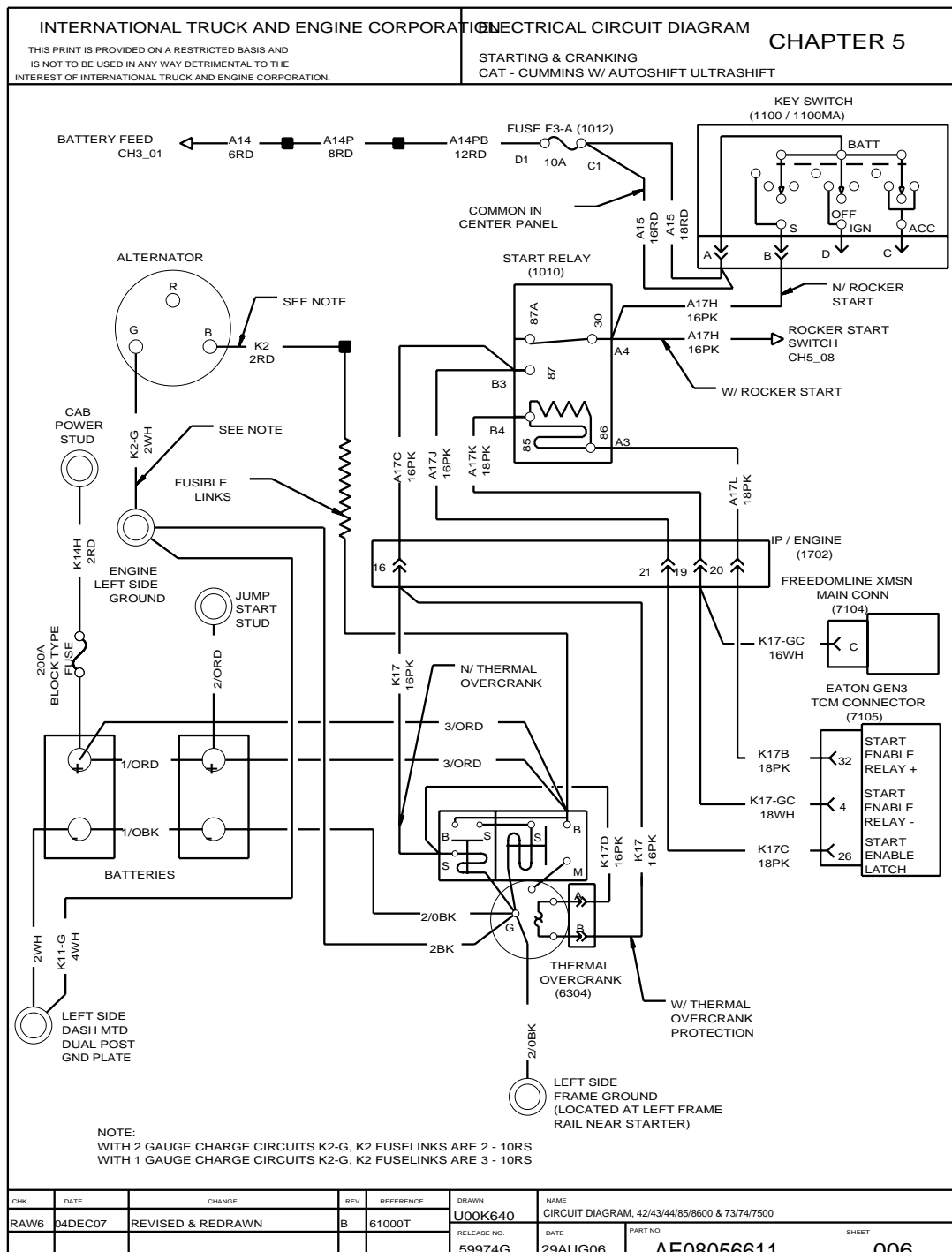


Figure 83 Cat — Cummins Engines with Autoshift and Ultrashift Transmission

5.7. I6 POWER PACK, P. 7

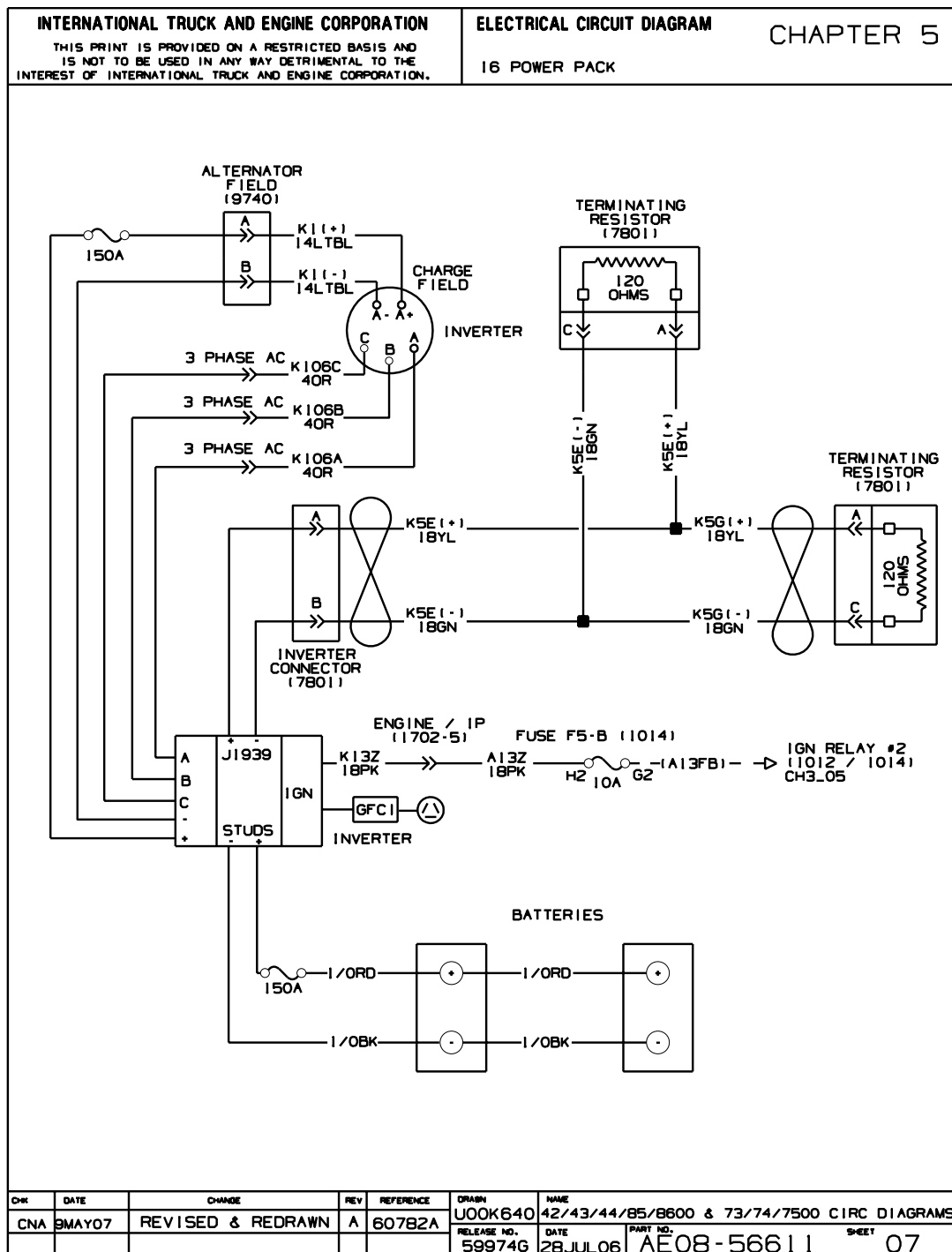


Figure 84 I6 Power Pack

5.8. ROCKER START, P. 8

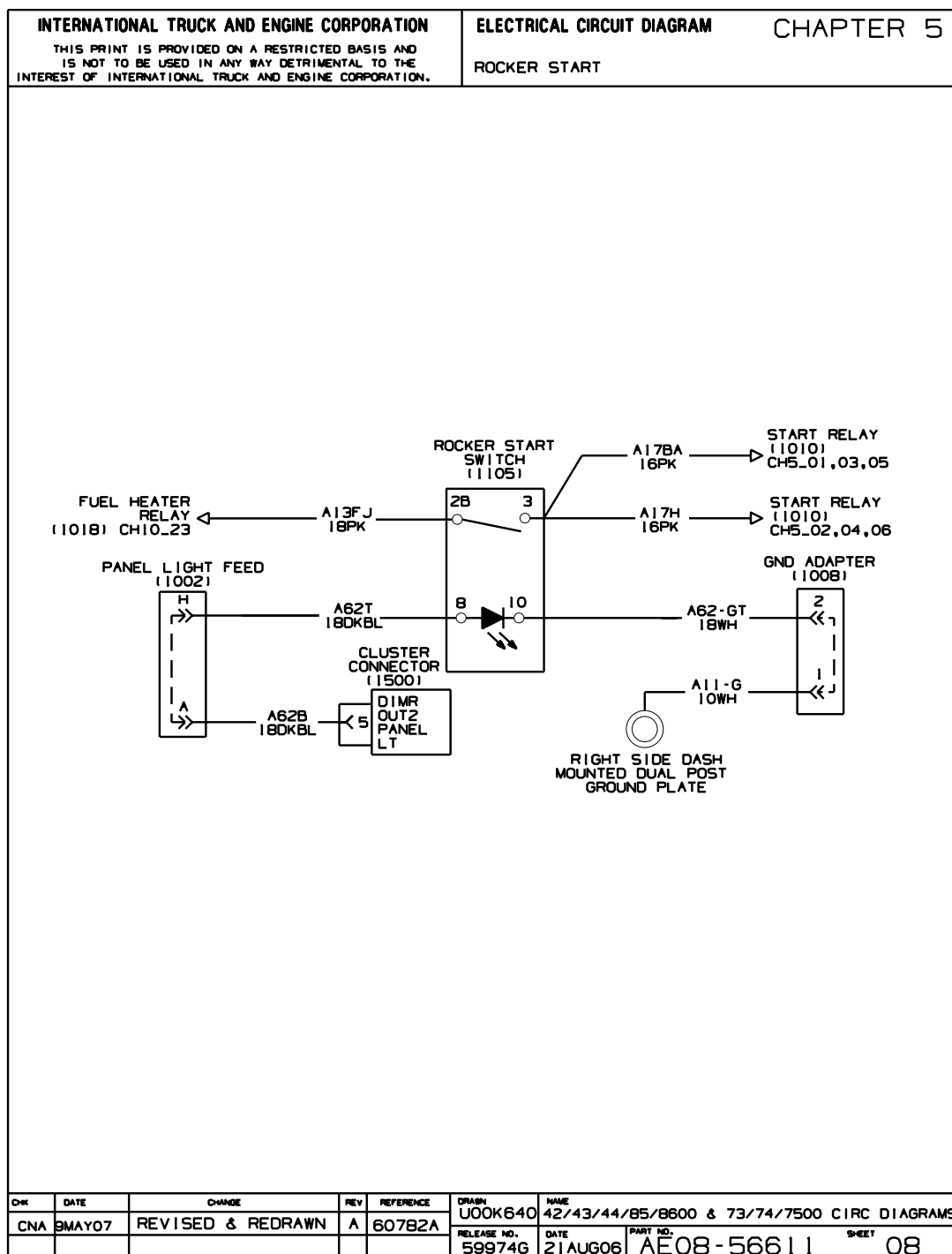


Figure 85 Rocker Start

6. FANS AND ENGINE ACCESSORIES (CHAPTER 6)

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

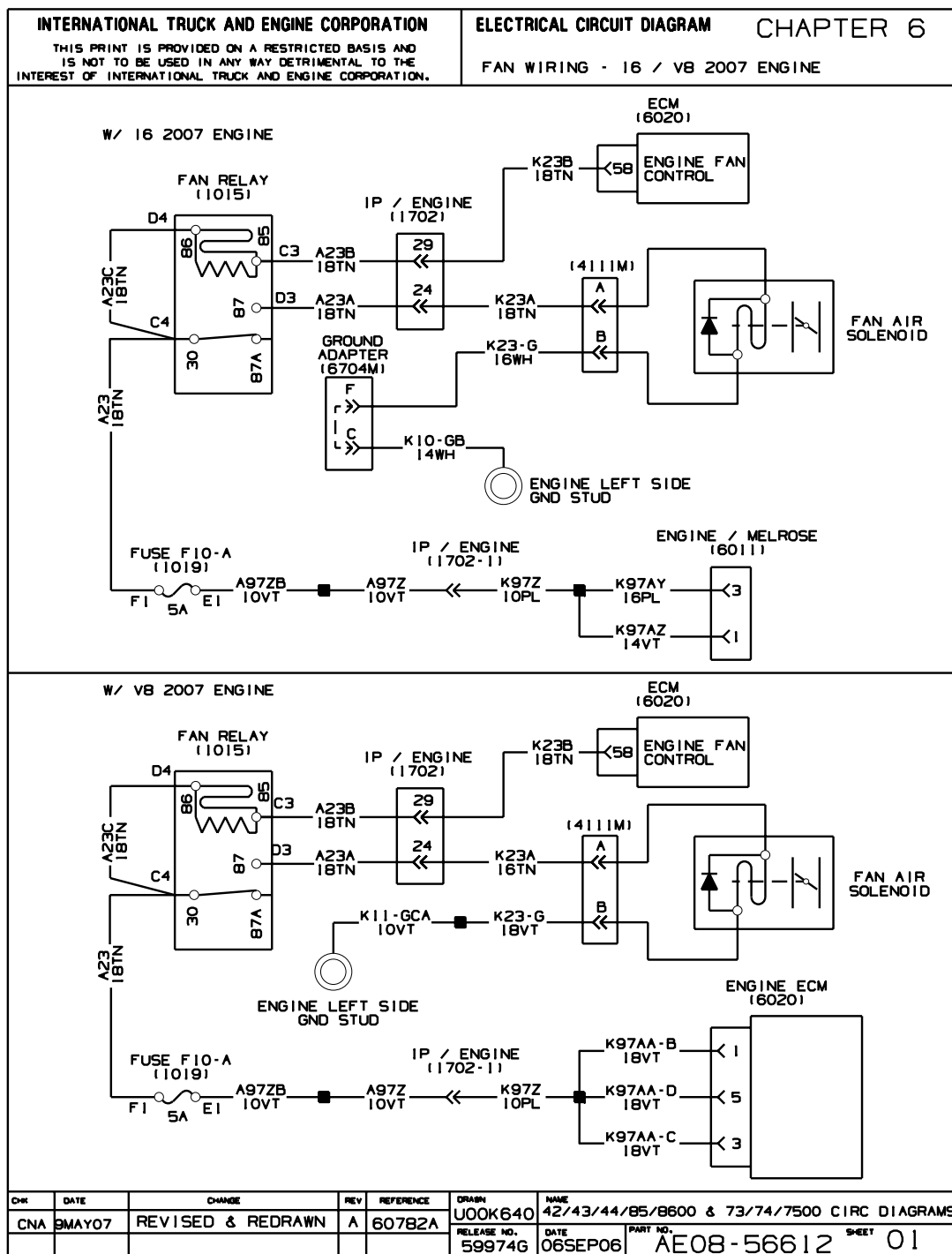


Figure 86 Fan Wiring, I6 / V8 2007 Engines

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

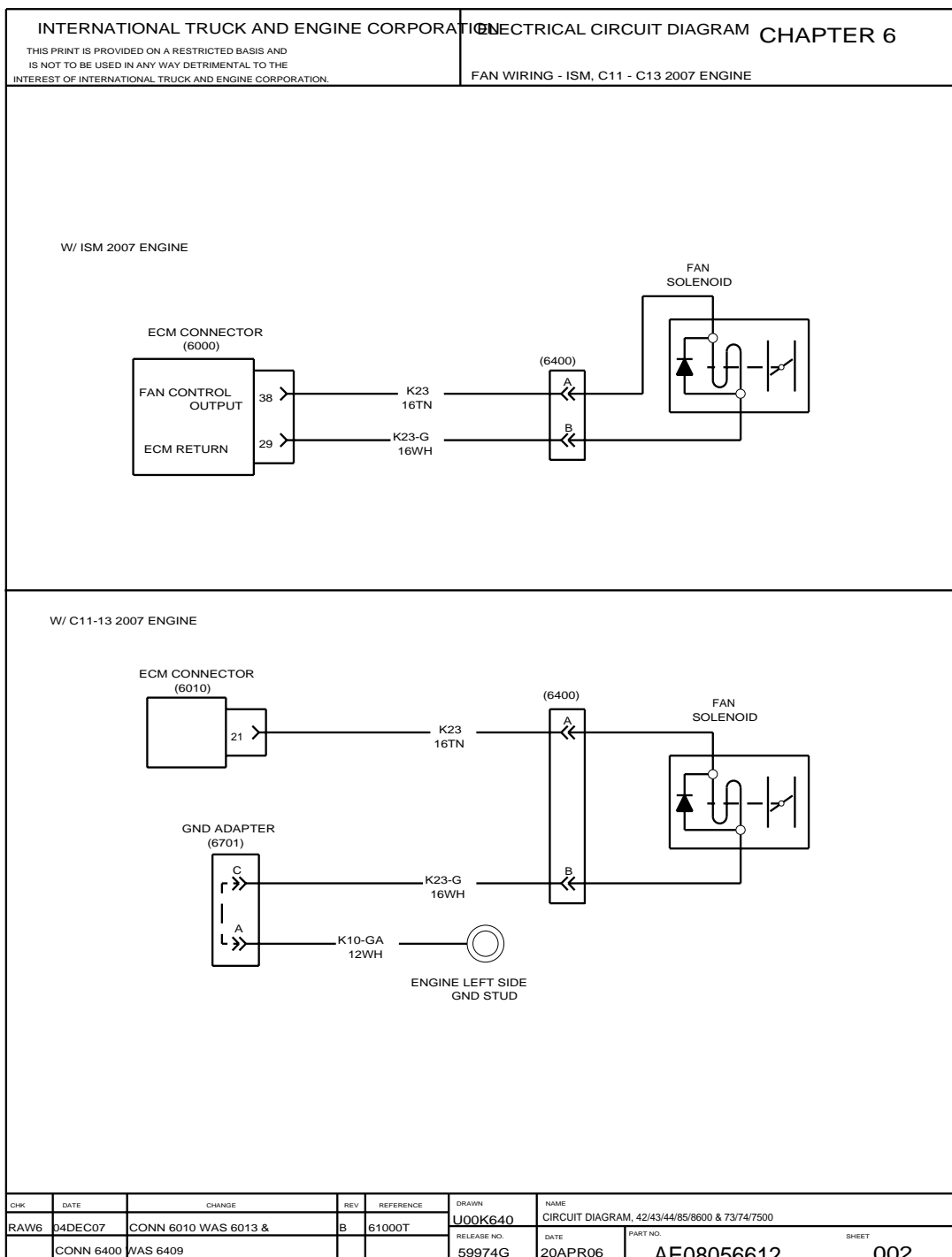


Figure 87 Fan Wiring, ISM, C11–C13 2007 Engines

6.3. STARTING AID — ETHER START, P. 3

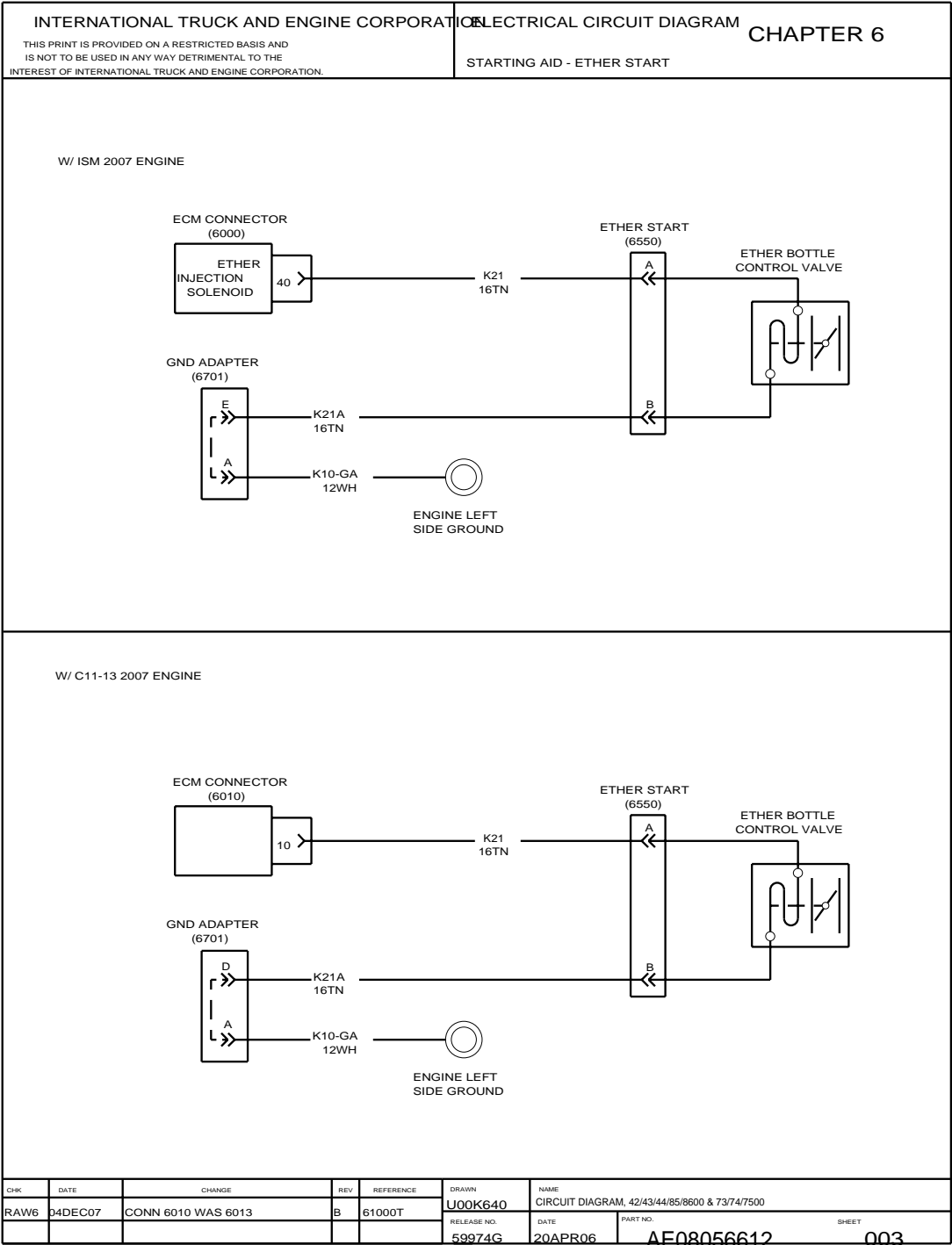


Figure 88 Starting Aid — Ether Start

6.4. SNOW VALVE, P. 4

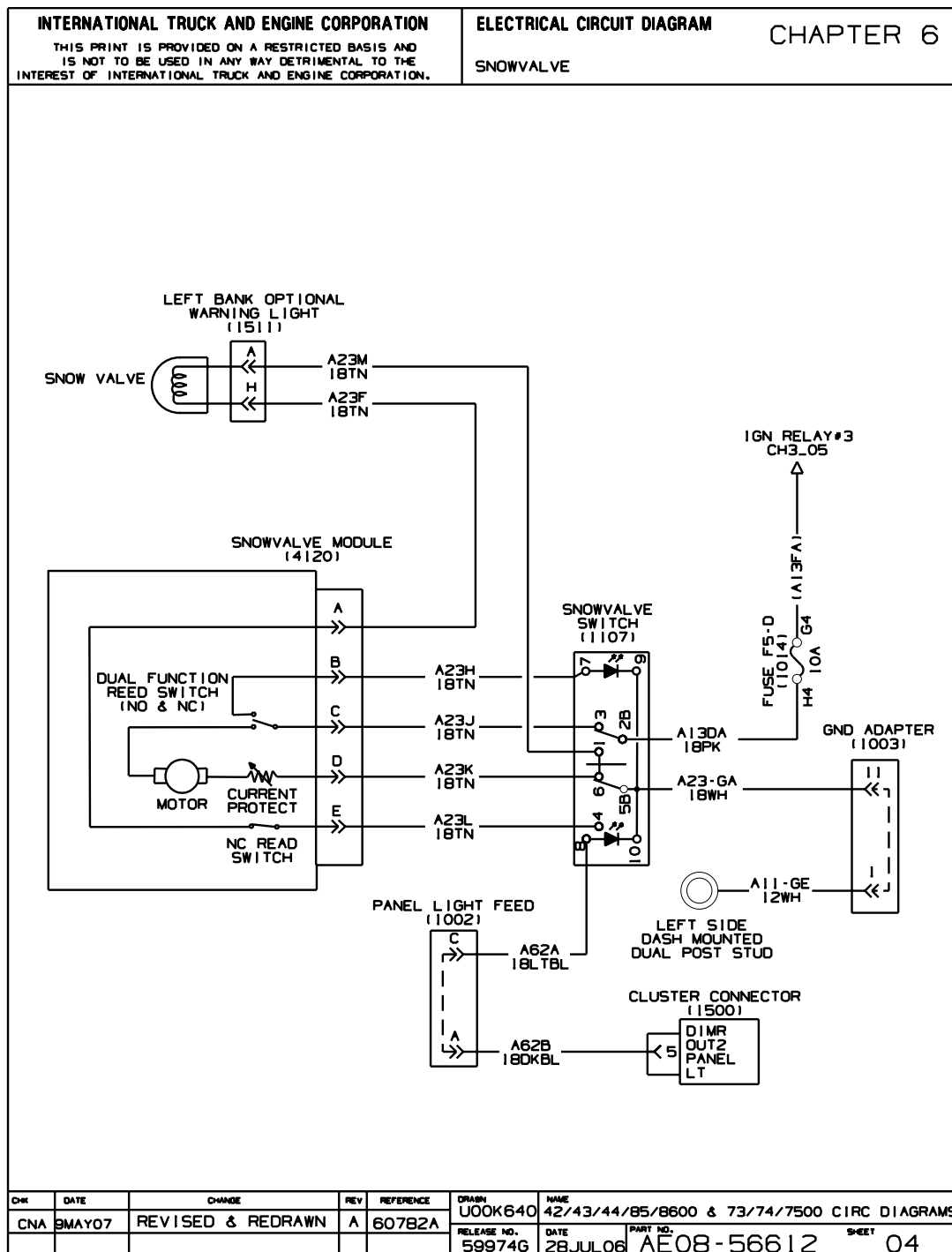


Figure 89 Snow Valve

7. ELECTRONIC ENGINES (CHAPTER 7)

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

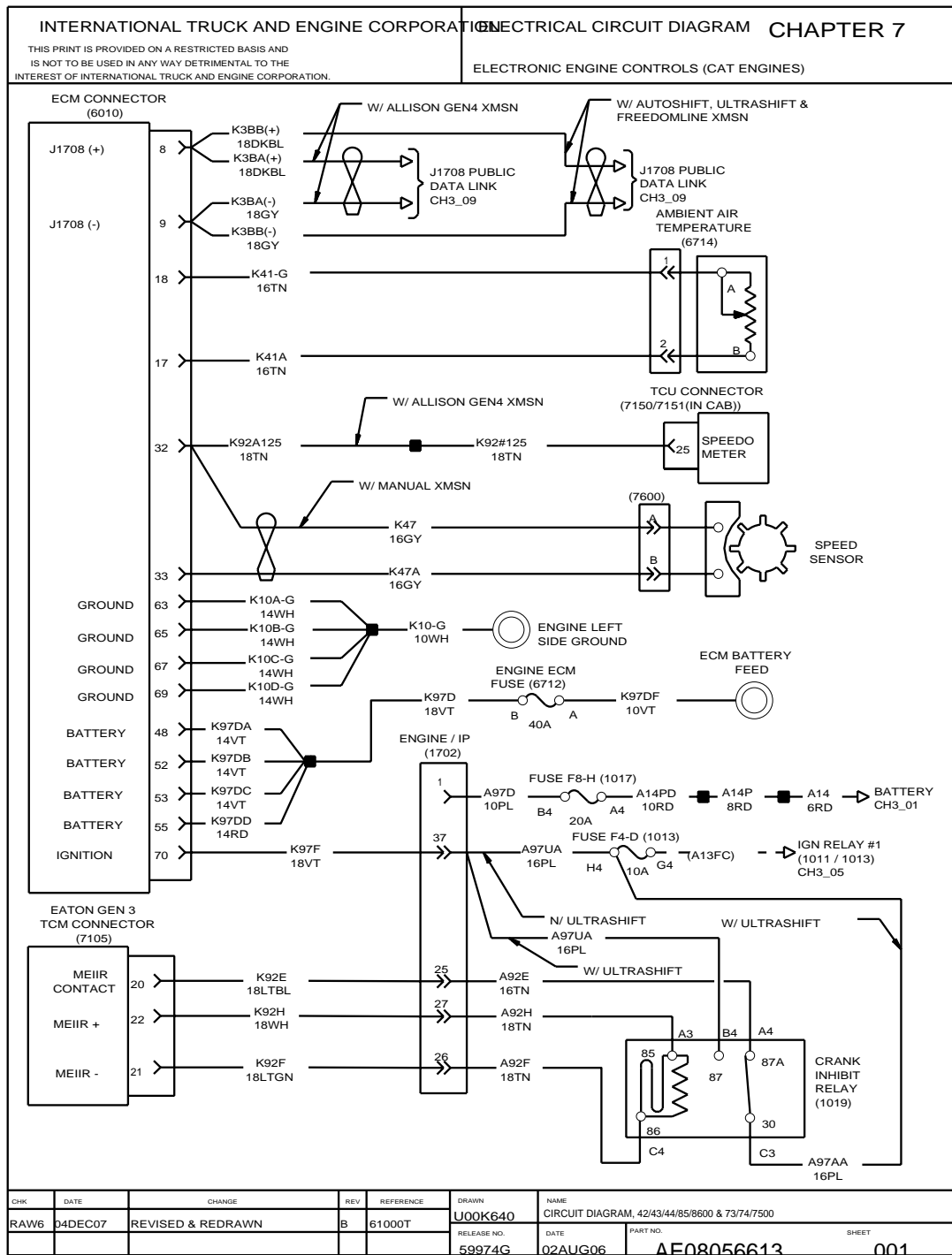


Figure 90 Electronic Engine Controls, Cat Engines

7.2. ELECTRONIC ENGINE CONTROLS, CAT ENGINES, P. 2

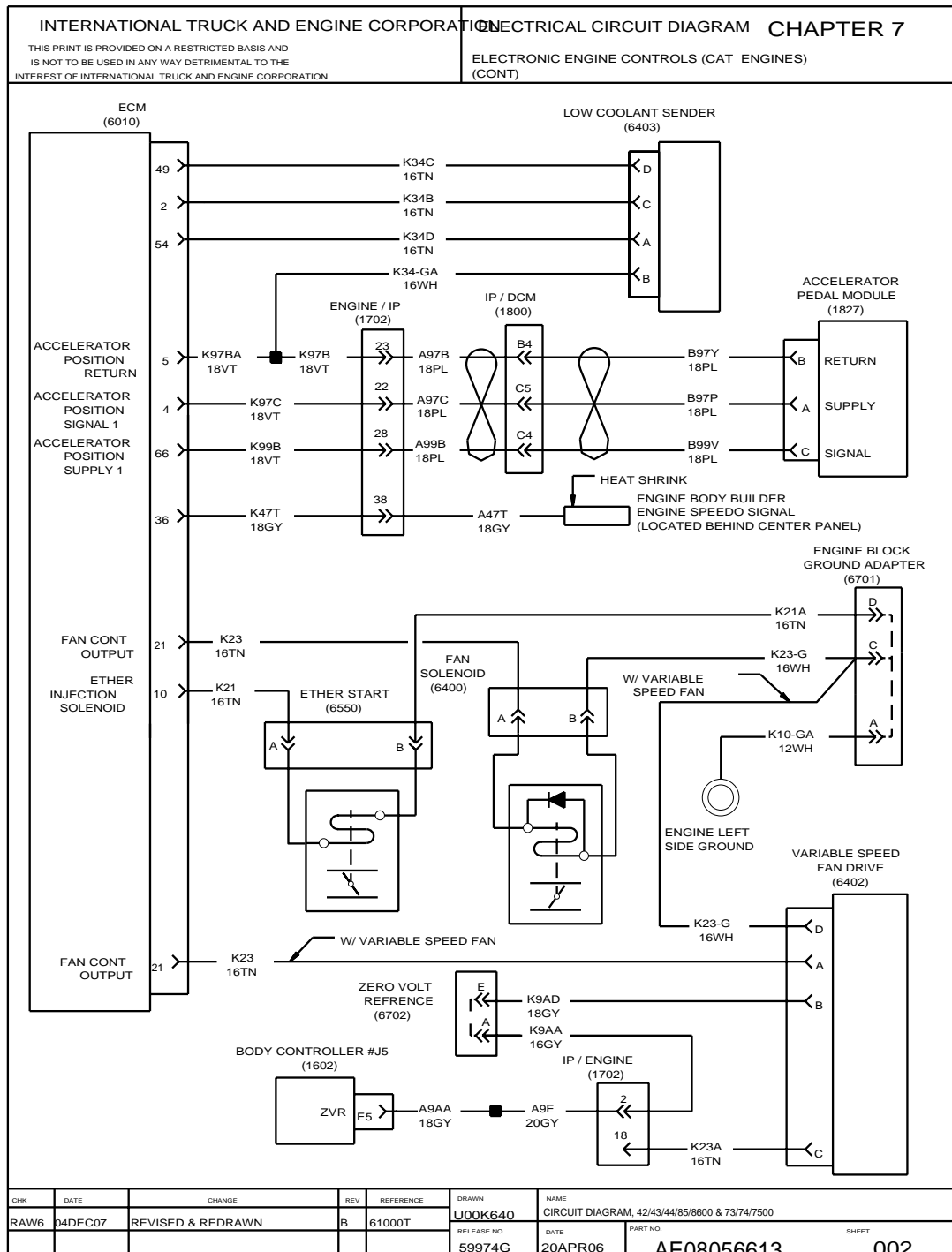


Figure 91 Electronic Engine Controls, Cat Engines (Cont.)

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

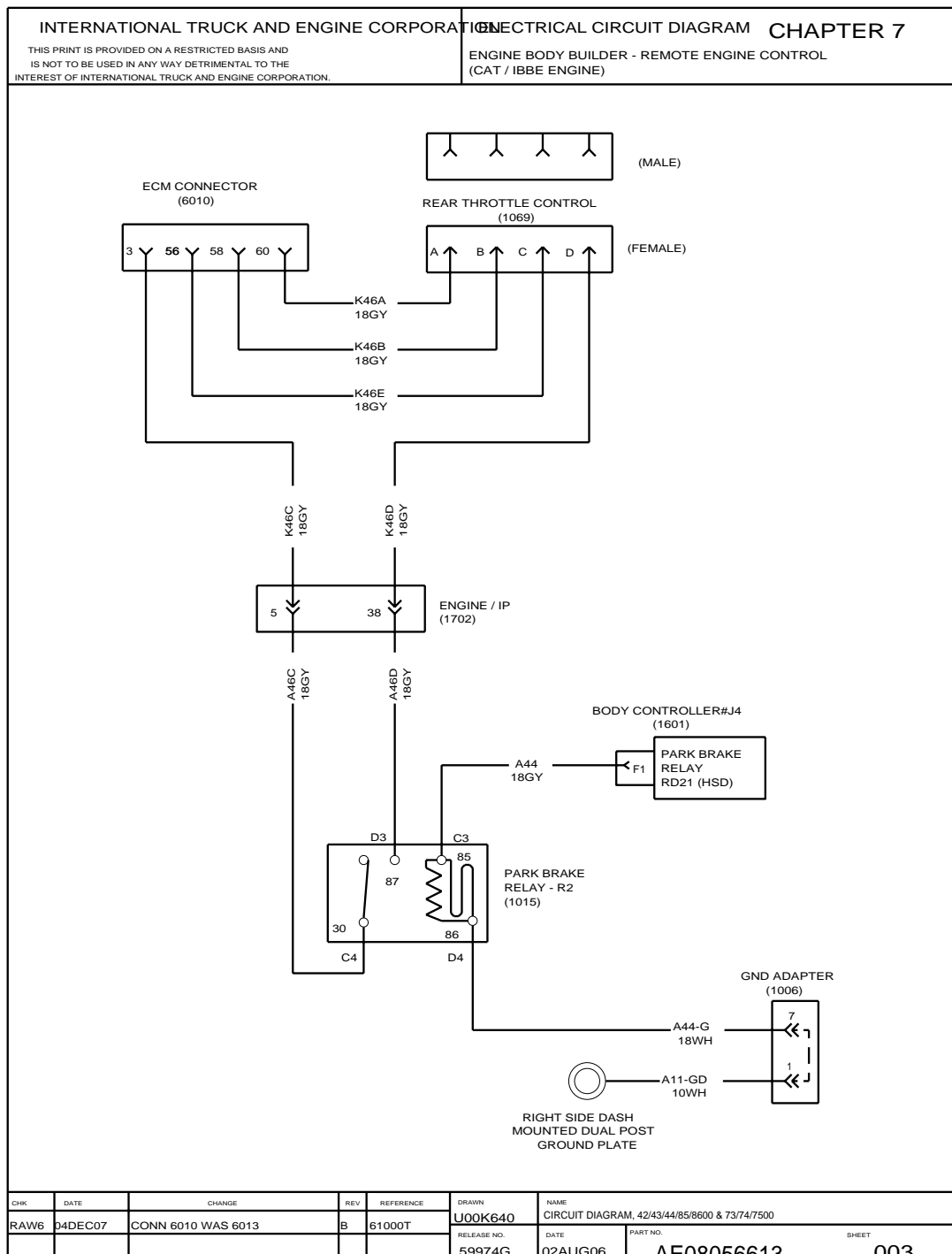


Figure 92 Engine Body Builder — Remote Engine Control (Cat/IBBE Engine)

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

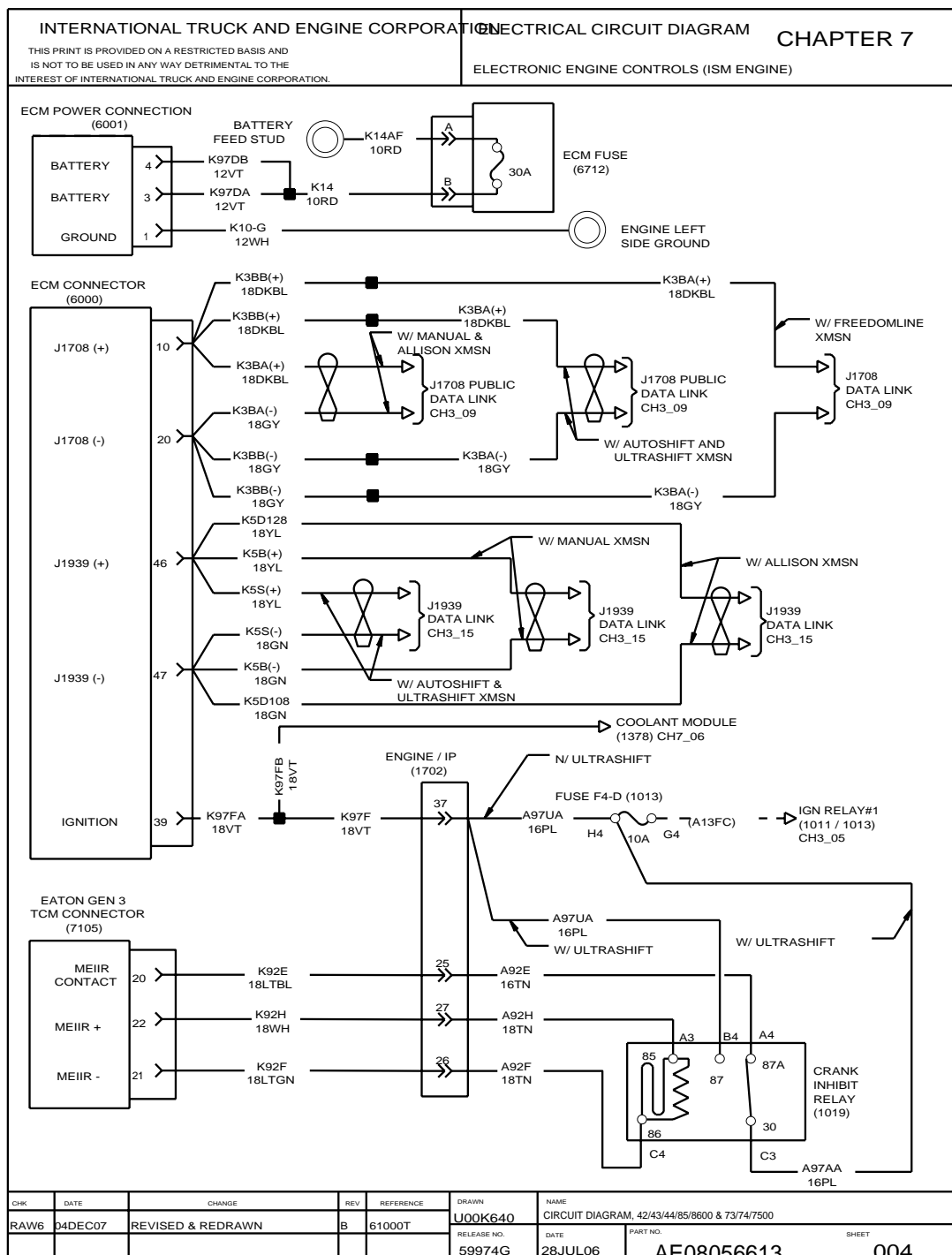


Figure 93 Electronic Engine Controls, ISM Engines

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

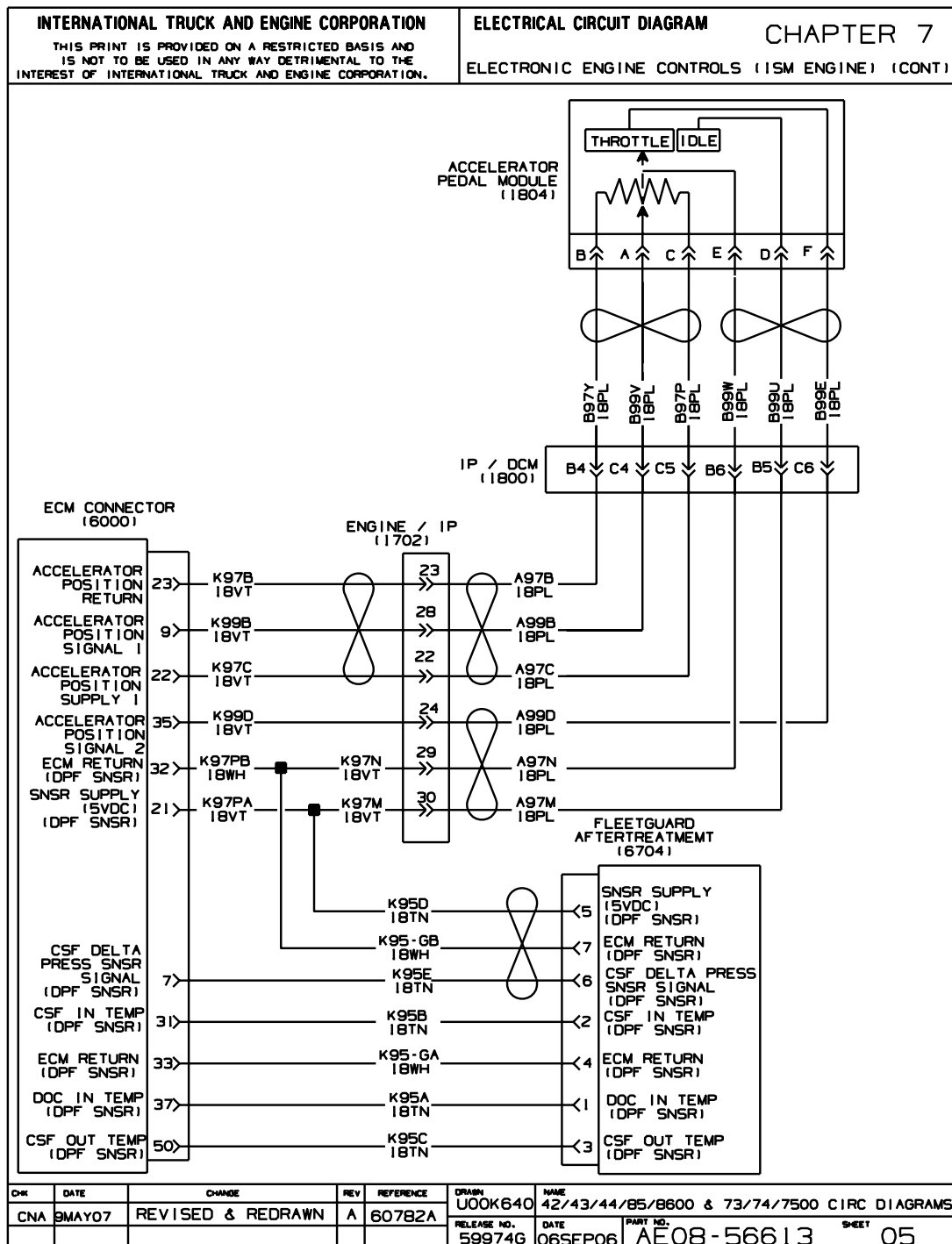


Figure 94 Electronic Engine Controls, ISM Engines (Cont.)

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

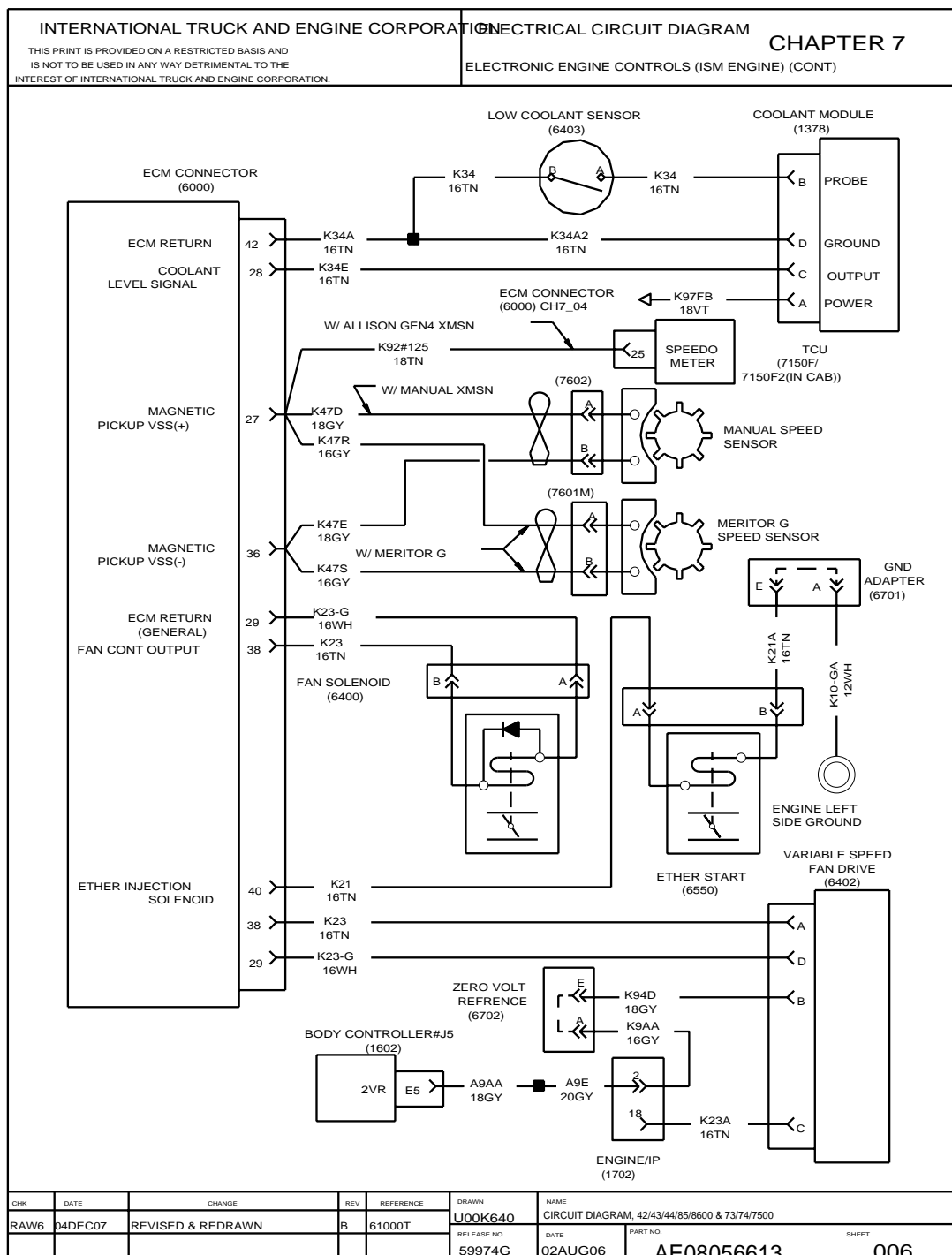


Figure 95 Electronic Engine Controls, ISM Engines (Cont.)

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

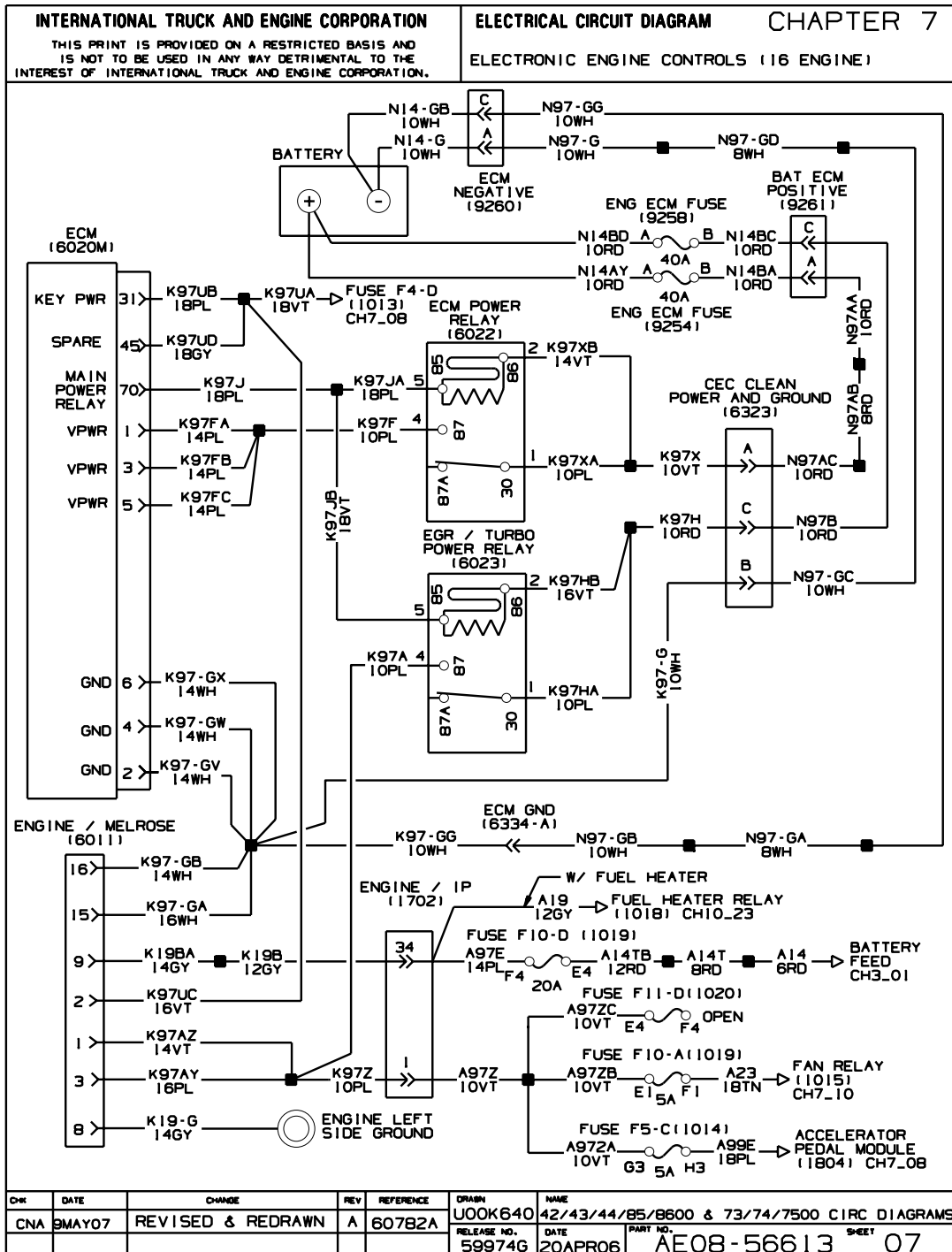


Figure 96 Electronic Engine Controls, I6 Engines

Figure 97 Electronic Engine Controls, I6 Engines (Cont.)



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

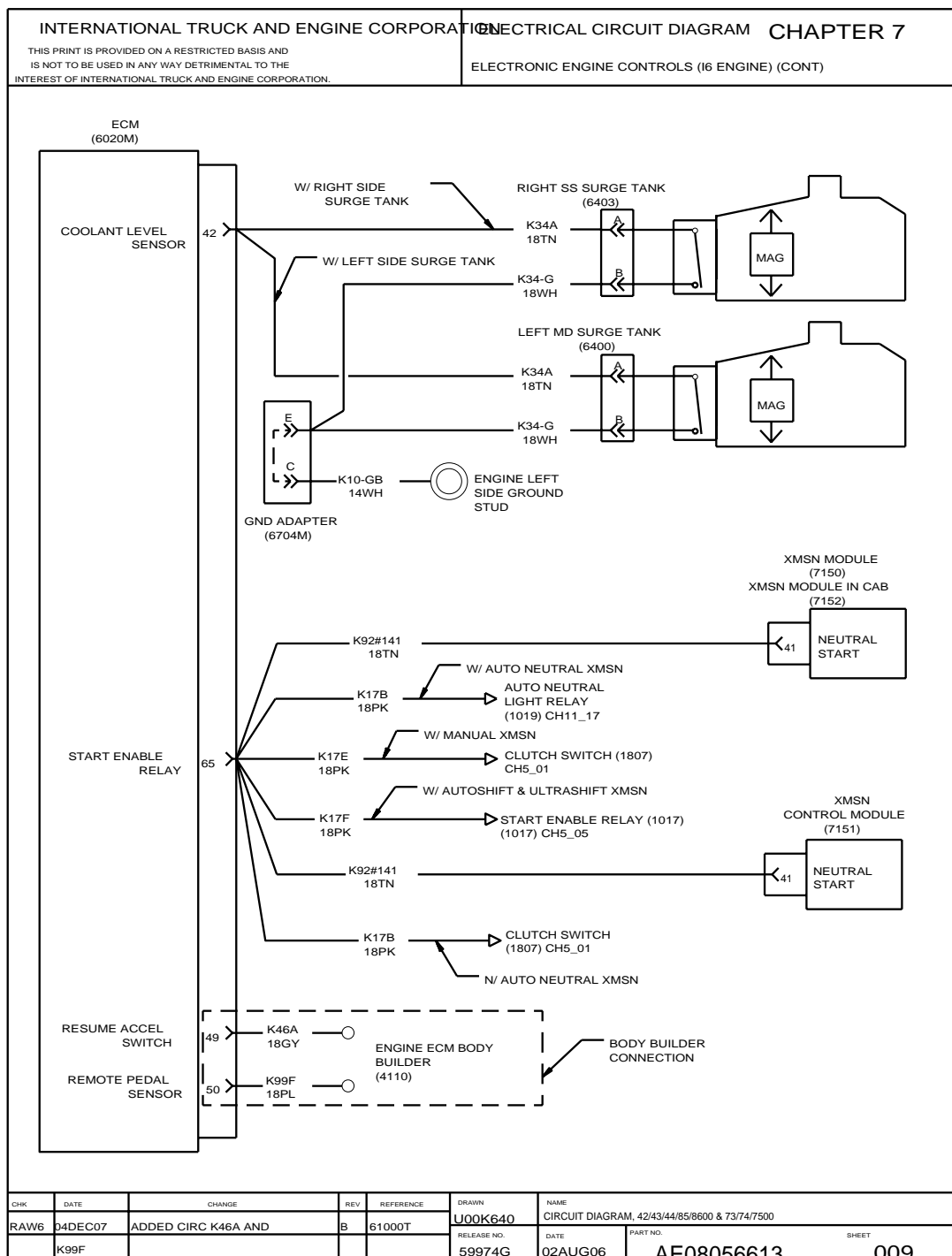


Figure 98 Electronic Engine Controls, I6 Engines (Cont.)

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

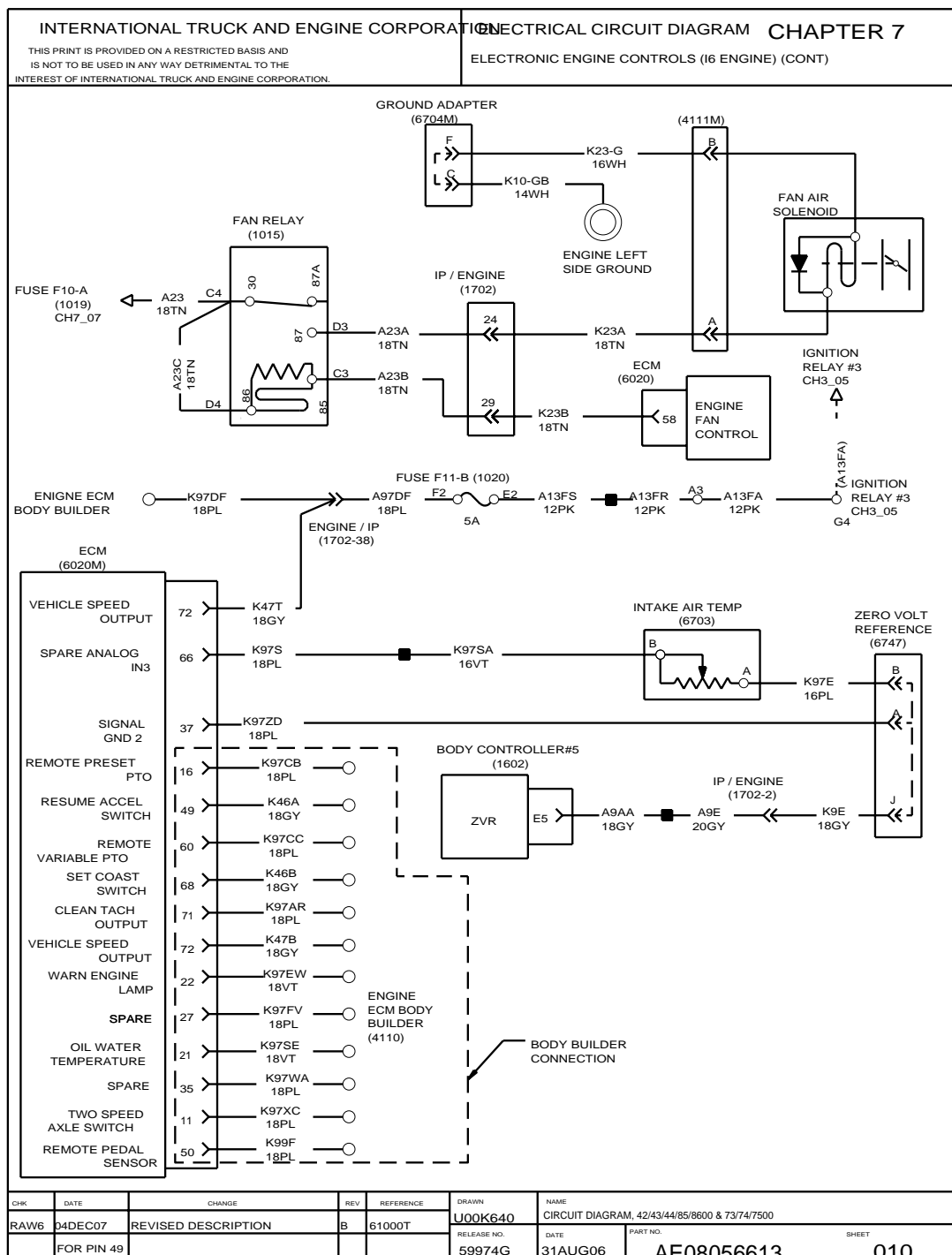


Figure 99 Electronic Engine Controls, I6 Engines (Cont.)

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

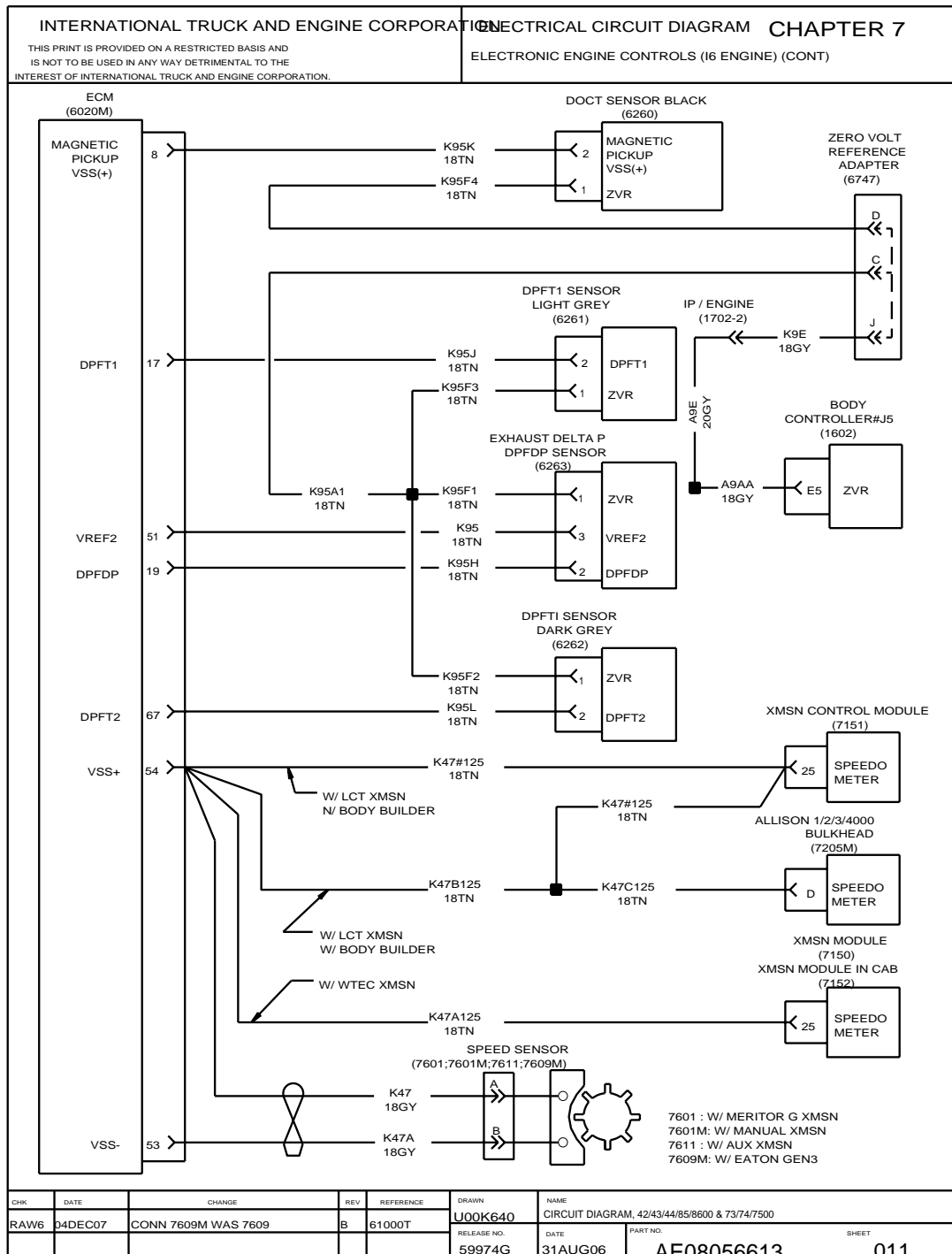


Figure 100 Electronic Engine Controls, I6 Engines (Cont.)

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

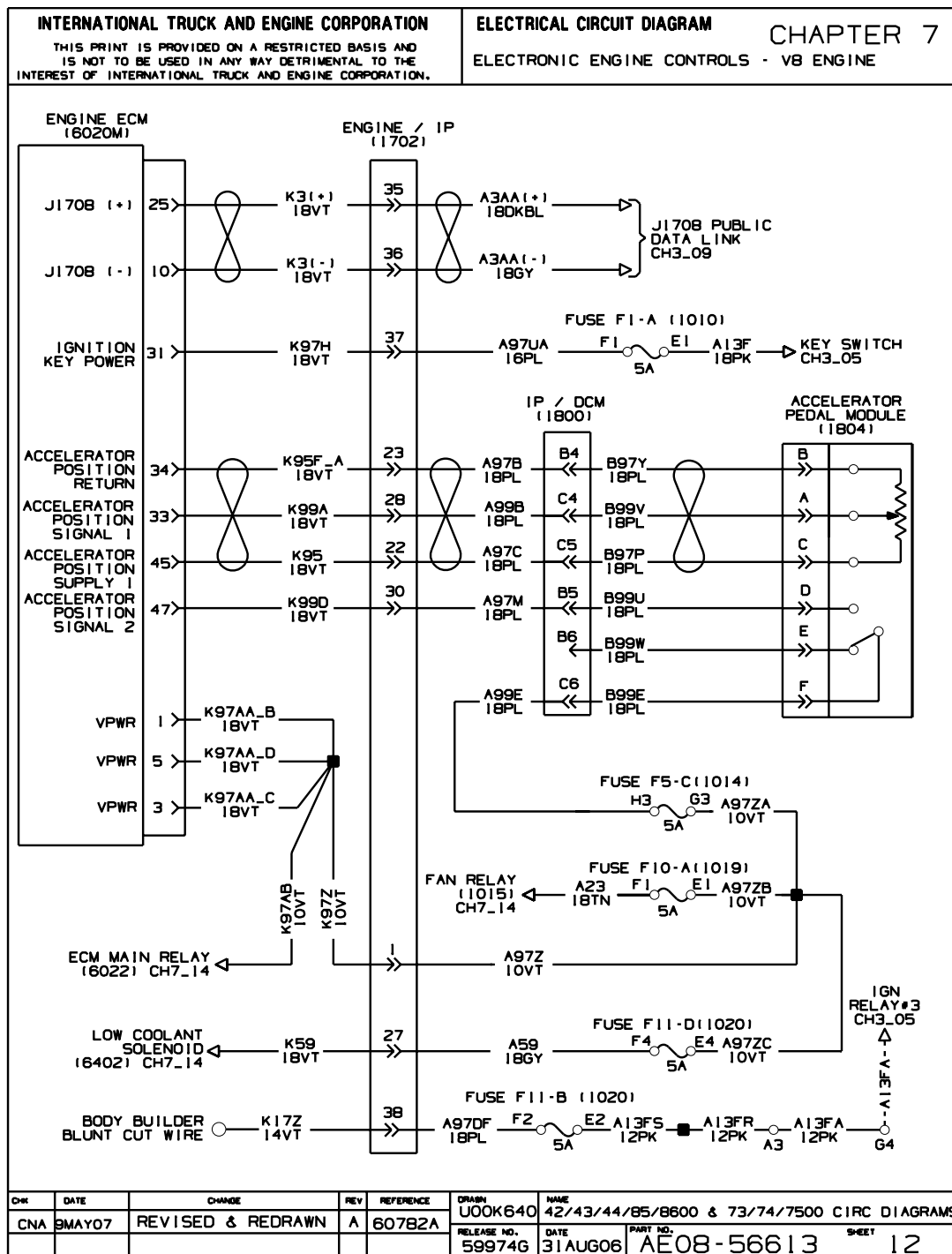


Figure 101 Electronic Engine Controls — V8 Engines

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

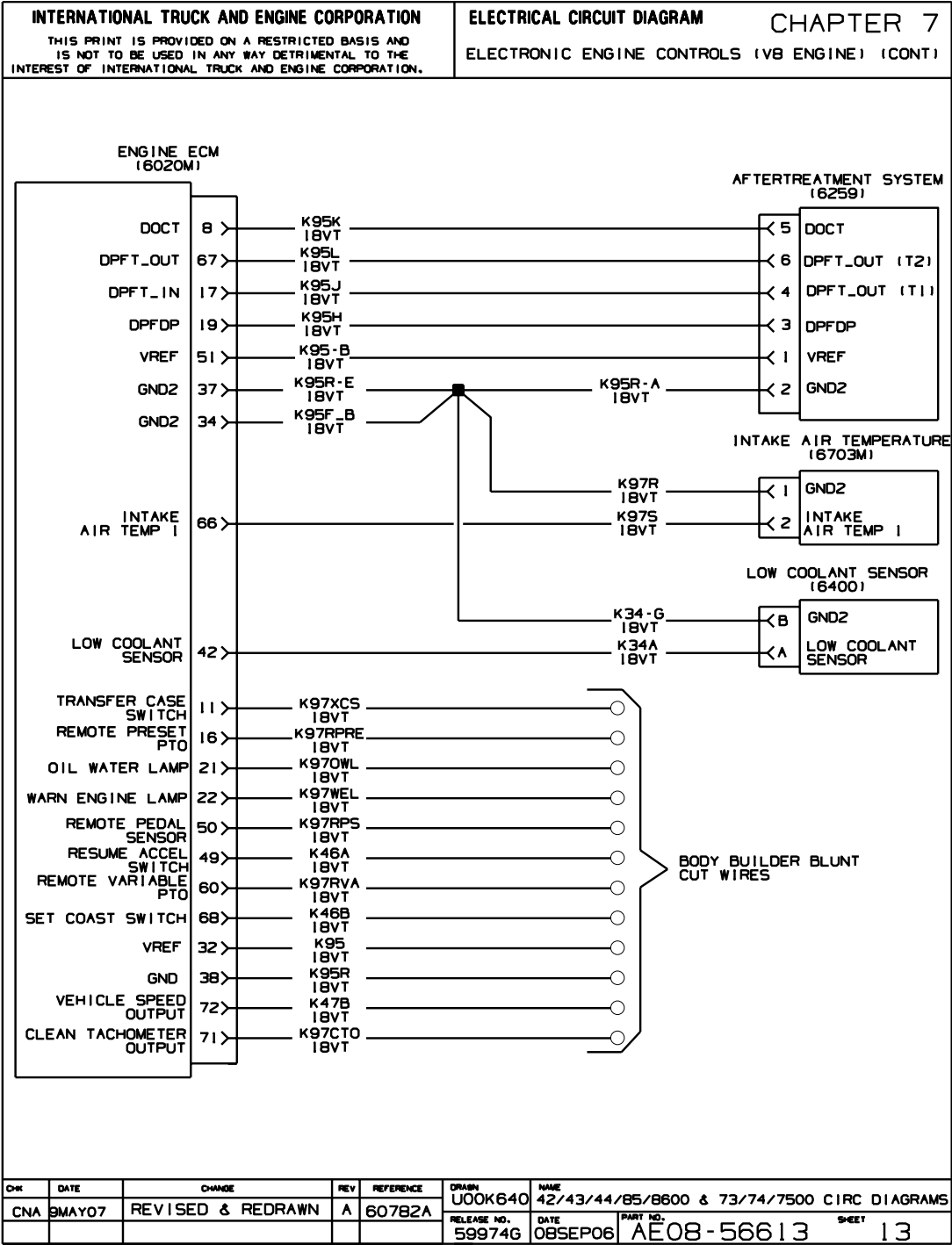


Figure 102 Electronic Engine Controls — V8 Engines

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

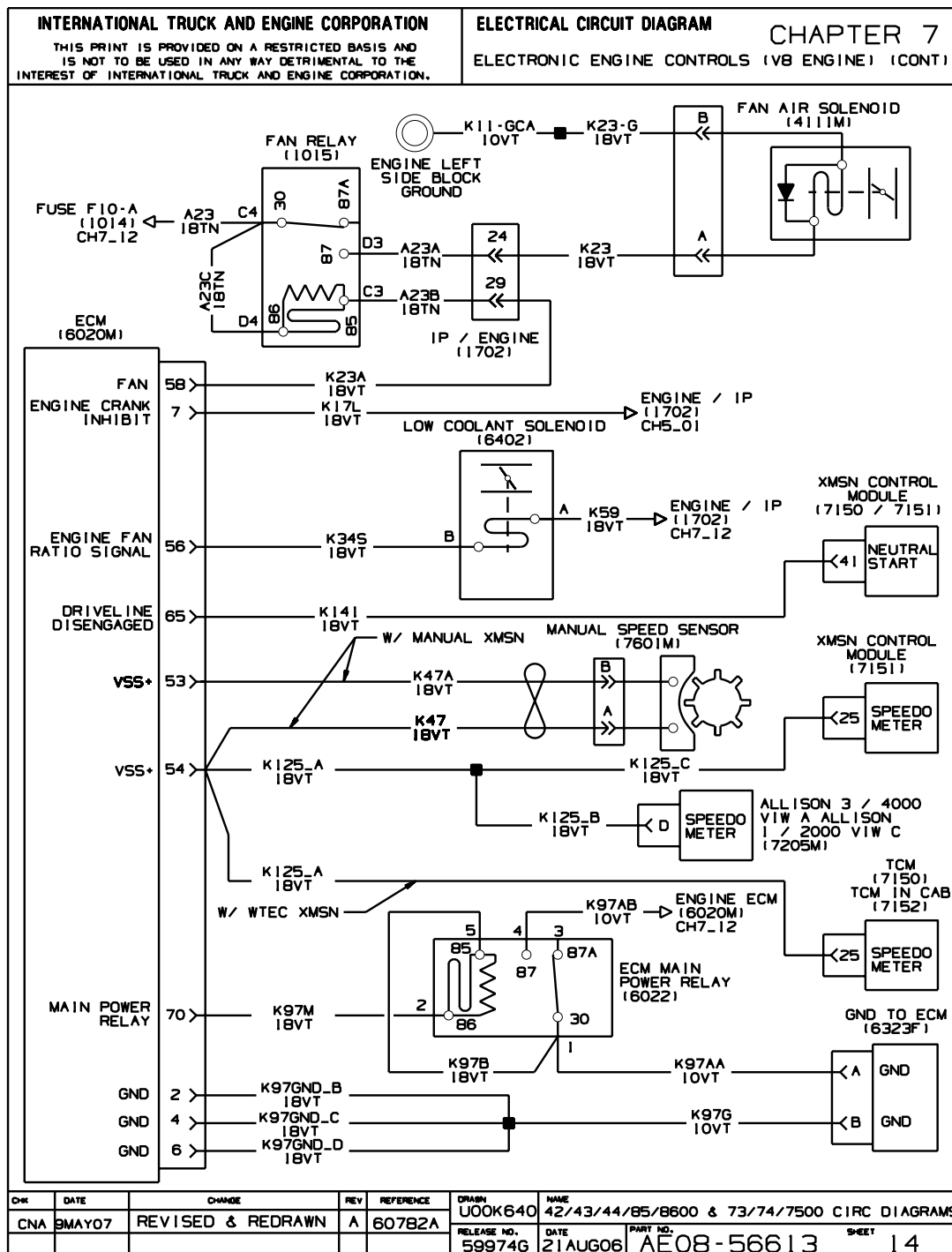


Figure 103 Electronic Engine Controls — V8 Engines

7.15. CRUISE CONTROL, P. 15

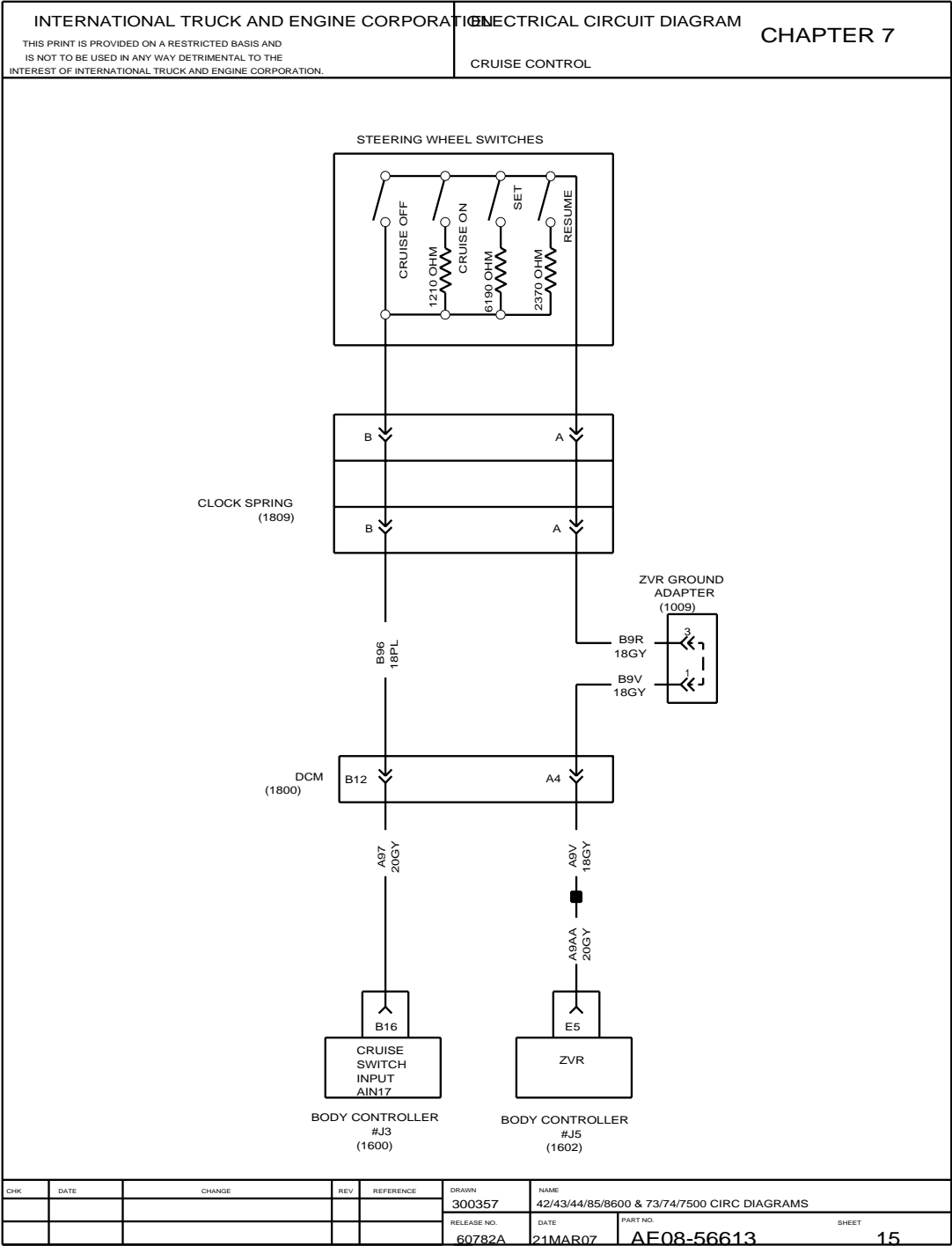


Figure 104 Cruise Control