

## **SERVICE MANUAL**

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### **SERVICE MANUAL SECTION**

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, RXT  
Models Built March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT  
DIAGRAMS**

**Model: 3200**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 4100**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 4300**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 4400**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 7300**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 7400**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 7500**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 7600**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 7700**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 8500**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: 8600**

**Start Date: 03/01/2007 End Date: 03/18/2008**

**Model: RXT**

**Start Date: 03/01/2007 End Date: 03/18/2008**

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## 2. INSTRUCTIONS AND CHARTS (CHAPTER 2)

### 2.1. ABBREVIATIONS, P. 1

| INTERNATIONAL TRUCK AND ENGINE CORPORATION                                                                                                                     |                  |              |                | ELECTRICAL CIRCUIT DIAGRAMS<br>CHAPTER 2<br>ABBREVIATIONS |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------|----------------|-----------------------------------------------------------|--------------|
| THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND<br>IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE<br>INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION. |                  |              |                |                                                           |              |
| 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      | DEFTR        | 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   | SNR                                                       | 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      **3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

## 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                   |  |  |  |           |  |
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## 2.3. CIRCUIT DIAGRAM INSTRUCTIONS, P. 3

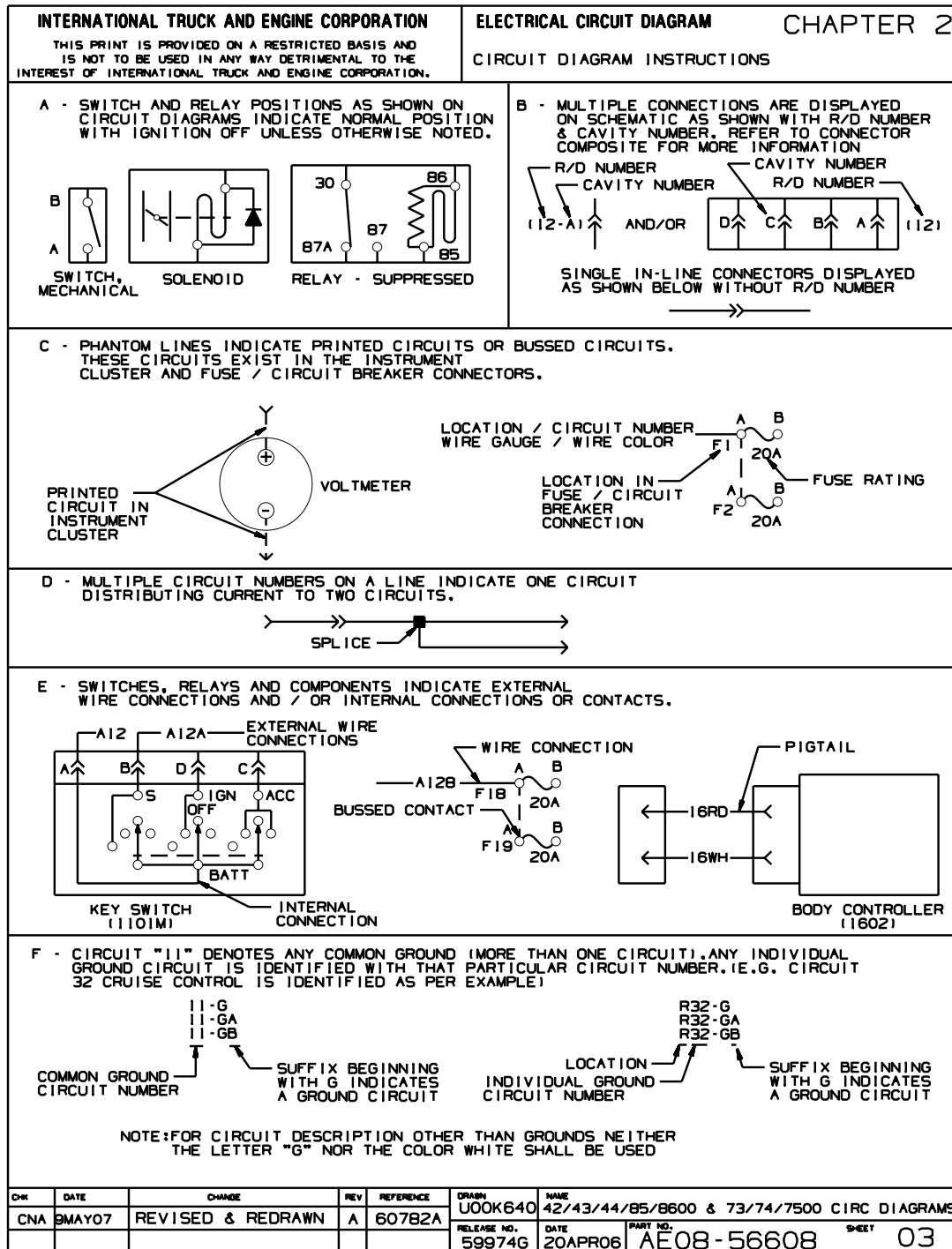


Figure 3 Circuit Diagram Instructions

4      **3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

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

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                                   |

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| 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 |
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Figure 4 Circuit Number Identification and Color

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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## 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) |
|                | 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.)**

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

INTERNATIONAL TRUCK AND ENGINE CORPORATION

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ELECTRICAL CIRCUIT DIAGRAM

CHAPTER 2

CIRCUIT NUMBER IDENTIFICATION AND COLOR (CONT)

| 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. | DATE                                           | PART NO.   |
|      |         |                     |     |           | 59974G      | 12SEP06                                        | AE08056608 |
|      |         |                     |     |           |             |                                                | 006        |

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

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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## 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<br>IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE<br>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<br/>WATT</th> <th style="text-align: center;">BULB<br/>TRADE<br/>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<br>WATT | BULB<br>TRADE<br>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 |
| BULB APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CANDLEPOWER OR<br>WATT | BULB<br>TRADE<br>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                                        | PART NO.   |                  |                        |                         |                  |       |        |                            |      |       |                |     |       |            |          |       |           |          |        |            |          |        |           |      |      |             |  |      |                                    |         |      |                               |  |      |                            |  |      |                          |          |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                         |     |                            | 59974G      | 20APR06                                     | AF08-56608 |                  |                        |                         |                  |       |        |                            |      |       |                |     |       |            |          |       |           |          |        |            |          |        |           |      |      |             |  |      |                                    |         |      |                               |  |      |                            |  |      |                          |          |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                         |     |                            |             | SHEET                                       | 07         |                  |                        |                         |                  |       |        |                            |      |       |                |     |       |            |          |       |           |          |        |            |          |        |           |      |      |             |  |      |                                    |         |      |                               |  |      |                            |  |      |                          |          |      |

**Figure 7 Lamp Bulb Chart**

## 2.8. RELAY FUNCTION AND WIRING GUIDE, P. 8

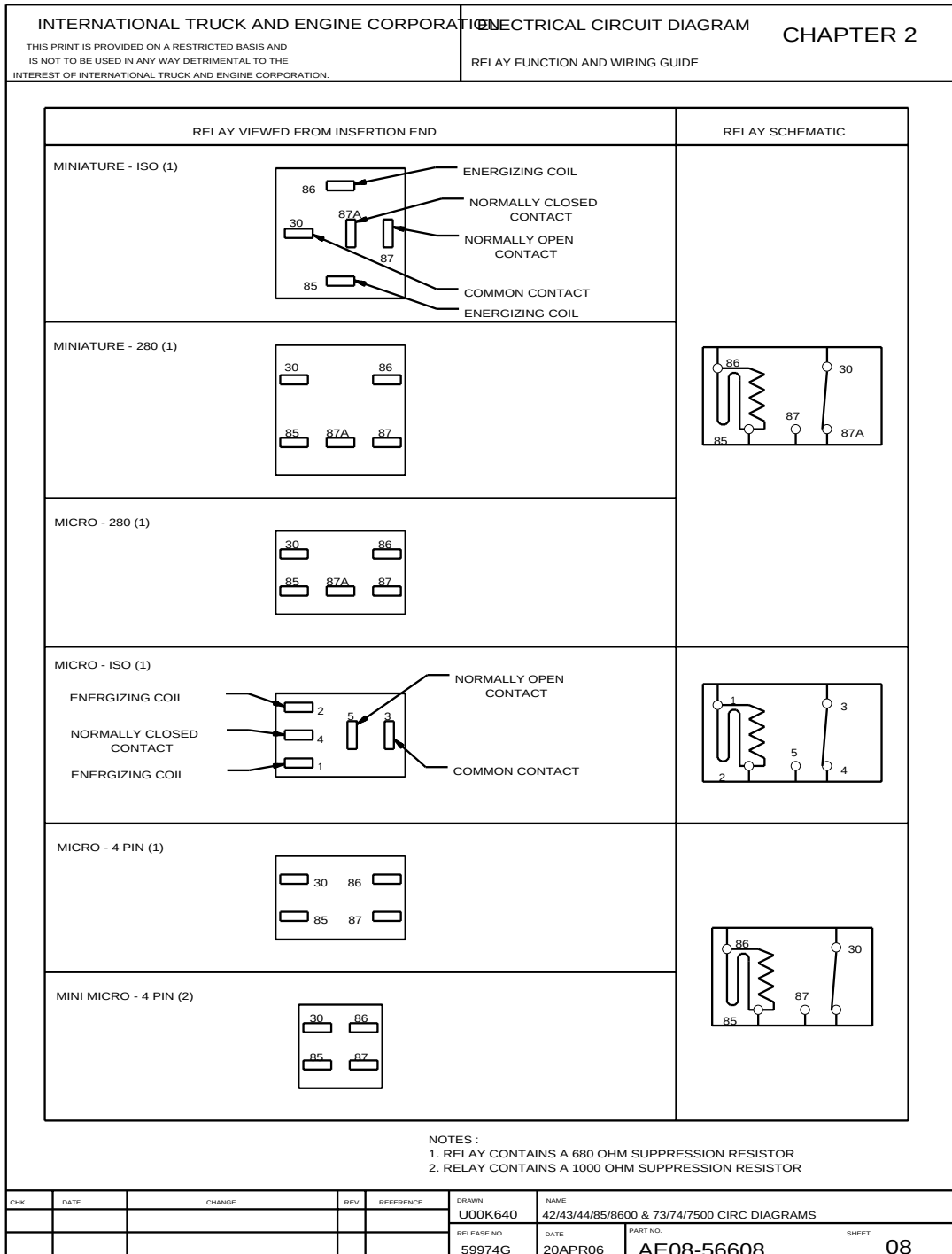


**Figure 8 Relay Function and Wiring Guide**

## 2.9. SCHEMATIC SYMBOL CHART, P. 9

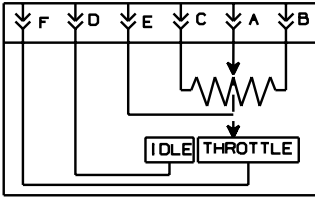
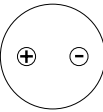
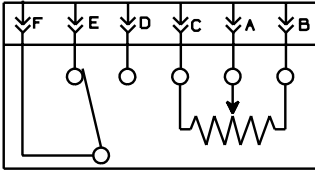
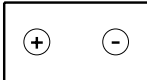
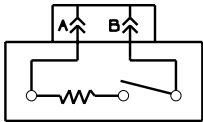
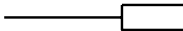
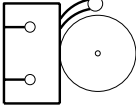
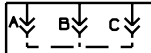
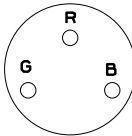
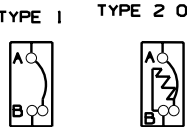
| INTERNATIONAL TRUCK AND ENGINE CORPORATION                                                                                                               |        |                         |     | ELECTRICAL CIRCUIT DIAGRAM                                                           |         | CHAPTER 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                                       |       |
|                                                                                                                                                          |        |                         |     |                                                                                      |         |                                             |       |
| CHG                                                                                                                                                      | 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.                                                                          | DATE    | PART NO.                                    | SHEET |
|                                                                                                                                                          |        |                         |     | 59974G                                                                               | 12SEP06 | AE08-56608                                  | 09    |

Figure 9 Schematic Symbol Chart

## 2.10. SCHEMATIC SYMBOL CHART, P. 10

| INTERNATIONAL TRUCK AND ENGINE CORPORATION<br>THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND<br>IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE<br>INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION. |                           |        |                           | ELECTRICAL CIRCUIT DIAGRAM CHAPTER 2<br>SCHEMATIC SYMBOL CHART (CONT) |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------|---------------------------|-----------------------------------------------------------------------|---------------------------|
| SYMBOL                                                                                                                                                                                                       | DESCRIPTION               | SYMBOL | DESCRIPTION               | SYMBOL                                                                | DESCRIPTION               |
|                                                                                                                                                                                                              | DIODE, LIGHT<br>EMITTING  |        | HORN                      |                                                                       | KEY SWITCH                |
|                                                                                                                                                                                                              | FAN SOLENOID              |        | KEY SWITCH,<br>COMPLEX    |                                                                       | LIGHT W/ SWITCH           |
|                                                                                                                                                                                                              | FEMALE TERMINAL           |        | LIGHT, DOUBLE<br>FILAMENT |                                                                       | LIGHT, SINGLE<br>FILAMENT |
|                                                                                                                                                                                                              | FUSE                      |        |                           |                                                                       |                           |
|                                                                                                                                                                                                              | FUSIBLE LINK              |        |                           |                                                                       |                           |
|                                                                                                                                                                                                              | FUSES W/ BUSBAR           |        |                           |                                                                       |                           |
|                                                                                                                                                                                                              | GROUND N/ STUD            |        |                           |                                                                       |                           |
|                                                                                                                                                                                                              | HEATER                    |        |                           |                                                                       |                           |
|                                                                                                                                                                                                              | HOLDER, FUSE<br>W/ BUSBAR |        |                           |                                                                       |                           |

|     |        |                   |     |           |             |                                             |
|-----|--------|-------------------|-----|-----------|-------------|---------------------------------------------|
| 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      | AE08-56608                                  |
|     |        |                   |     |           | DATE        | SHEET                                       |
|     |        |                   |     |           | 12SEP06     | 10                                          |

Figure 10 Schematic Symbol Chart (Cont.)

## 2.11. SCHEMATIC SYMBOL CHART, P. 11

| INTERNATIONAL TRUCK AND ENGINE CORPORATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                 |                   |     |           | 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.) |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
| <table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>MALE TERMINAL</td></tr><tr><td></td><td>MOTOR</td></tr><tr><td></td><td>PASS THRU CONNECTION</td></tr><tr><td></td><td>PRESSURE SWITCH</td></tr><tr><td></td><td>RELAY, FIVE TERMINAL</td></tr><tr><td></td><td>RELAY, FOUR TERMINAL</td></tr><tr><td></td><td>RELAY, LATCHING</td></tr></table>                                                                                                                                                                                                                          |                                 |                   |     |           | SYMBOL                         | DESCRIPTION                                 |        | MALE TERMINAL |           | MOTOR |      | PASS THRU CONNECTION |        | PRESSURE SWITCH   |   | RELAY, FIVE TERMINAL |         | RELAY, FOUR TERMINAL                        |  | RELAY, LATCHING | <table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>RESISTOR</td></tr><tr><td></td><td>SENDER - FUEL, OIL, TEMP, WATER</td></tr><tr><td></td><td>SENSOR, PRESSURE, ABS 6</td></tr><tr><td></td><td>SENSOR, MAGNETIC</td></tr><tr><td></td><td>SENSOR, YAW</td></tr><tr><td></td><td>SOLENOID</td></tr><tr><td></td><td>SOLENOID W/ DIODE</td></tr></table> |  |  |                       |                 | SYMBOL | DESCRIPTION |  | RESISTOR |  | SENDER - FUEL, OIL, TEMP, WATER |                        | SENSOR, PRESSURE, ABS 6 |  | SENSOR, MAGNETIC |  | SENSOR, YAW |  | SOLENOID    |  | SOLENOID W/ DIODE |
| SYMBOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DESCRIPTION                     |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MALE TERMINAL                   |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MOTOR                           |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PASS THRU CONNECTION            |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PRESSURE SWITCH                 |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RELAY, FIVE TERMINAL            |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RELAY, FOUR TERMINAL            |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RELAY, LATCHING                 |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
| SYMBOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DESCRIPTION                     |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RESISTOR                        |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SENDER - FUEL, OIL, TEMP, WATER |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SENSOR, PRESSURE, ABS 6         |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SENSOR, MAGNETIC                |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SENSOR, YAW                     |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SOLENOID                        |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SOLENOID W/ DIODE               |                   |     |           |                                |                                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
| <table><tr><th>CHK</th><th>DATE</th><th>CHANGE</th><th>REV</th><th>REFERENCE</th><th>DRAWN</th><th>NAME</th></tr><tr><td>CNA</td><td>9MAY07</td><td>REVISED &amp; REDRAWN</td><td>A</td><td>60782A</td><td>U00K640</td><td>42/43/44/85/8600 &amp; 73/74/7500 CIRC DIAGRAMS</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>RELEASE NO.<br/>59974G</td><td>DATE<br/>20APR06</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>PART NO.<br/>AE08-56608</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>SHEET<br/>11</td></tr></table> |                                 |                   |     |           | 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.<br>59974G | DATE<br>20APR06 |        |             |  |          |  |                                 | PART NO.<br>AE08-56608 |                         |  |                  |  |             |  | SHEET<br>11 |  |                   |
| 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.<br>59974G          | DATE<br>20APR06                             |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                   |     |           |                                | PART NO.<br>AE08-56608                      |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                   |     |           |                                | SHEET<br>11                                 |        |               |           |       |      |                      |        |                   |   |                      |         |                                             |  |                 |                                                                                                                                                                                                                                                                                                                                                                            |  |  |                       |                 |        |             |  |          |  |                                 |                        |                         |  |                  |  |             |  |             |  |                   |

Figure 11 Schematic Symbol Chart (Cont.)

## 2.12. SCHEMATIC SYMBOL CHART, P.12

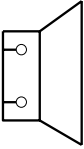
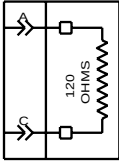
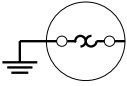
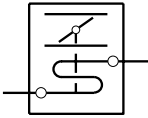
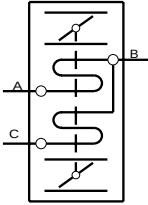
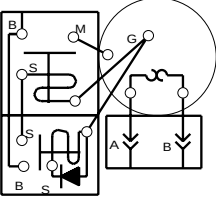
| INTERNATIONAL TRUCK AND ENGINE CORPORATION                                                                                                               |             |                                                                                     |                     | ELECTRICAL CIRCUIT DIAGRAM 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         | SYMBOL                                                                              | DESCRIPTION                        | SYMBOL                                                                              | DESCRIPTION                          |
|                                                                         | SPEAKER     |    | SWITCH, PUSH BUTTON |    | TERMINATING RESISTOR               |    | THERMISTOR                           |
|                                                                         | SPLICE      |  | THERMOSTAT          |  | VALVE, ETHER BOTTLE                |  | VALVE, MODULATOR                     |
|                                                                         | STUD        |  | START MOTOR W/ TOCP |  | SWITCH, MECHANICAL (NORMALLY OPEN) |  | SWITCH, MECHANICAL (NORMALLY CLOSED) |
|                                                                                                                                                          |             |                                                                                     |                     |                                                                                     |                                    |                                                                                     |                                      |
| 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                                      |                                      |
|                                                                                                                                                          | SYMBOL      |                                                                                     |                     |                                                                                     | 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

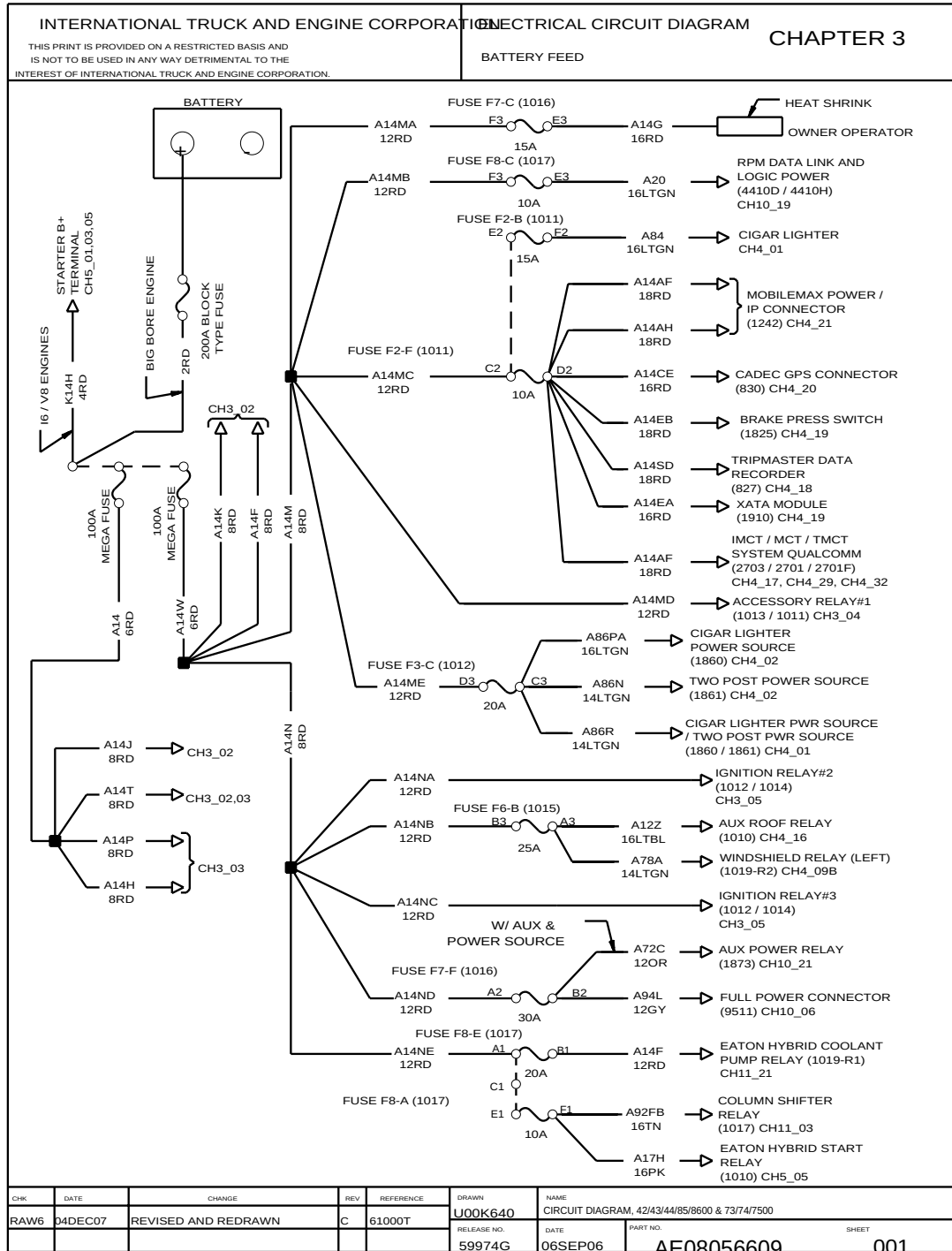


Figure 13 Battery Feed

## 3.2. BATTERY FEED, P. 2

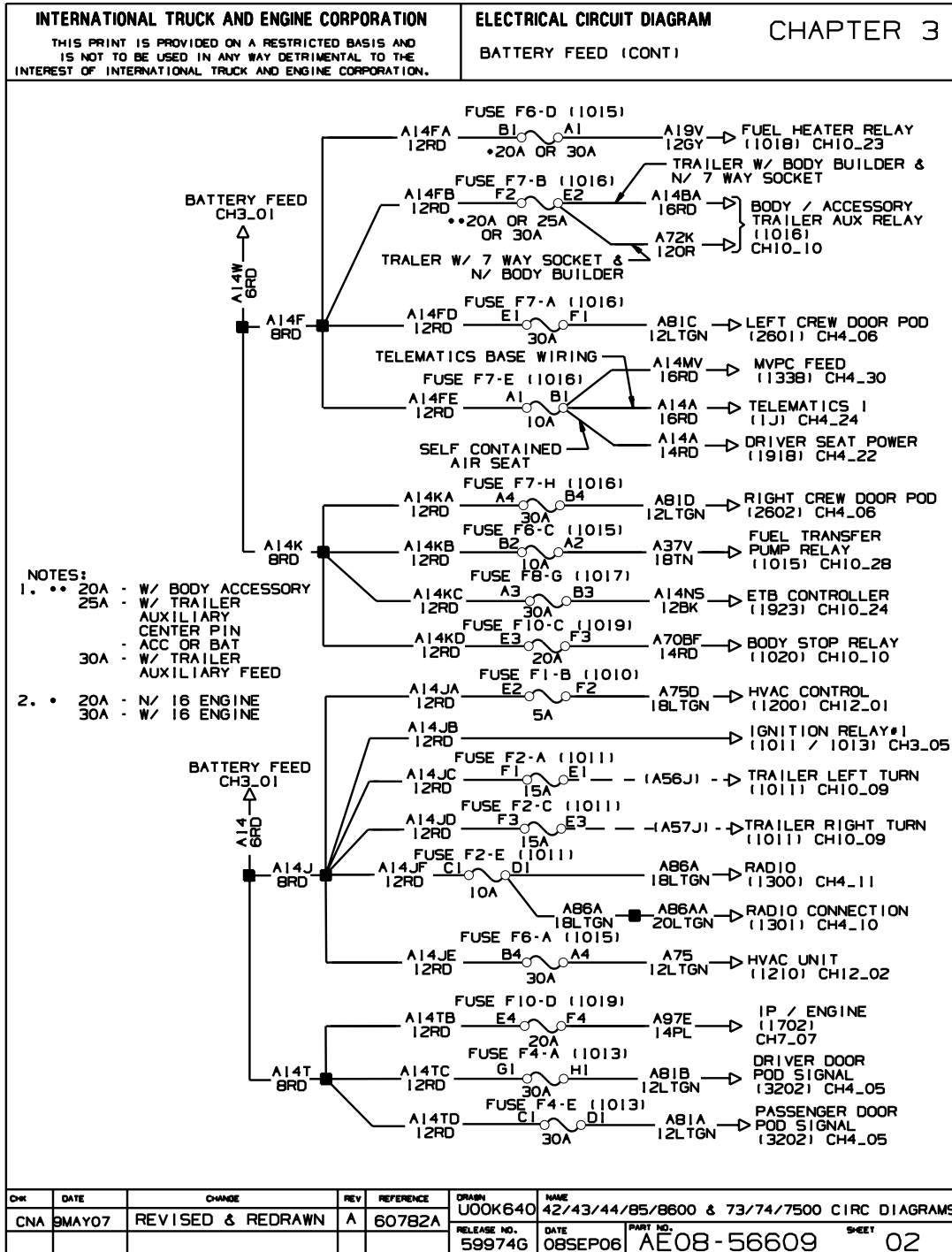


Figure 14 Battery Feeds (Cont.)

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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### 3.3. BATTERY FEED, P. 3

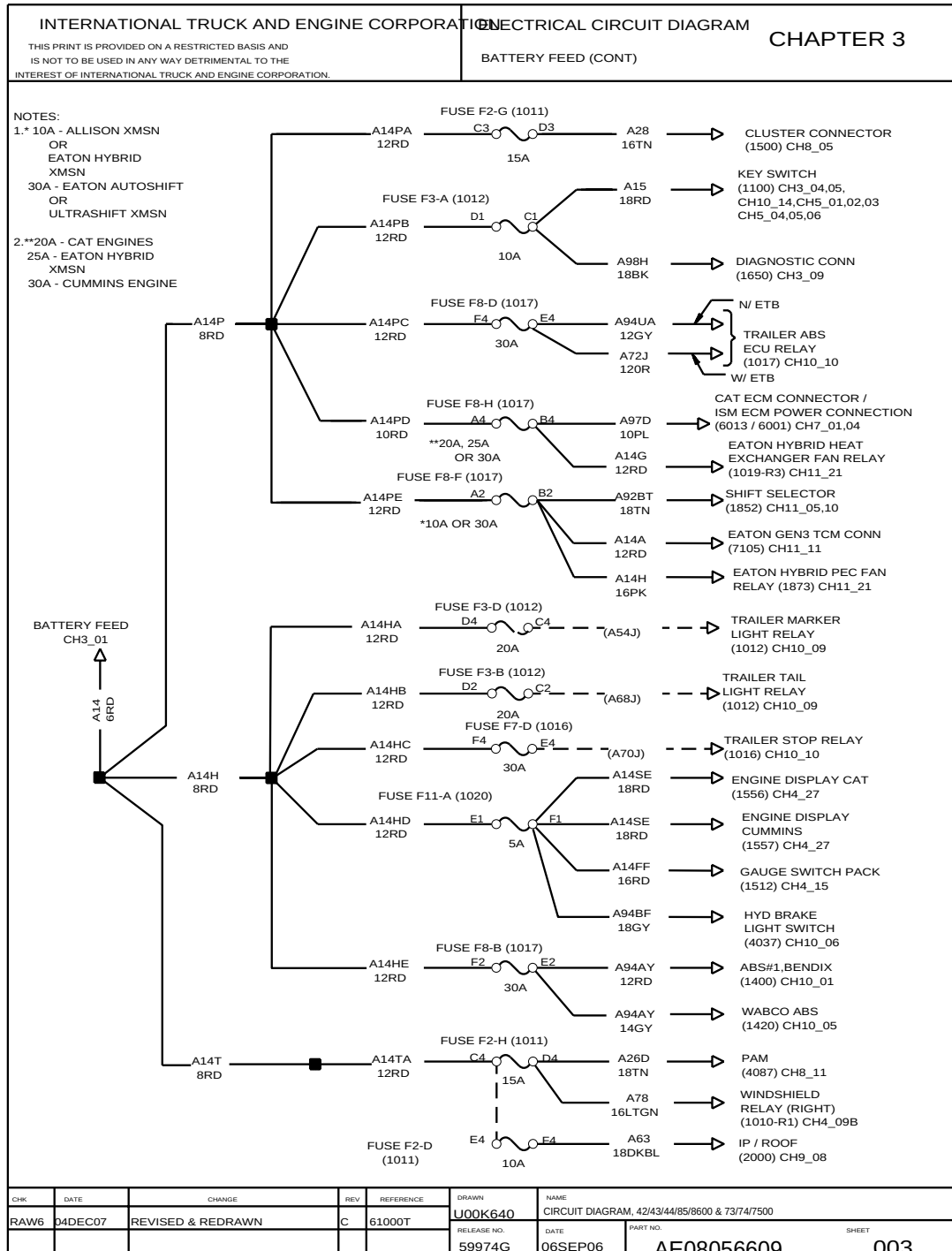


**Figure 15 Battery Feed (Cont.)**

## 3.4. ACCESSORY FEED, P. 4

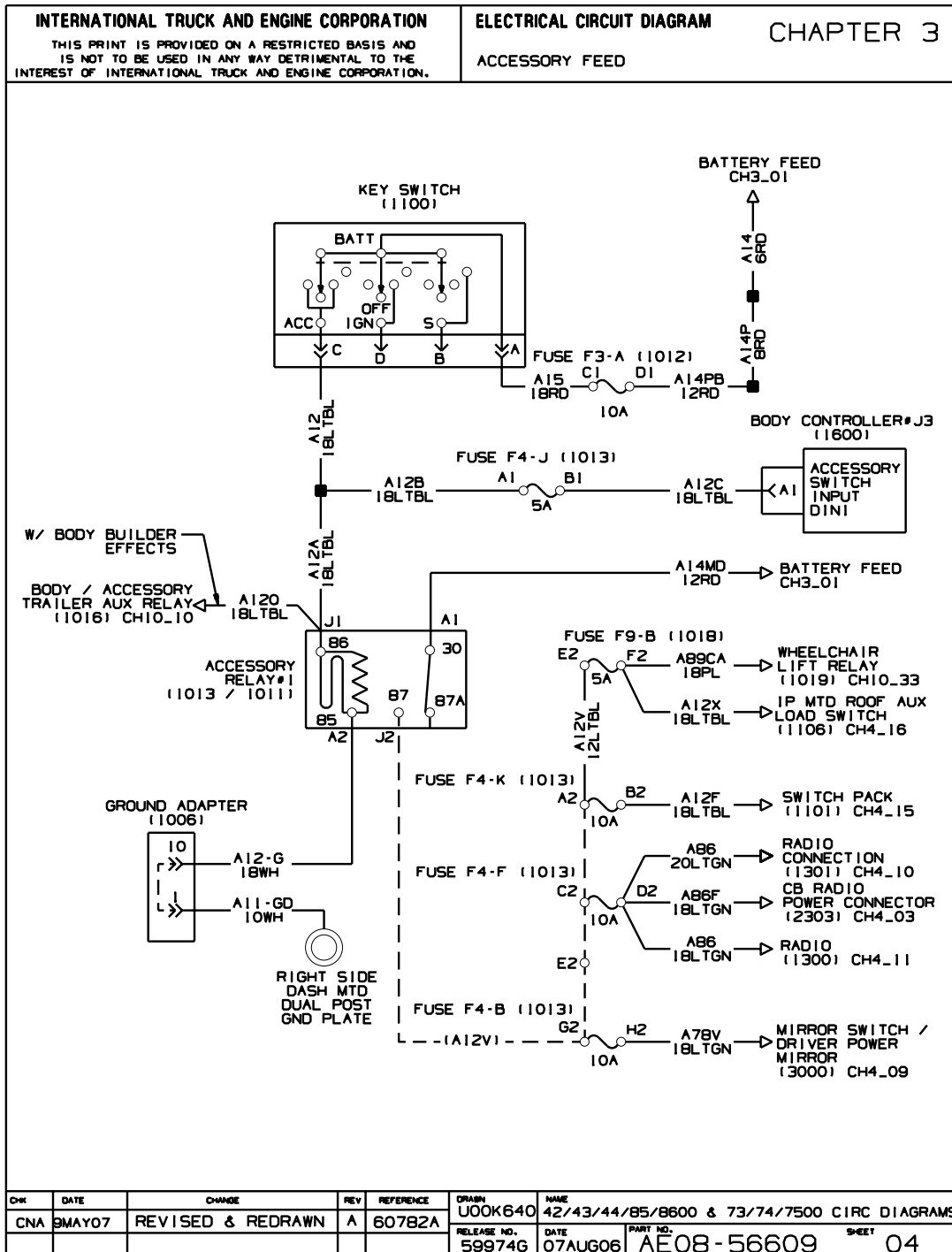


Figure 16 Accessory Feed

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

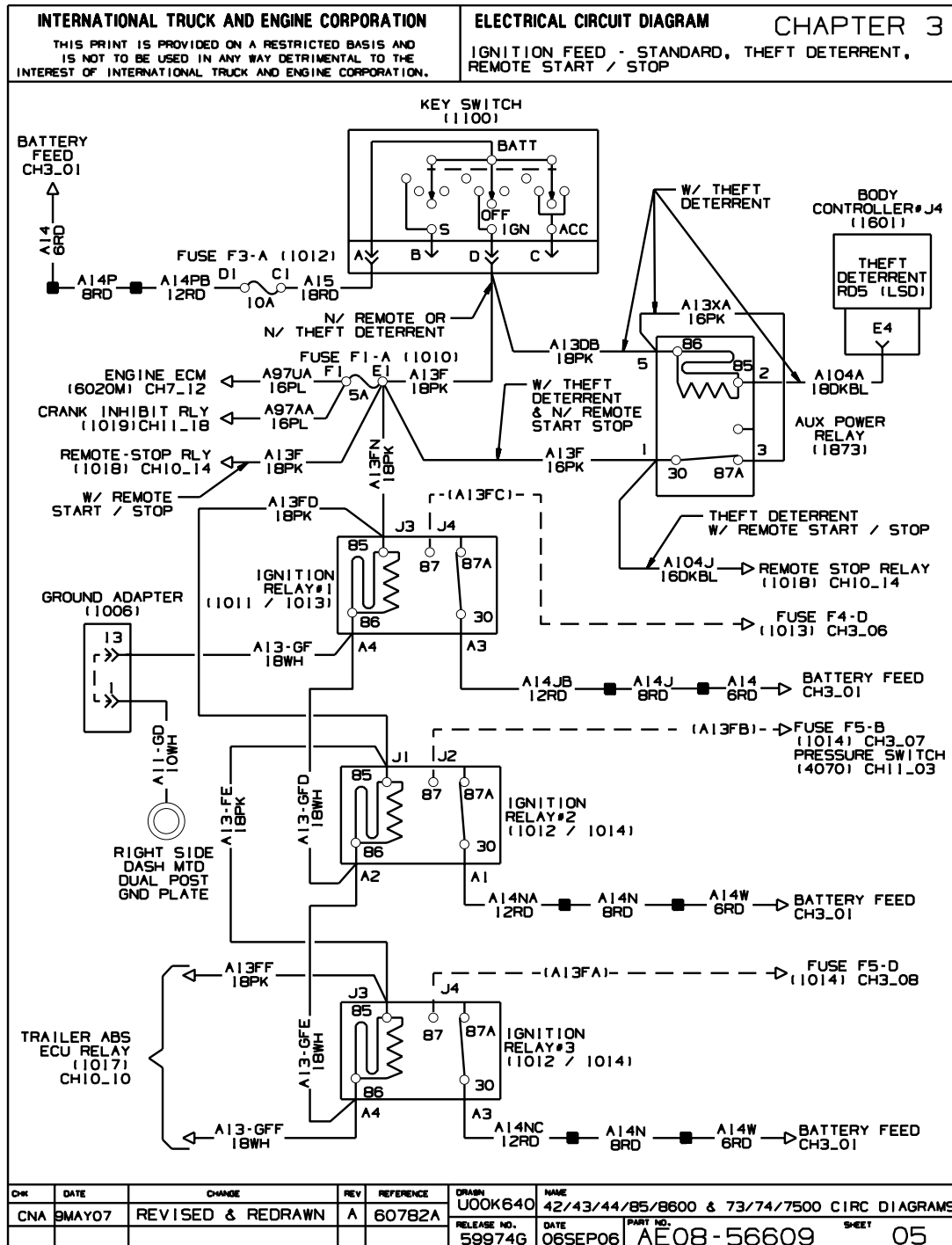


Figure 17 Ignition Feed — Standard, Theft Deterrent, Remote Start/Stop

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

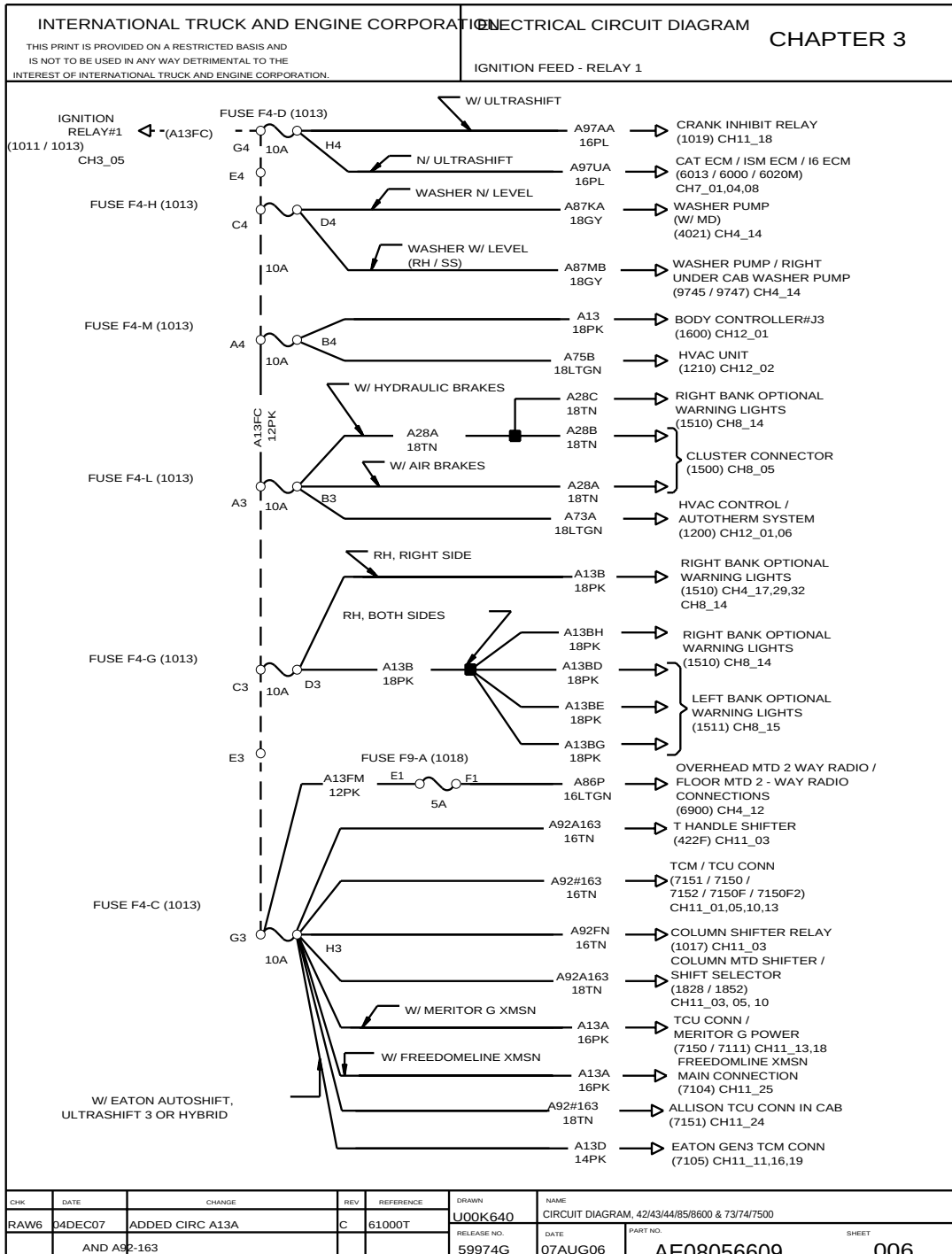


Figure 18 Ignition Feed Relay 1

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

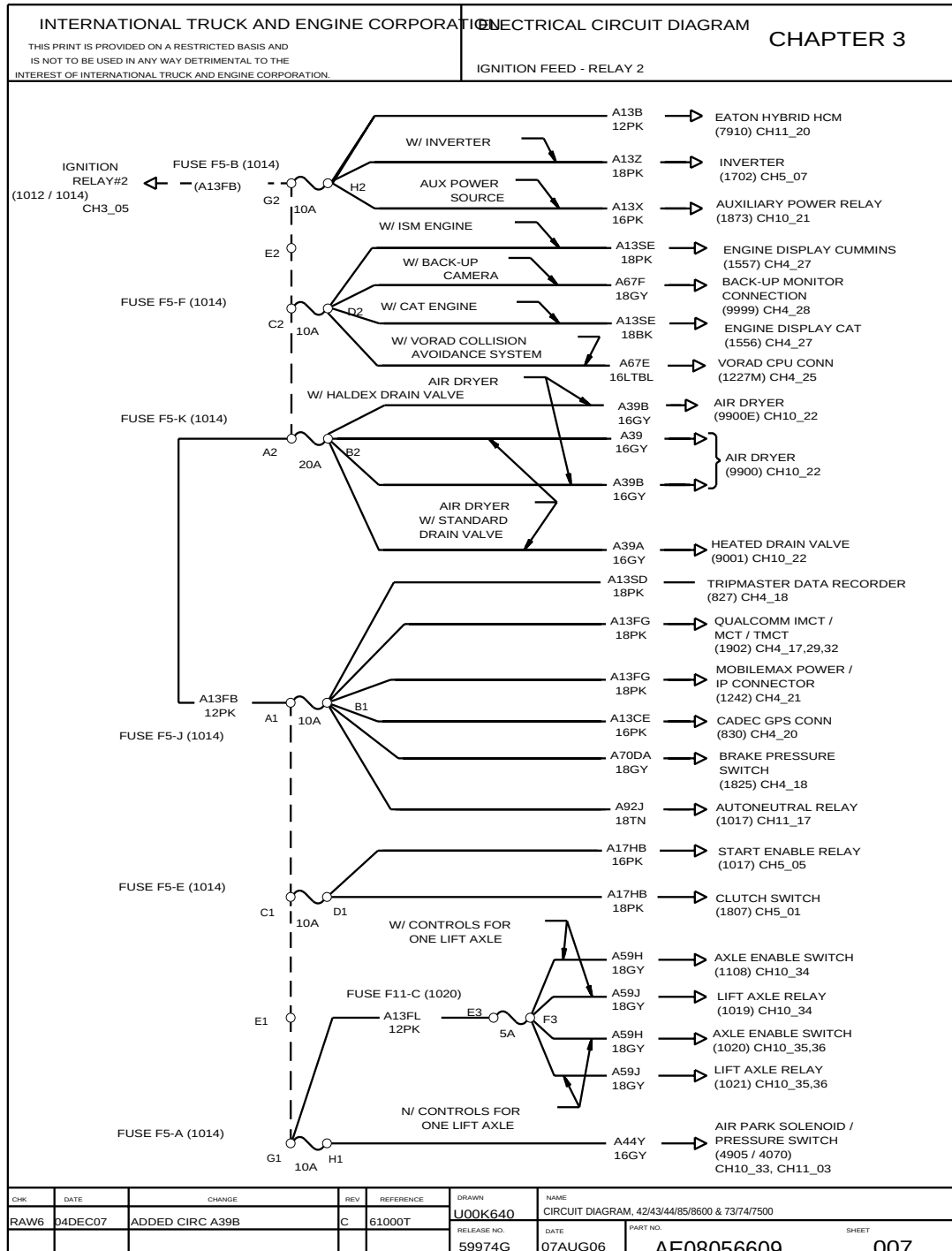


**Figure 19 Ignition Feed Relay 2**

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

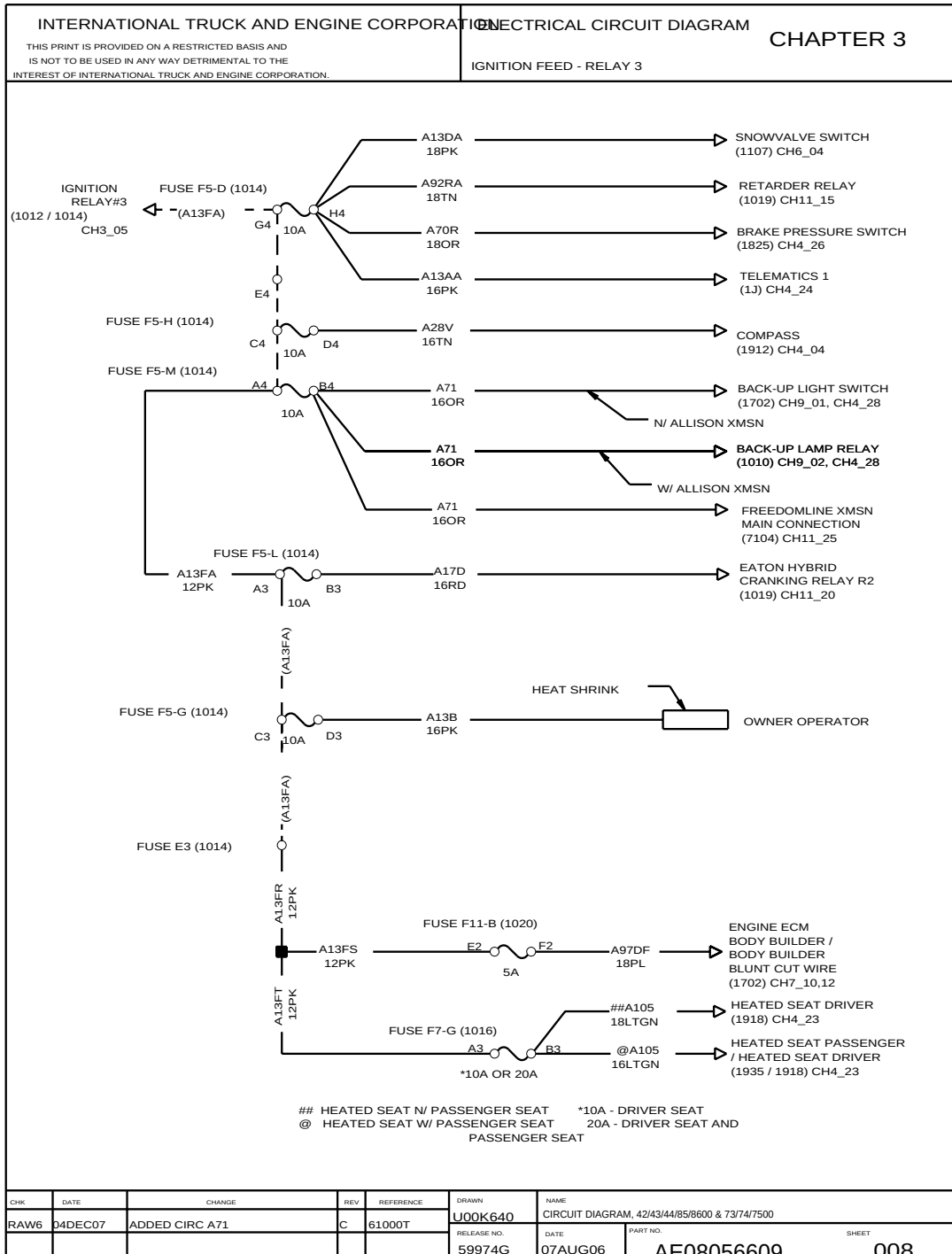


**Figure 20 Ignition Feed Relay 3**

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

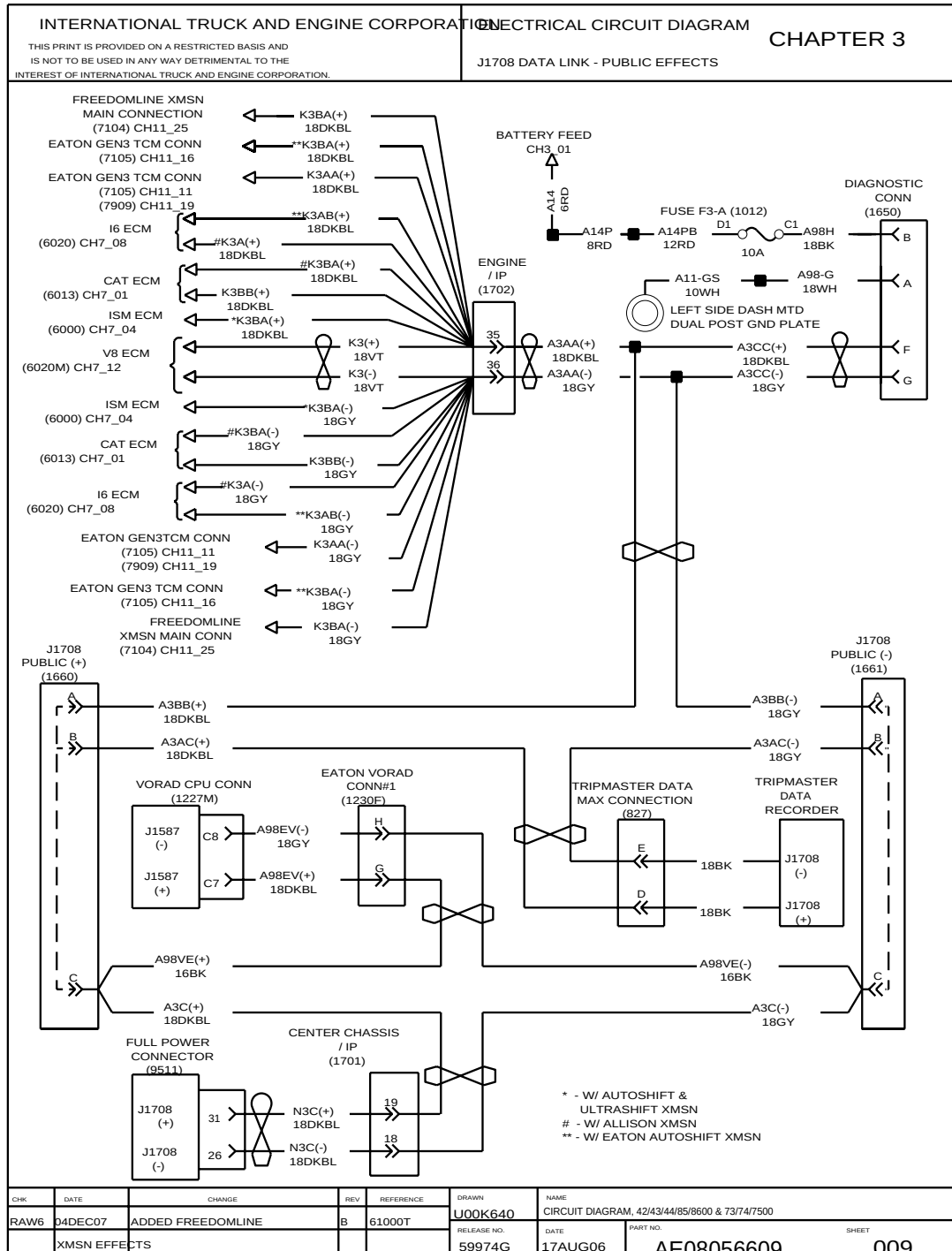


**Figure 21 J1708 Data Link — Public Effects**

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

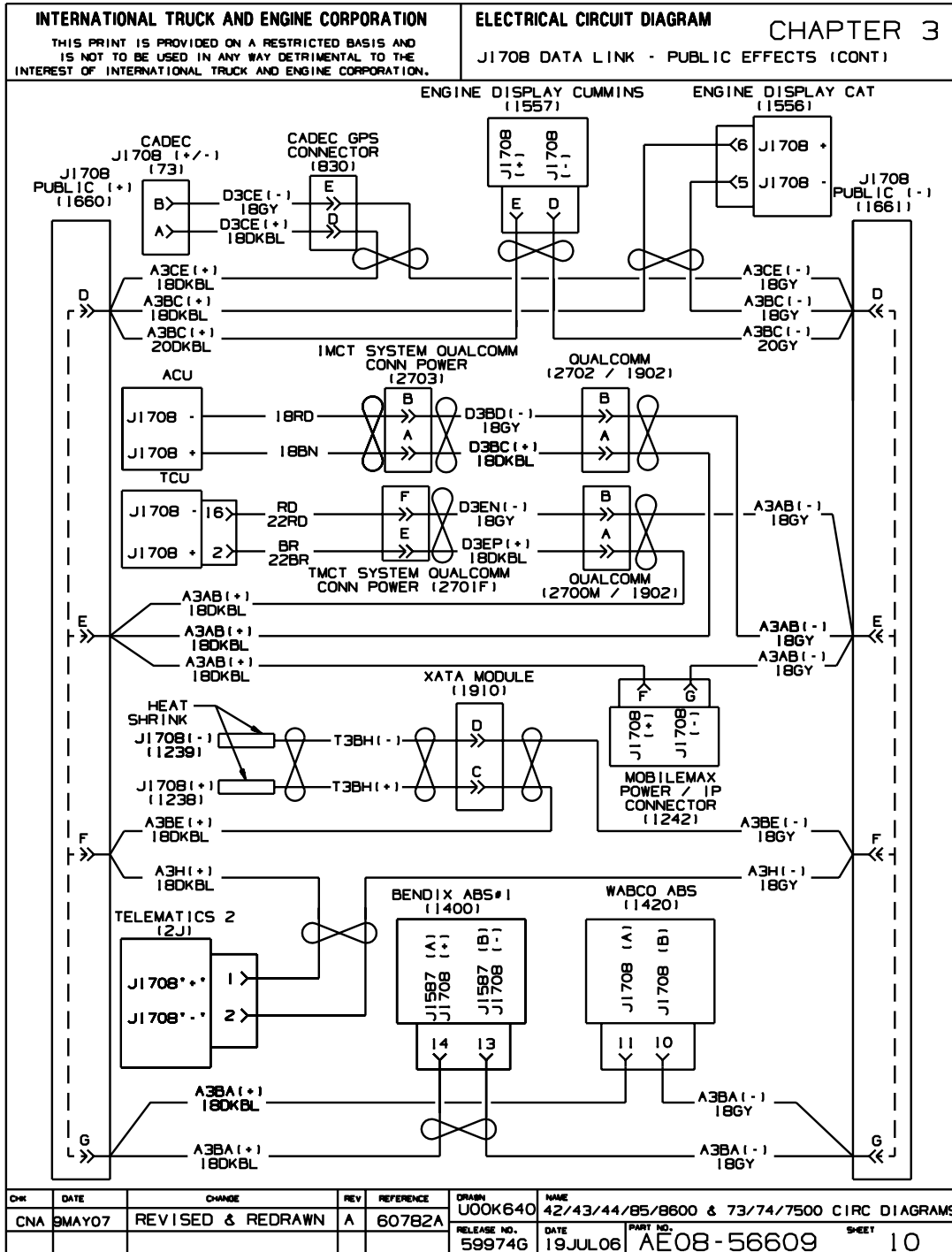


Figure 22 J1708 Data Link — Public Effects (Cont.)

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

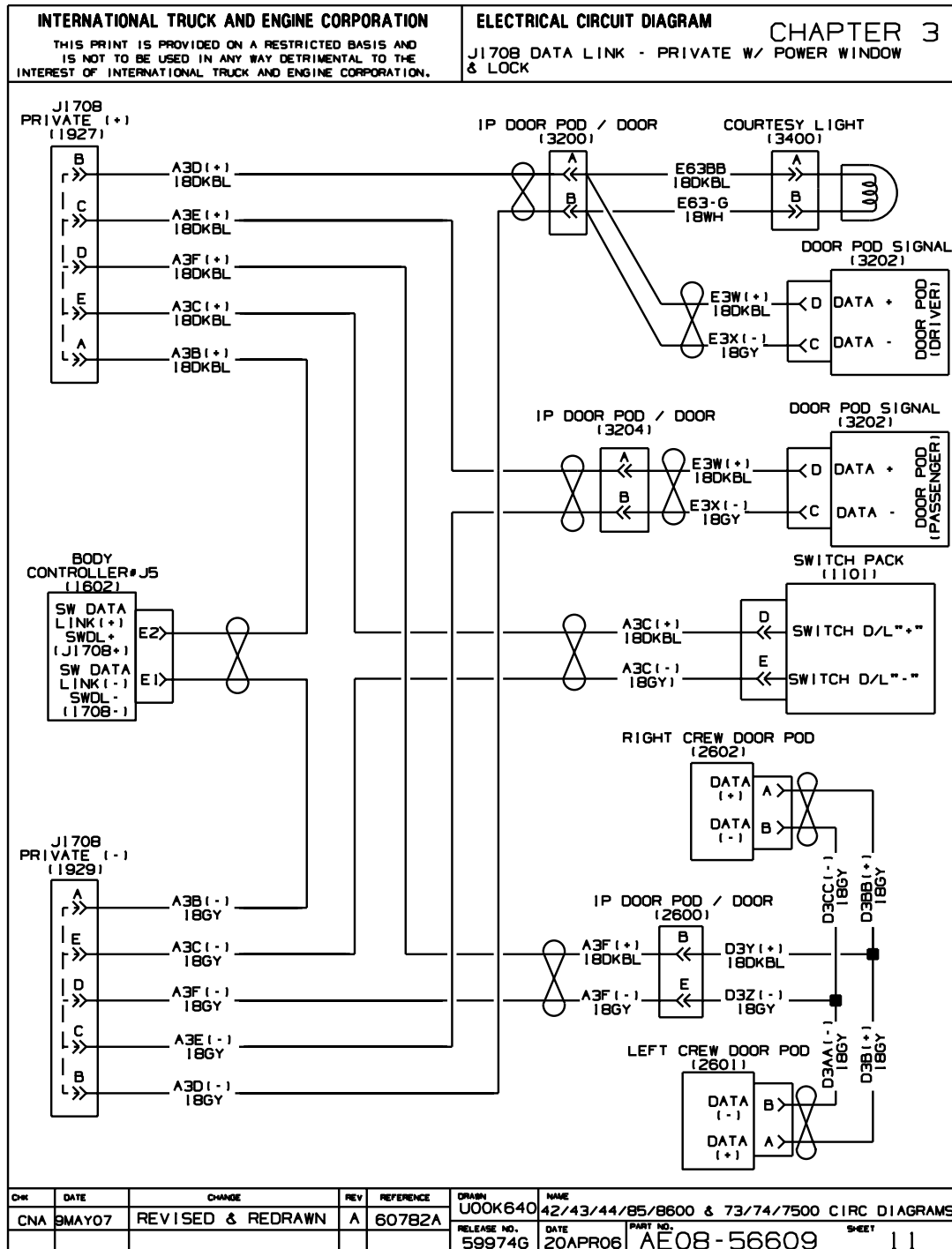


Figure 23 J1708 Data Link — Private with Power Window and Lock

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

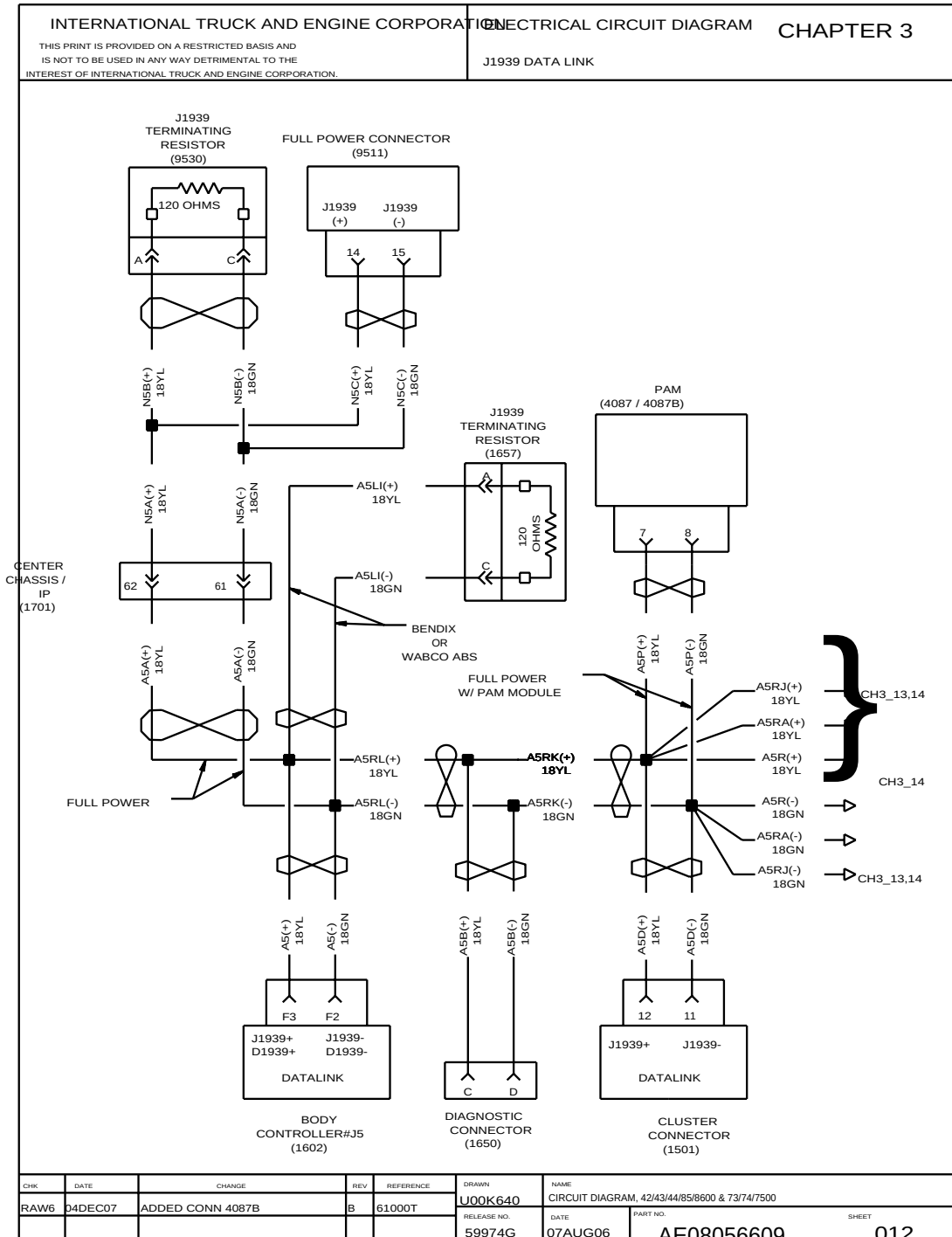


Figure 24 J1939 Data Link

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

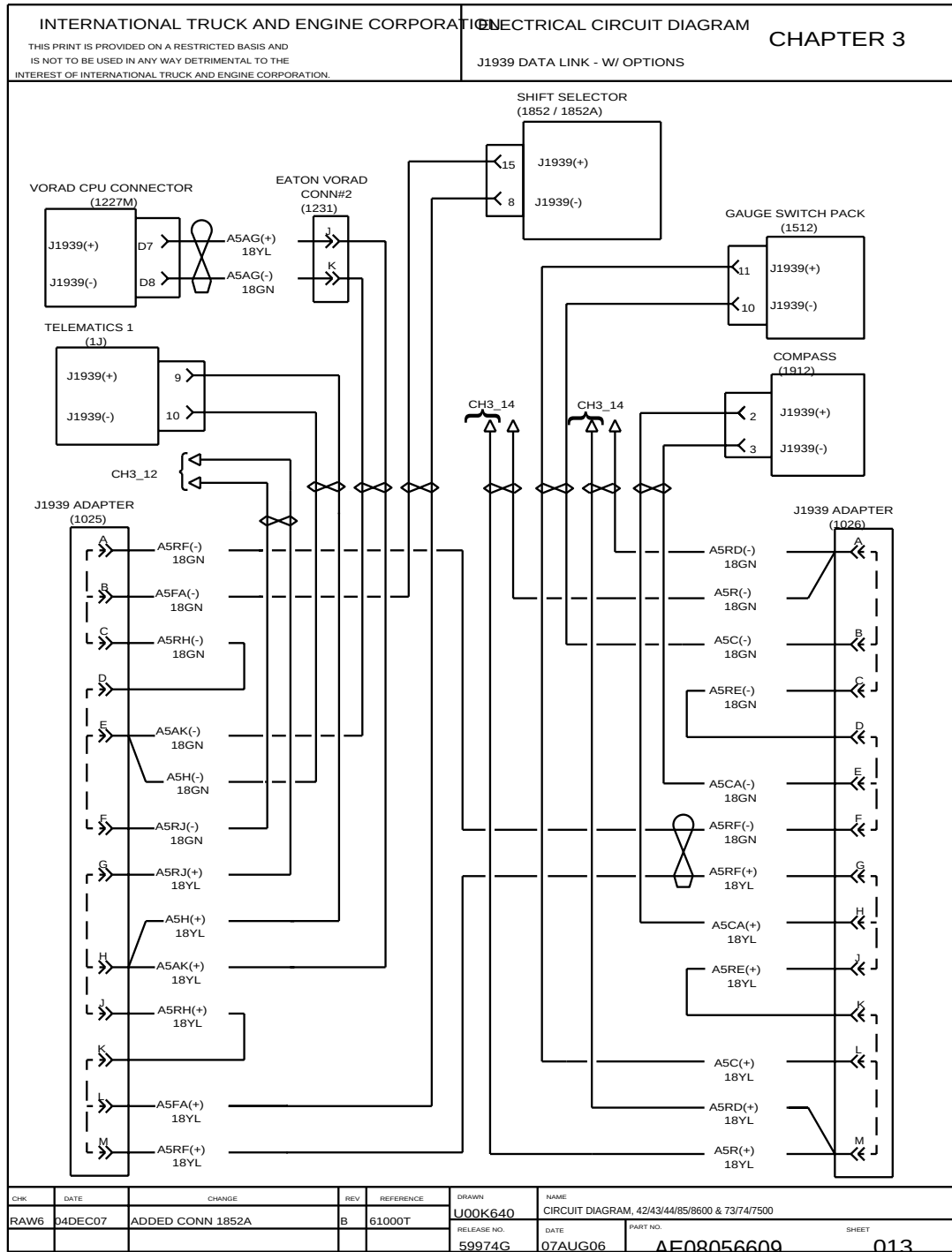


**Figure 25 J1939 Data Link with Options**

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

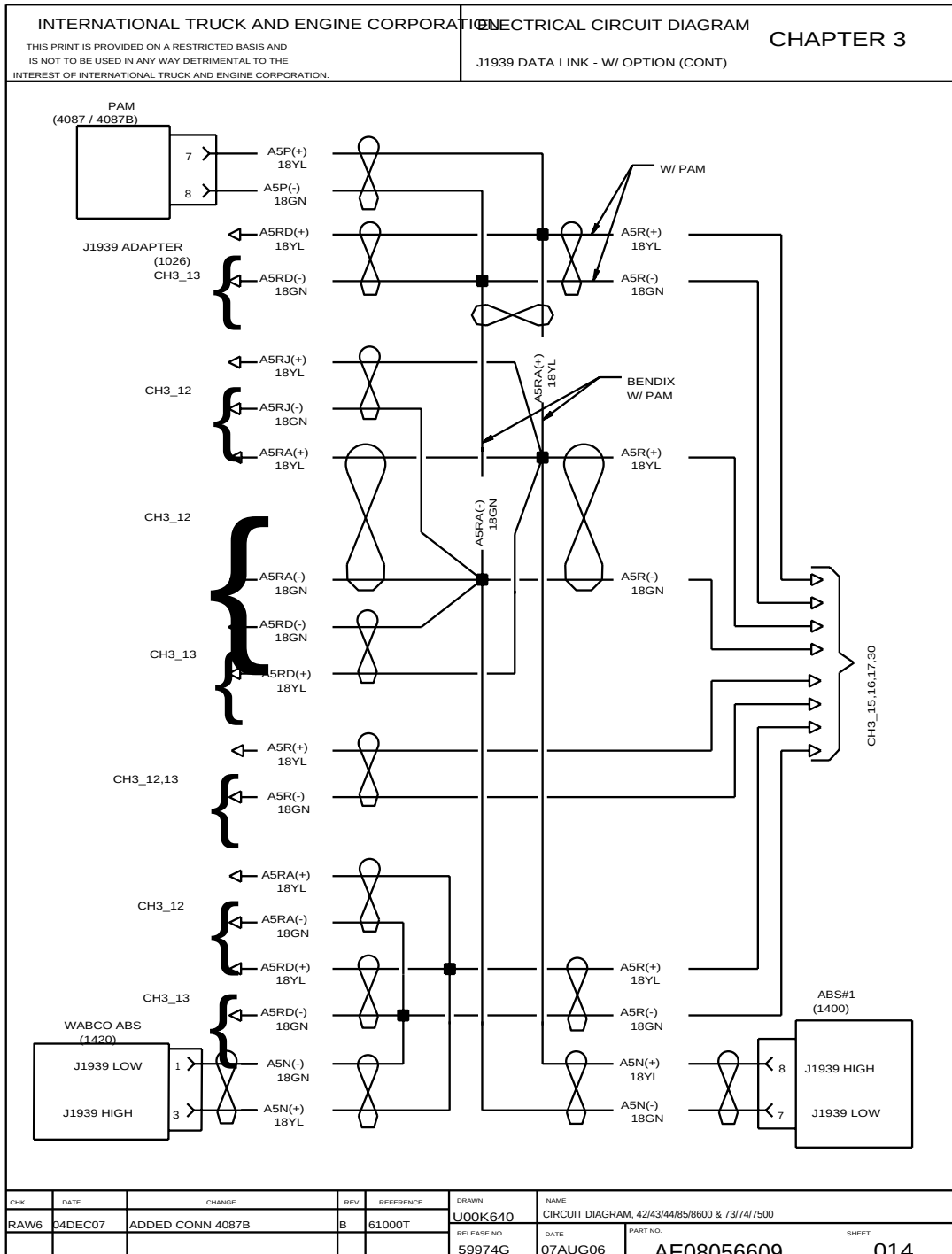
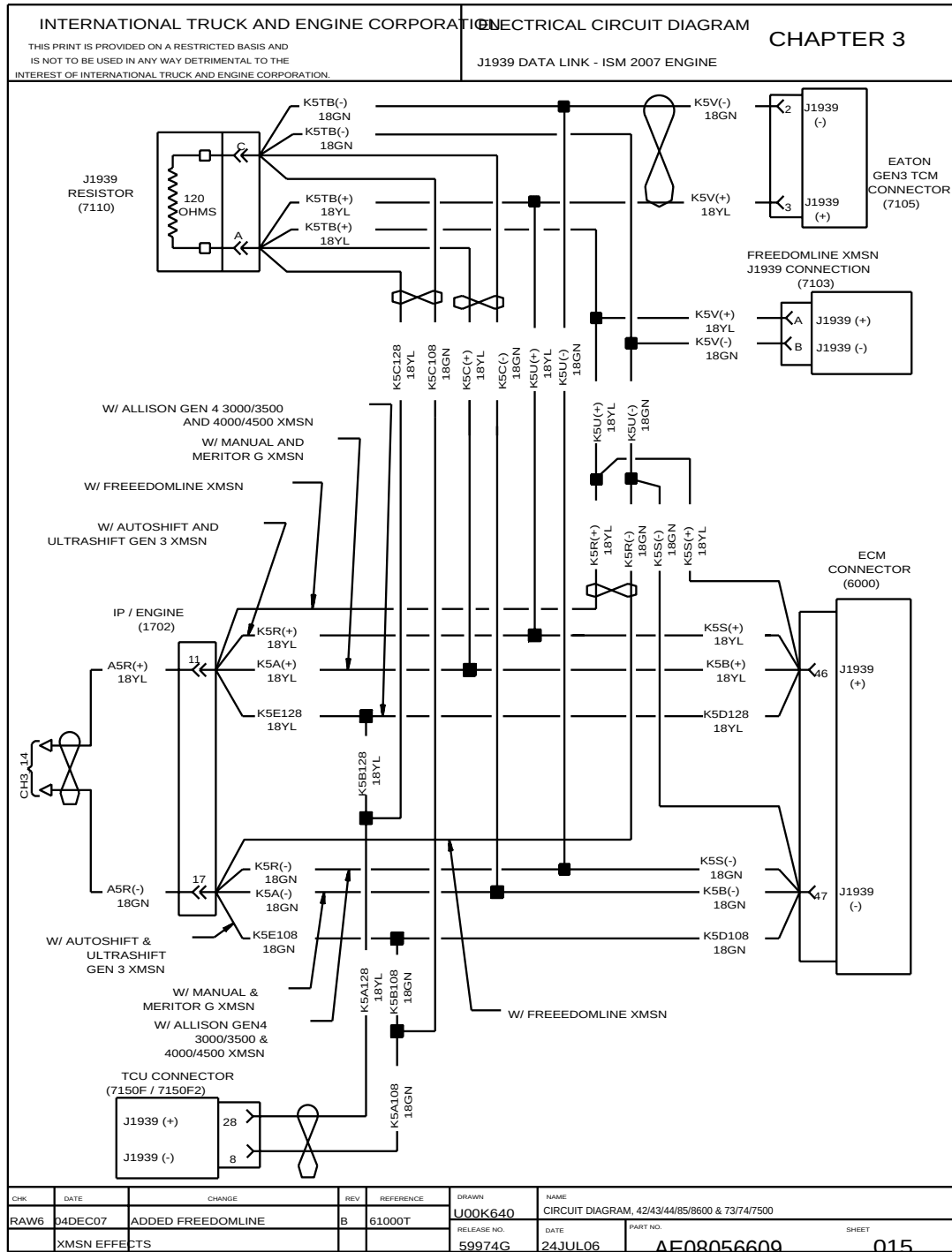
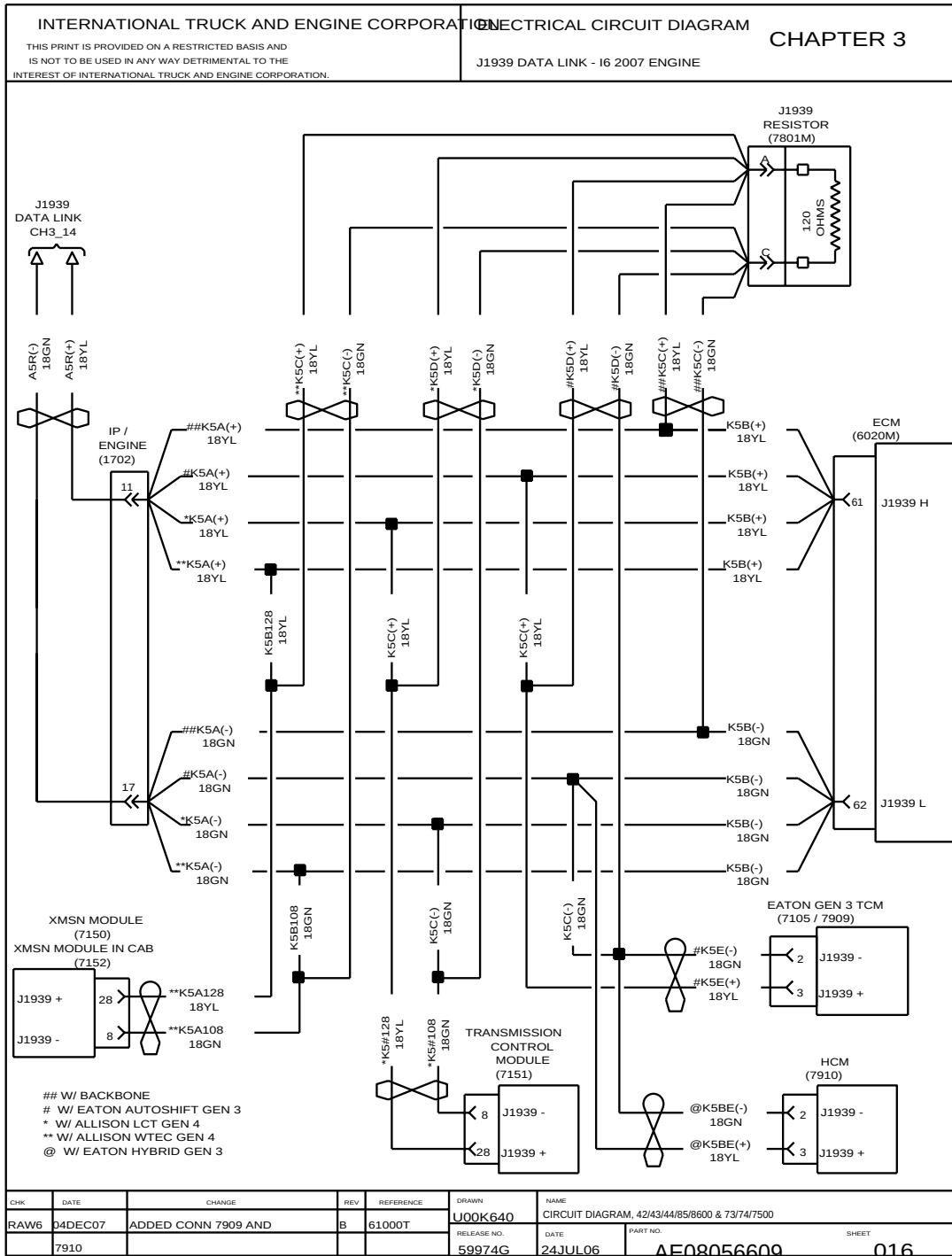


Figure 26 J1939 Data Link with Options

### 3.15. J1939 DATA LINK — ISM 2007 ENGINE, P. 15



### 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**

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

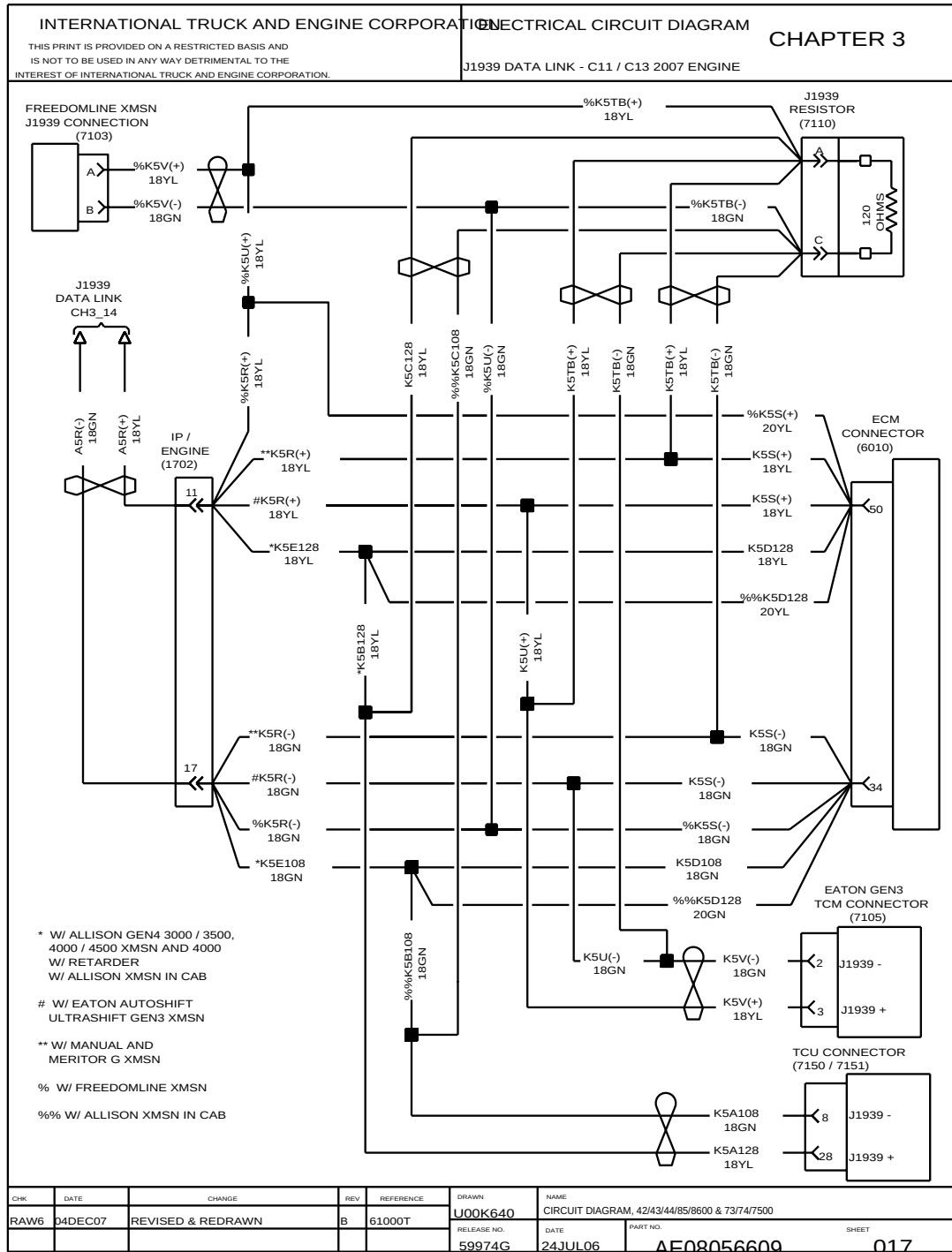


**Figure 29 J1939 Data Link — C11/C13 2007 Engine**

### 3.18. GROUND — IP, P. 18

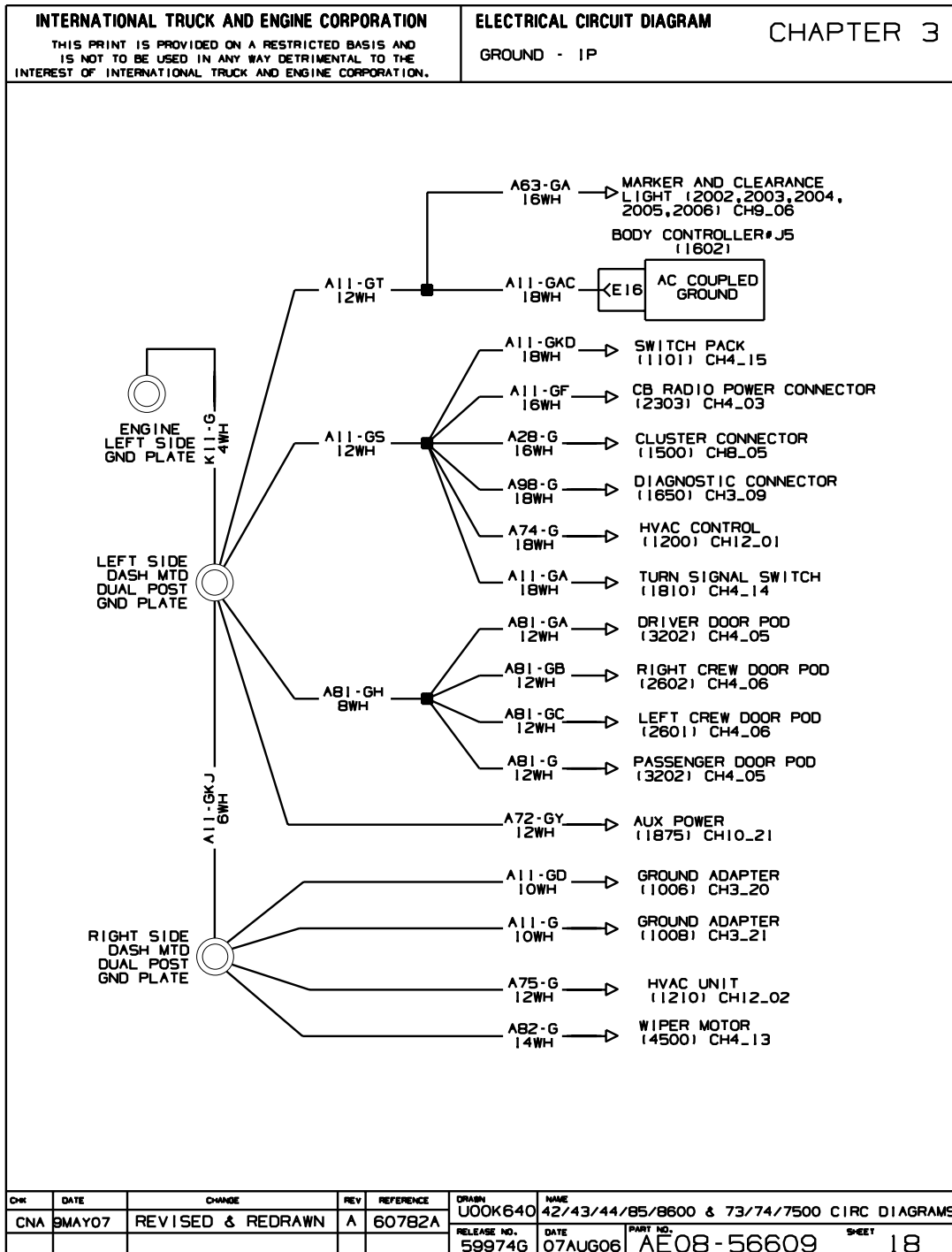


**Figure 30 Ground — IP**

3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS

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### 3.19. GROUND — IP, P. 19

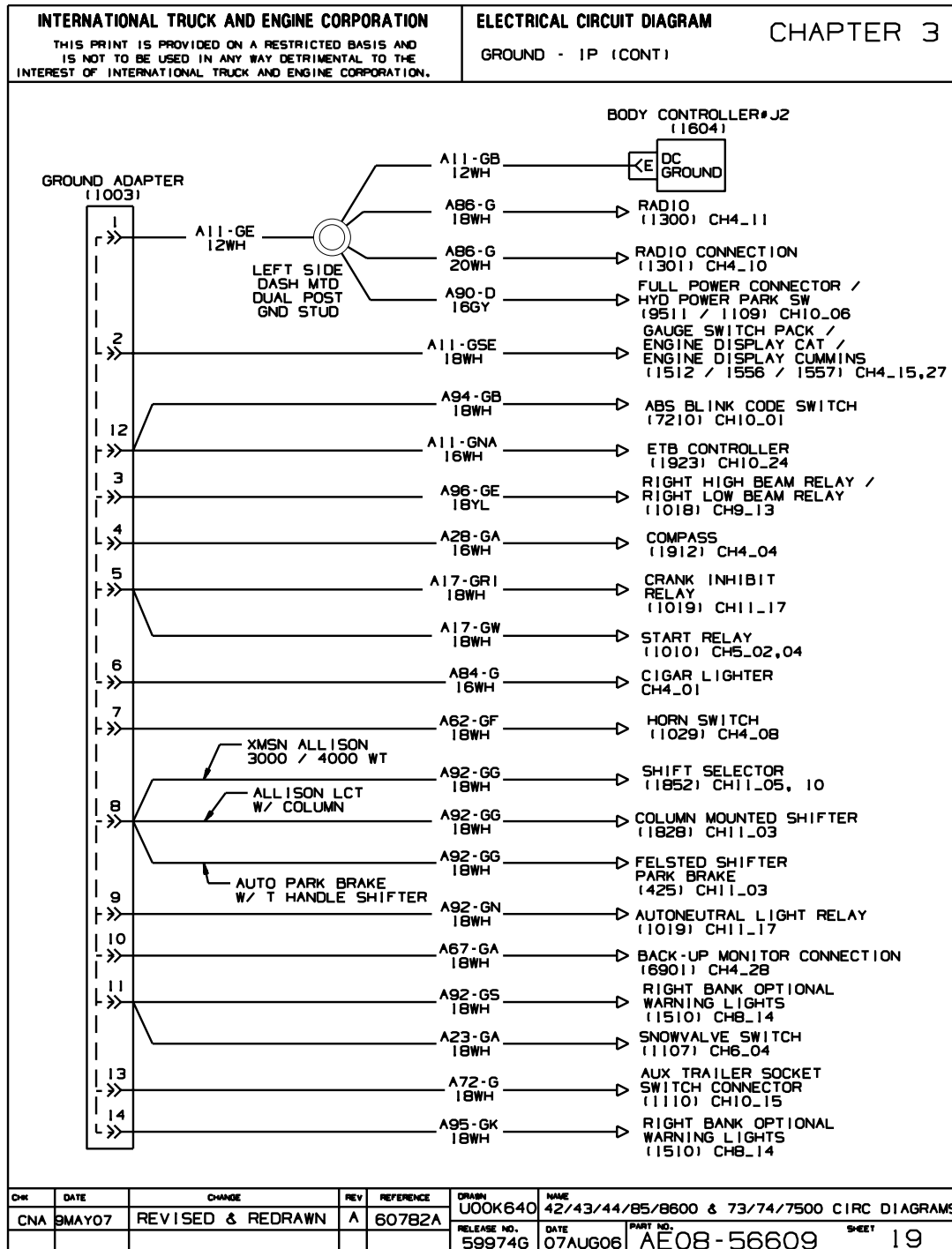


Figure 31 Ground — IP (Cont.)

### 3.20. GROUND — IP, P. 20

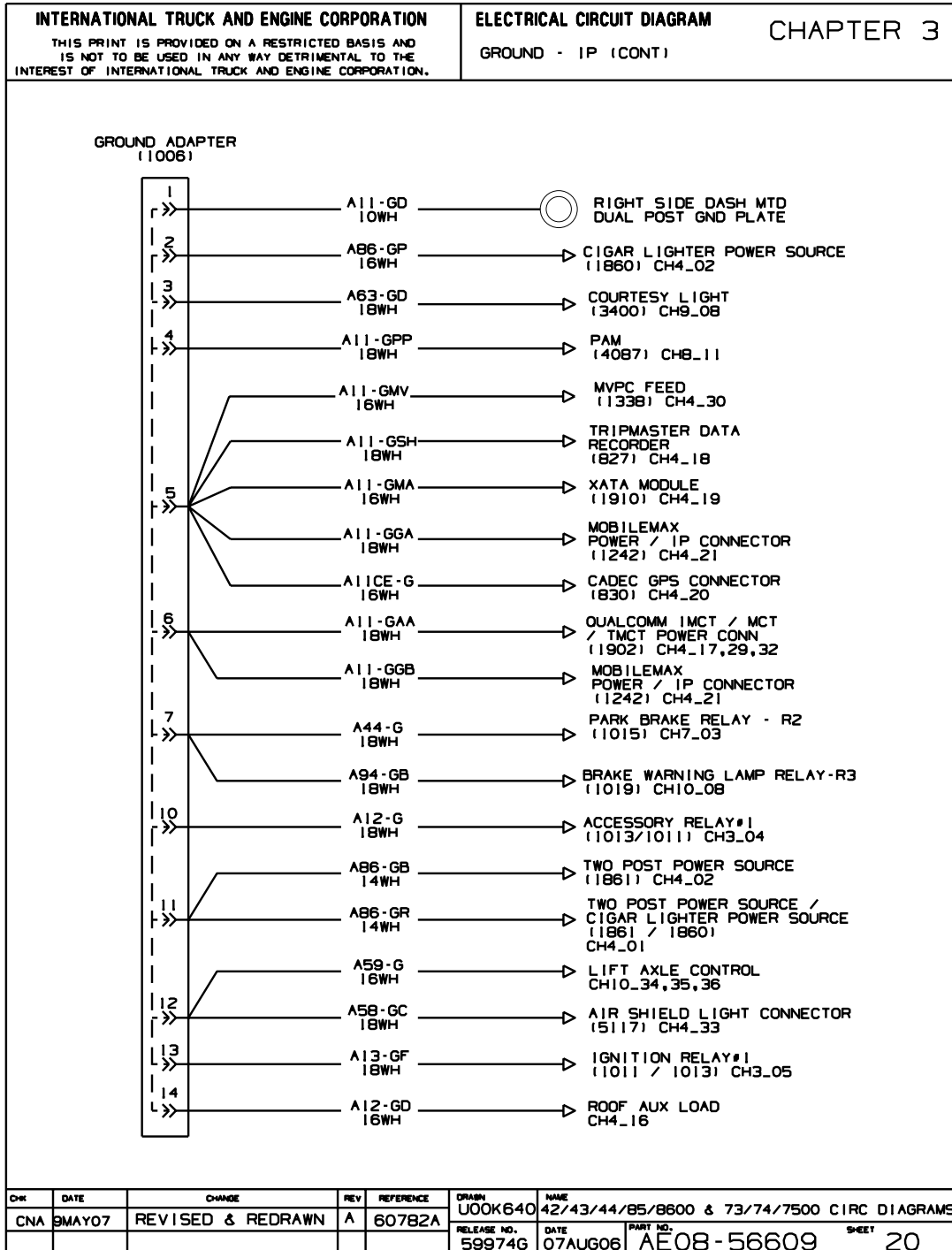


Figure 32 Ground — IP (Cont.)

### 3.21. GROUND — IP, P. 21

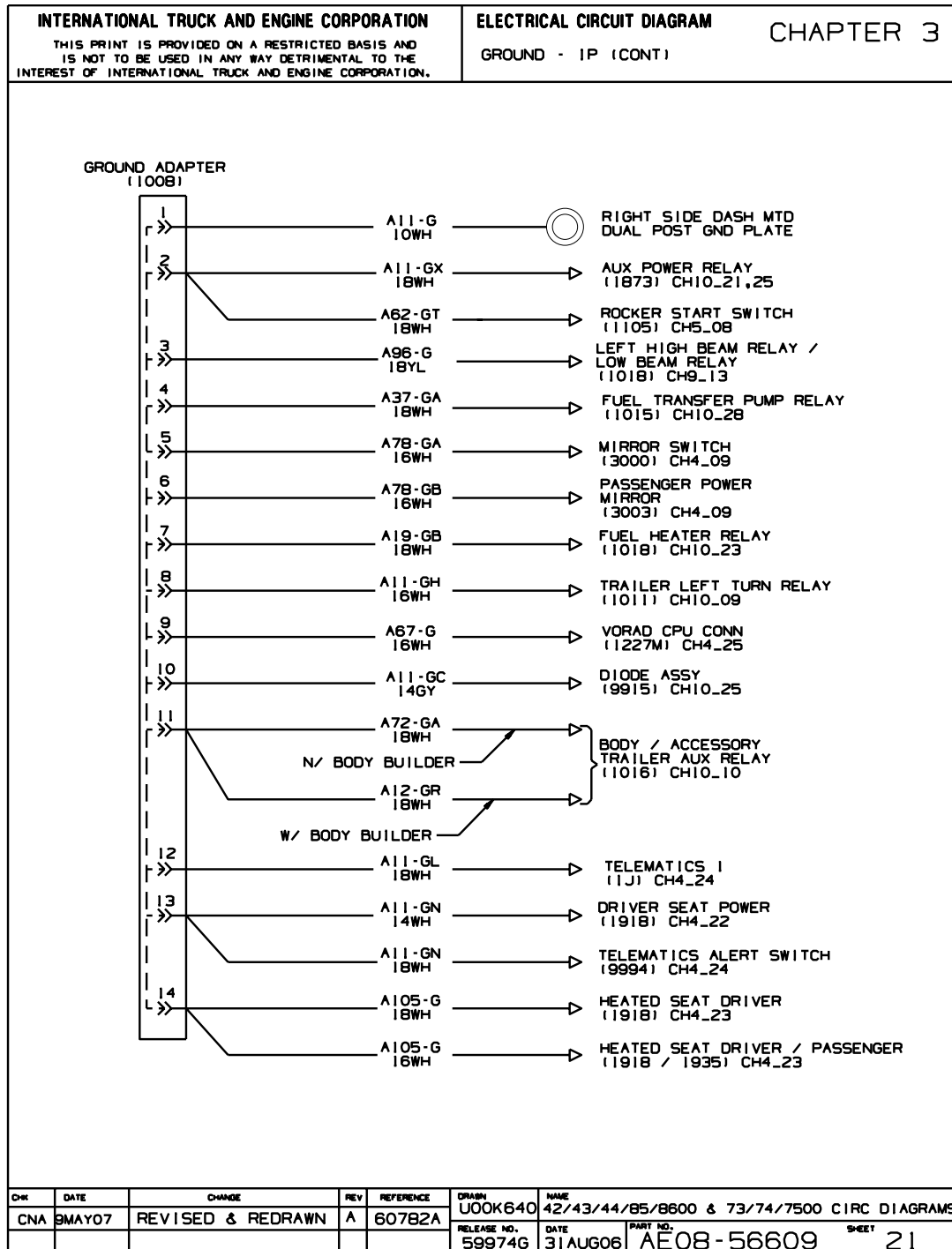


Figure 33 Ground — IP (Cont.)

### 3.22. ENGINE GROUND, P. 22

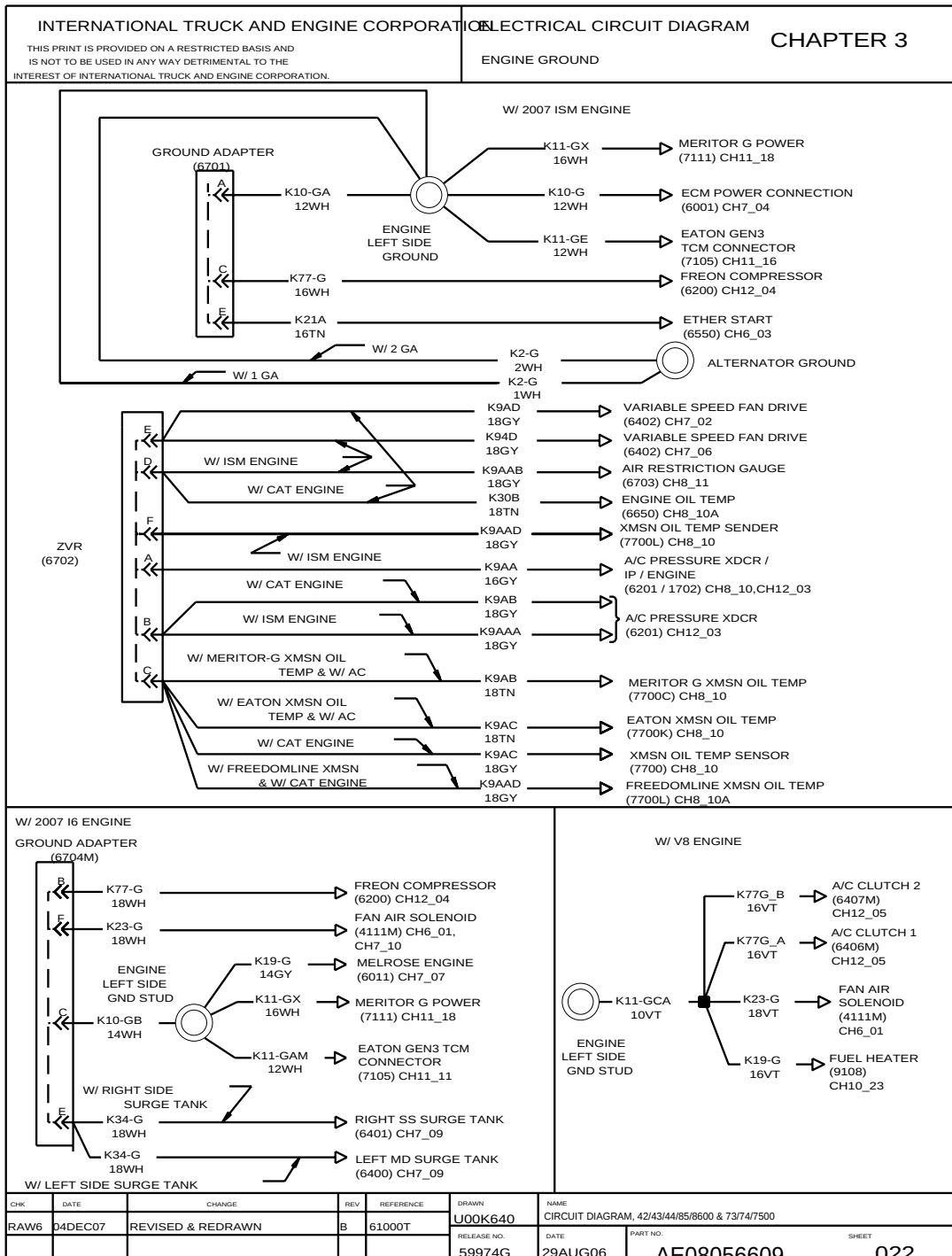


**Figure 34 Engine Ground**

### 3.23. ENGINE GROUND, P. 23

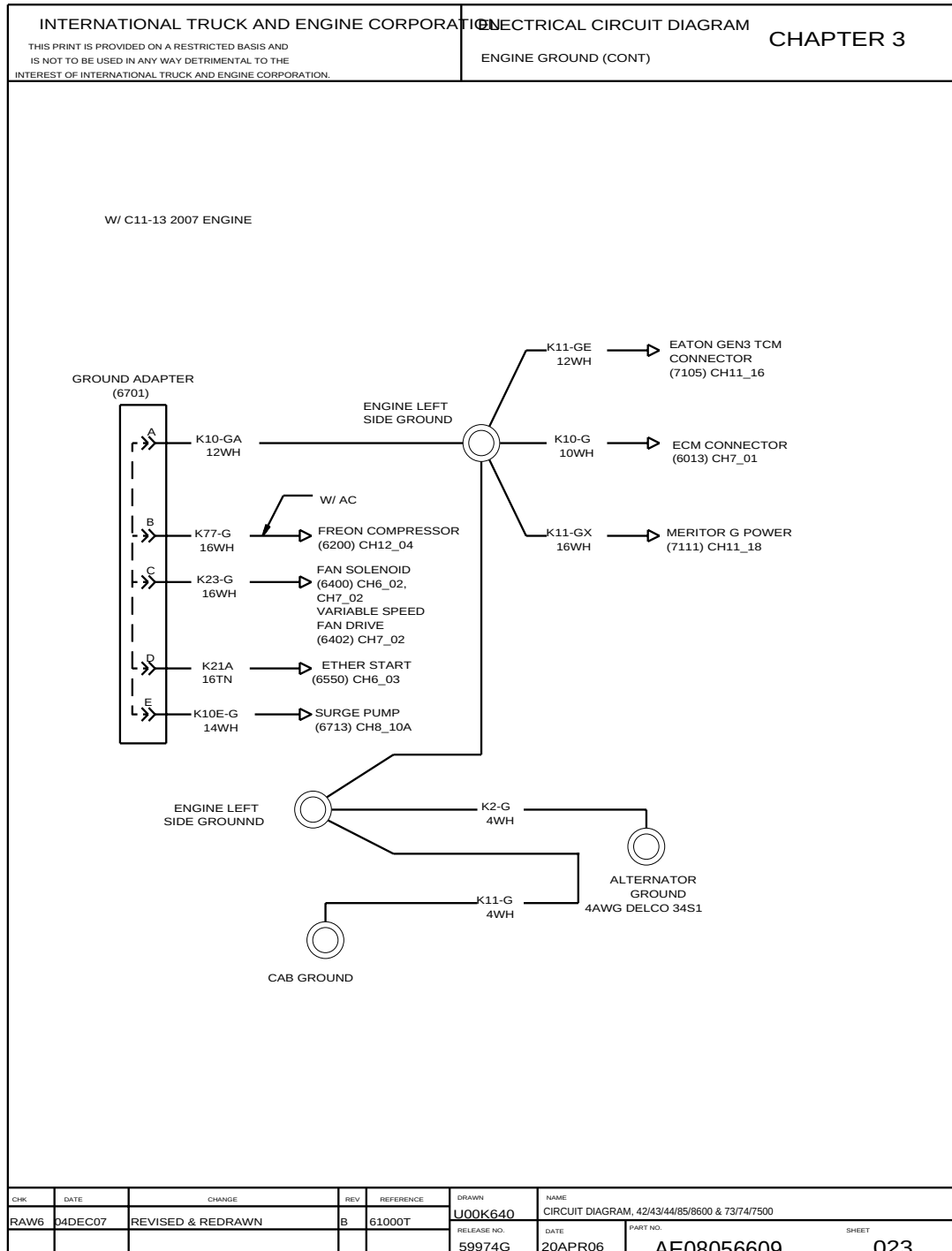


Figure 35 Engine Ground (Cont.)

## 3.24. GROUND — CHASSIS, P. 24

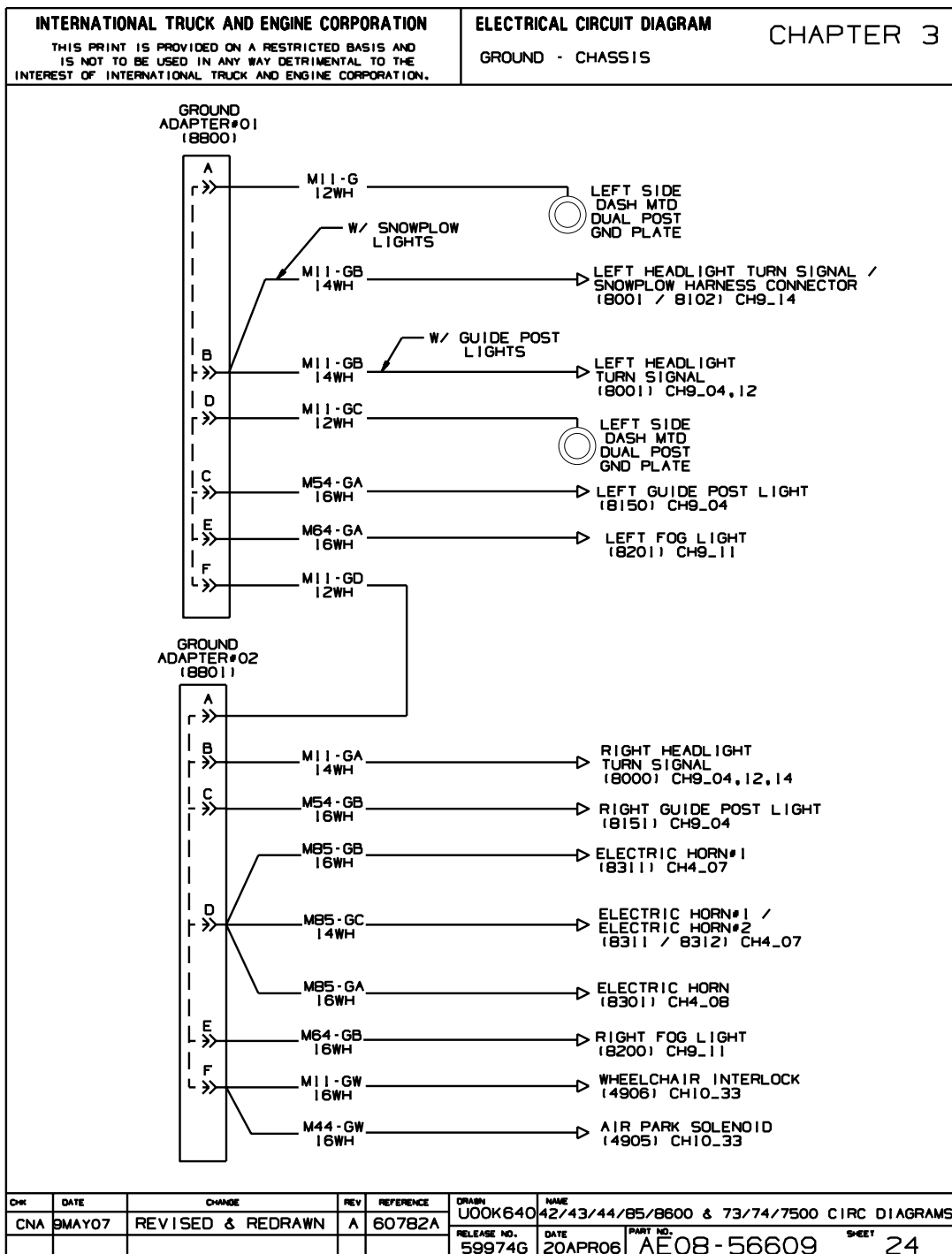


Figure 36 Ground — Chassis

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

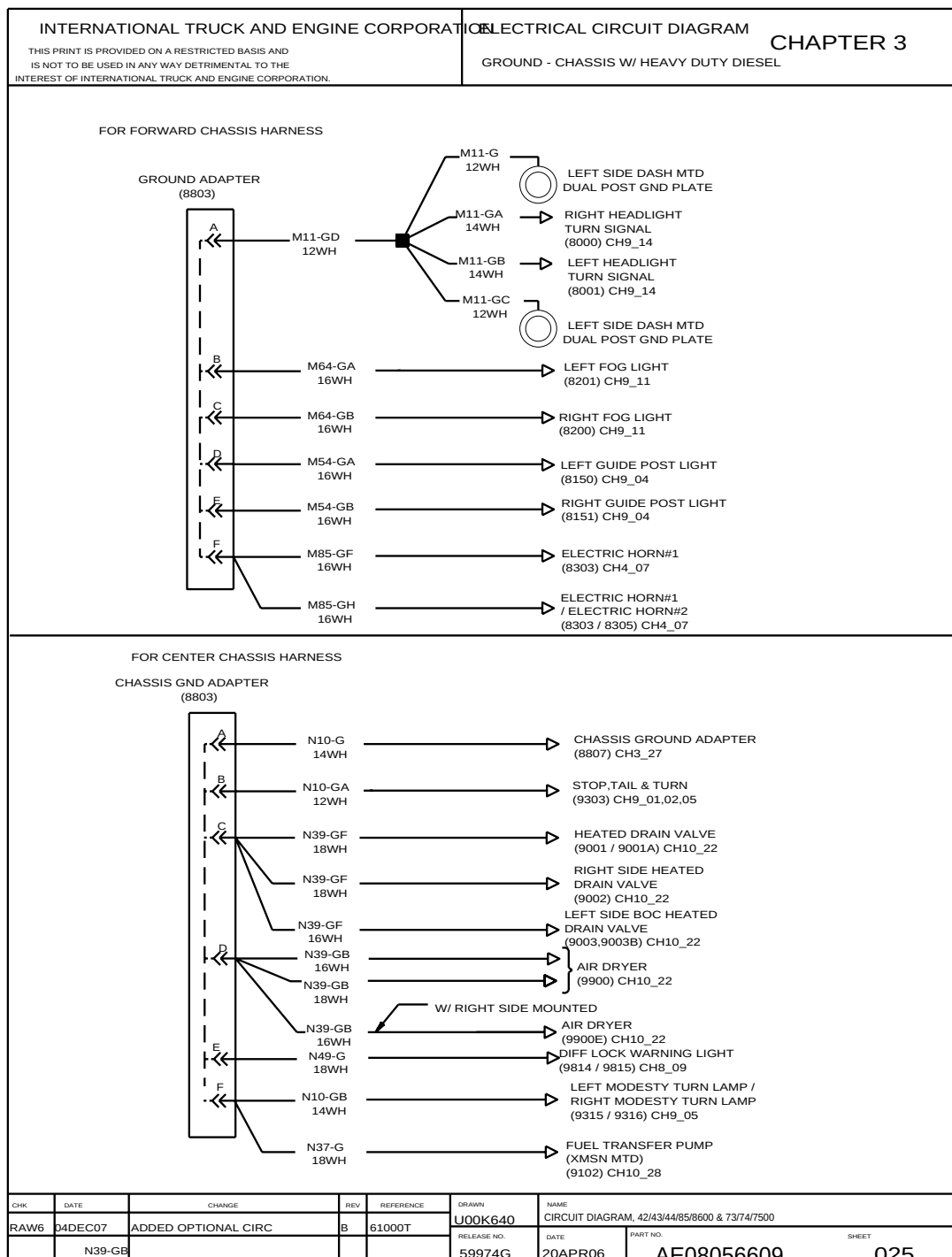


Figure 37 Ground — Chassis with Heavy Duty Diesel

### 3.26. GROUND — CHASSIS, P. 26

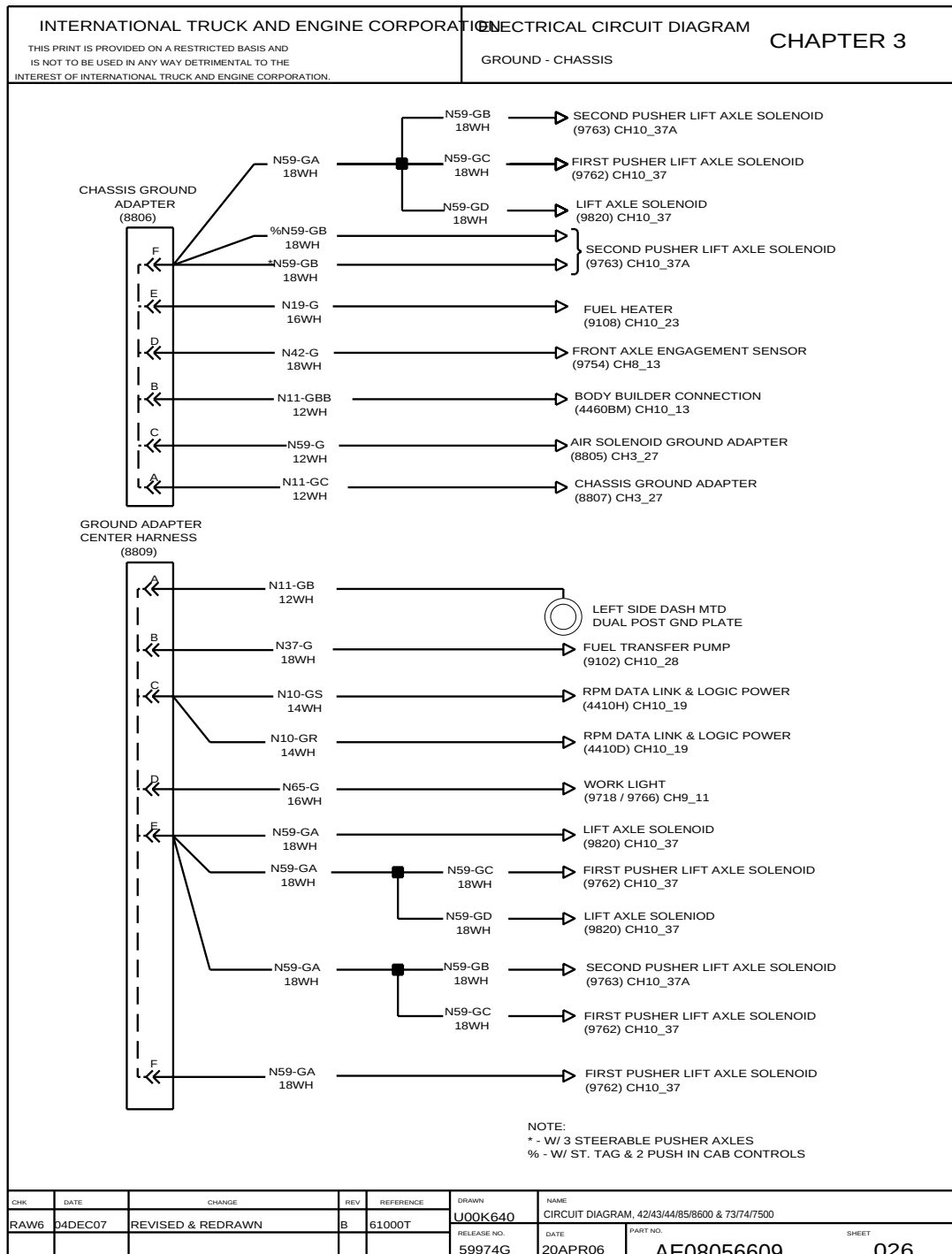


Figure 38 Ground — Chassis

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

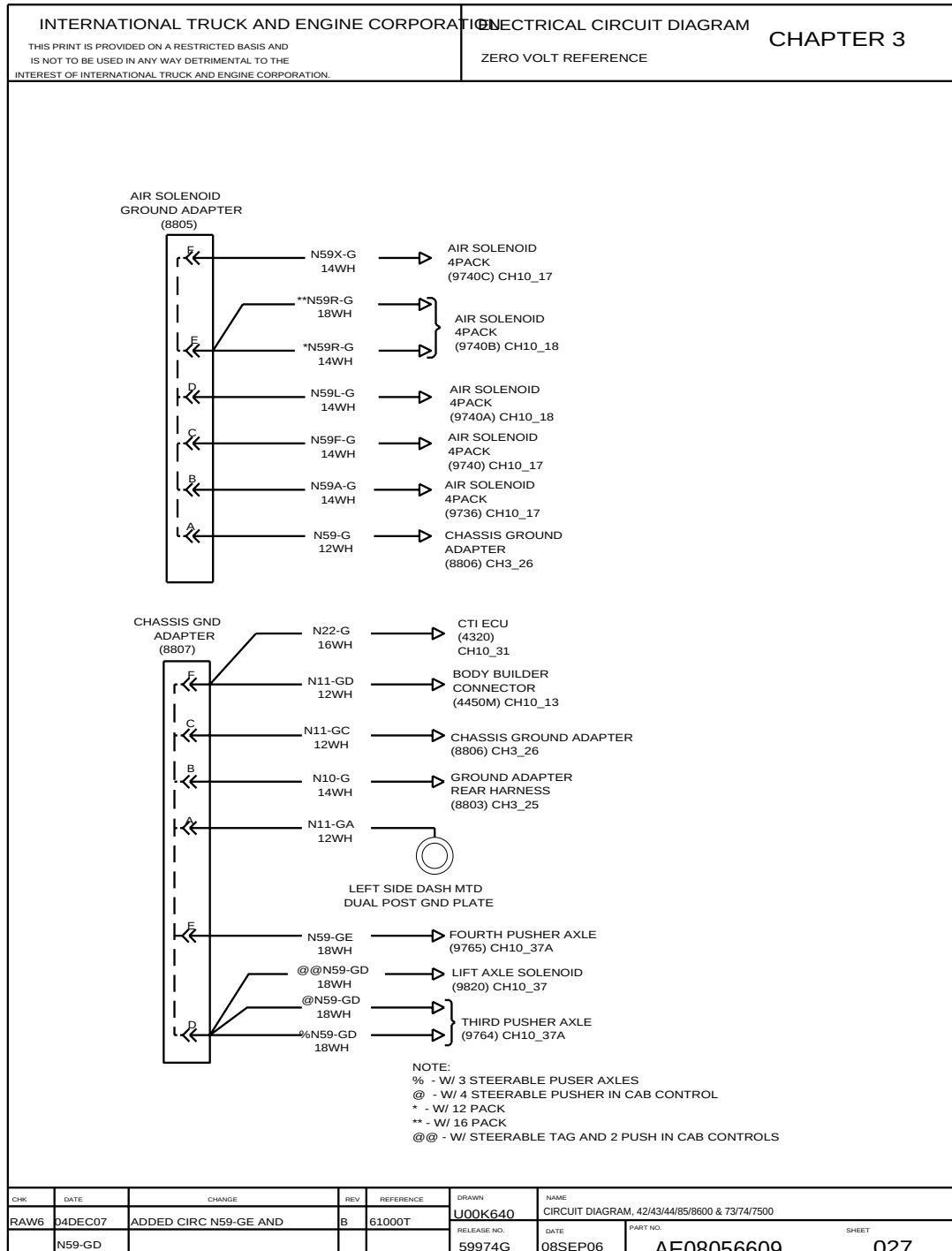


**Figure 39 Zero Volt Reference**

### 3.28. ZERO VOLT REFERENCE, P. 28

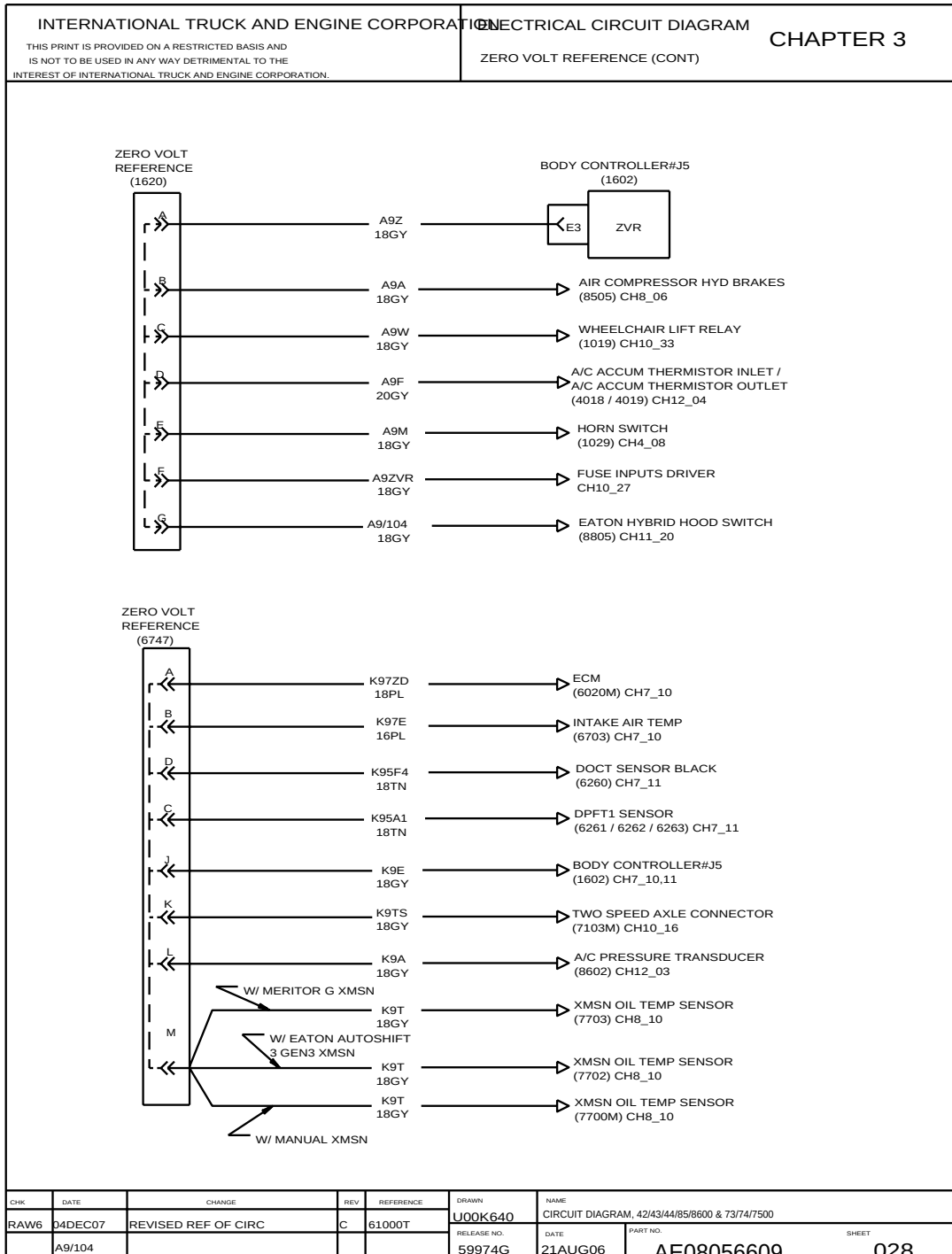


**Figure 40 Zero Volt Reference**

### 3.29. GROUND — CHASSIS, P. 29

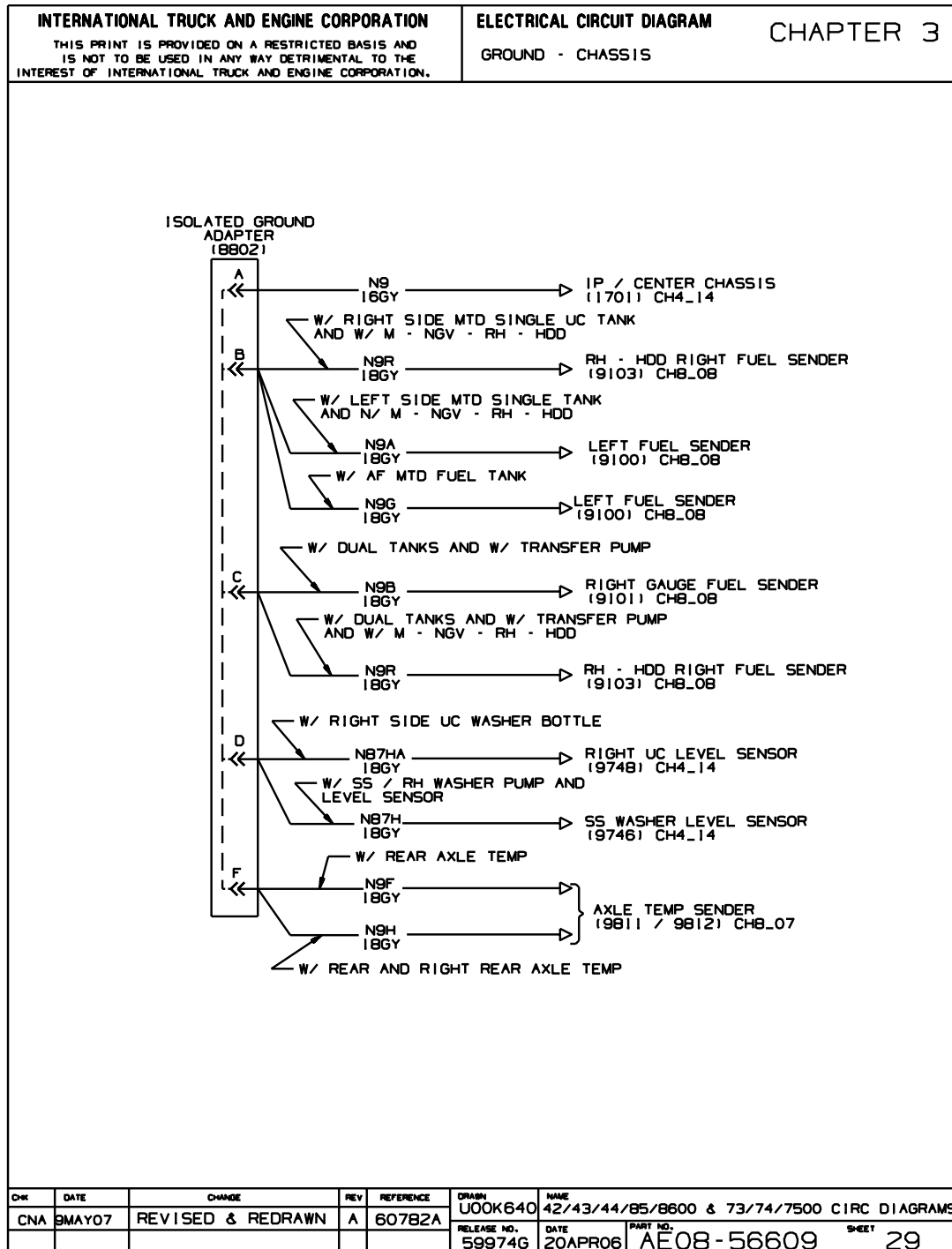
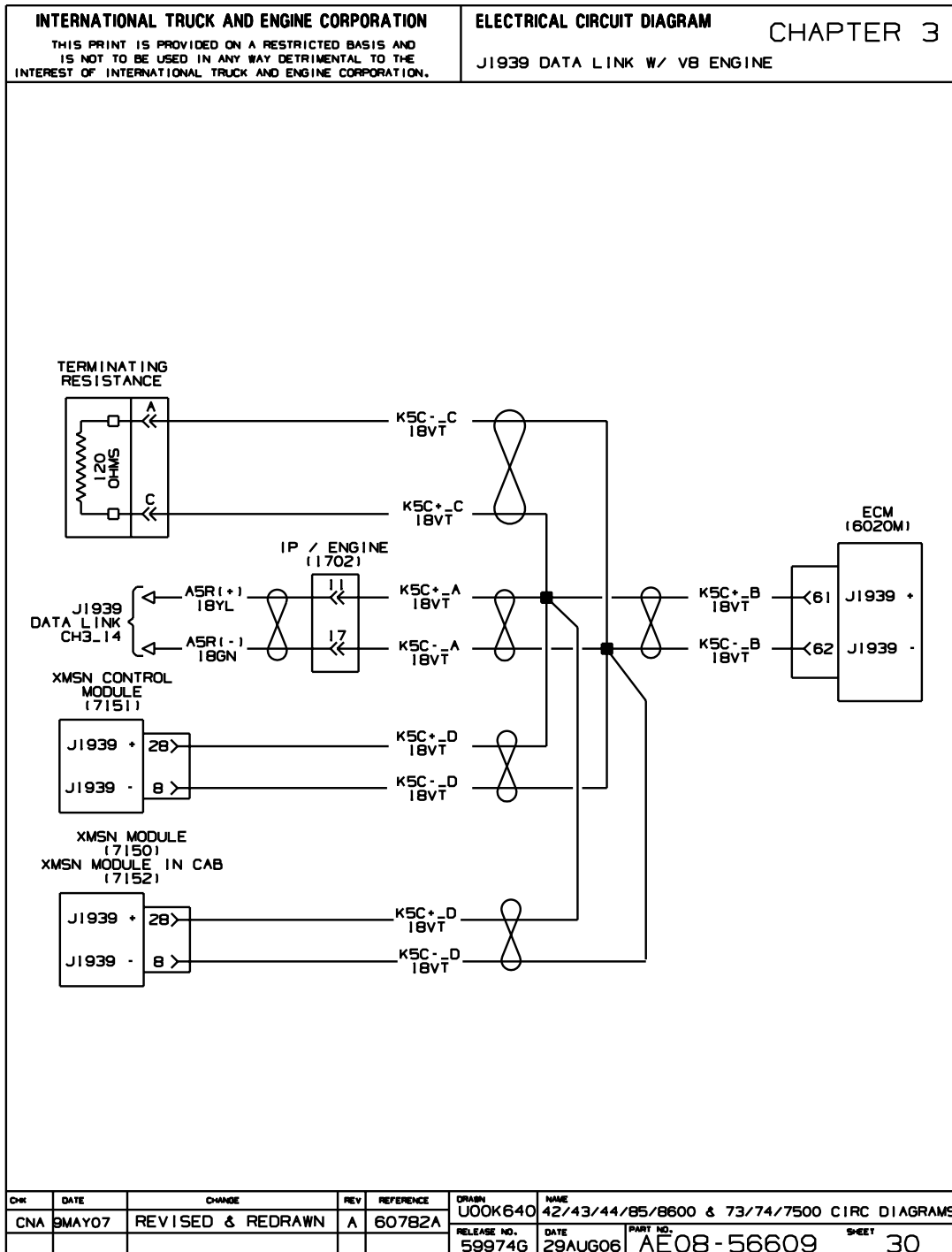


Figure 41 Ground — Chassis

**3.30. J1939 DATA LINK WITH V8 ENGINE, P. 30****Figure 42 J1939 Data Link with V8 Engine**

## 4. CAB ACCESSORIES (CHAPTER 4)

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

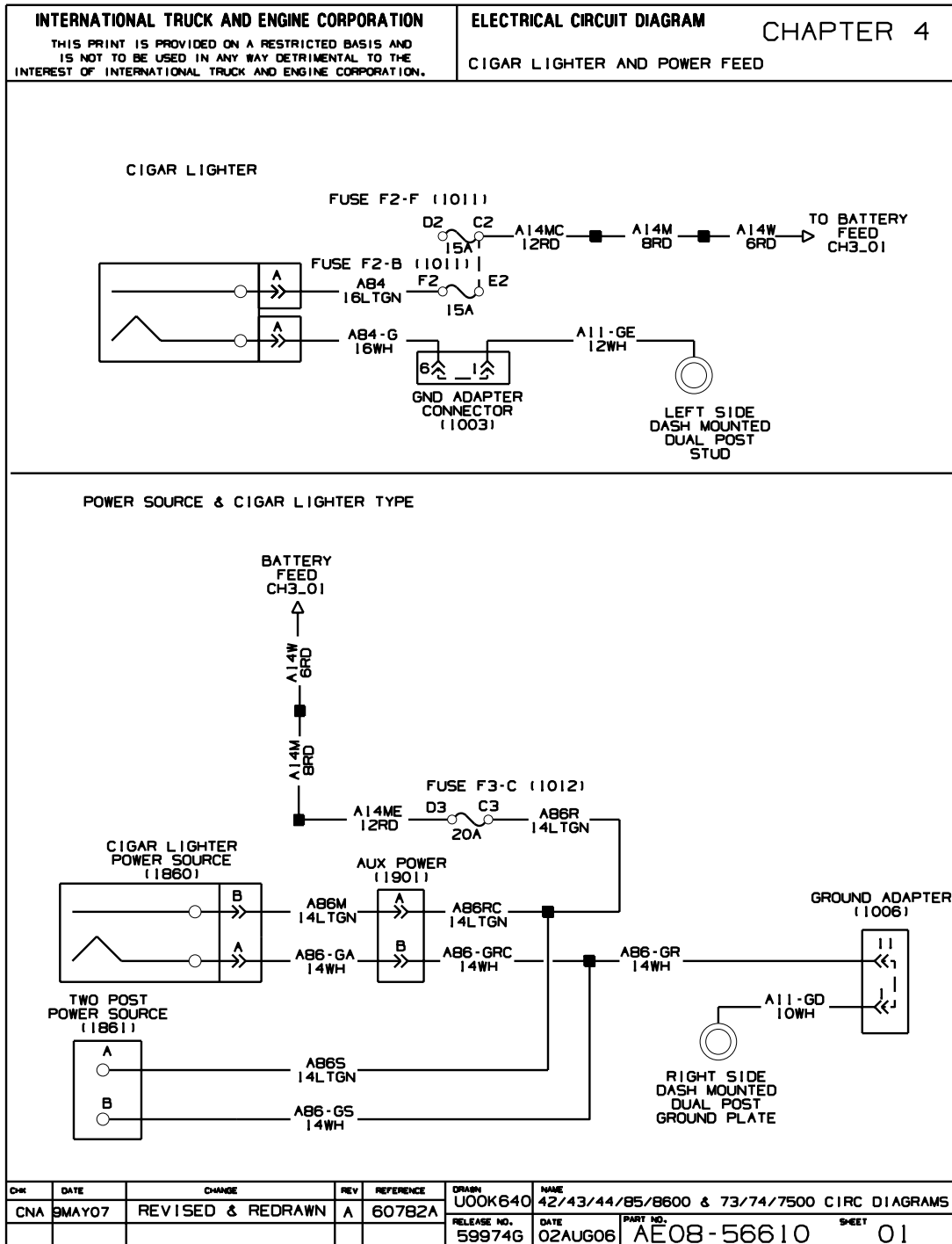


Figure 43 Cigar Lighter and Power Feed

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

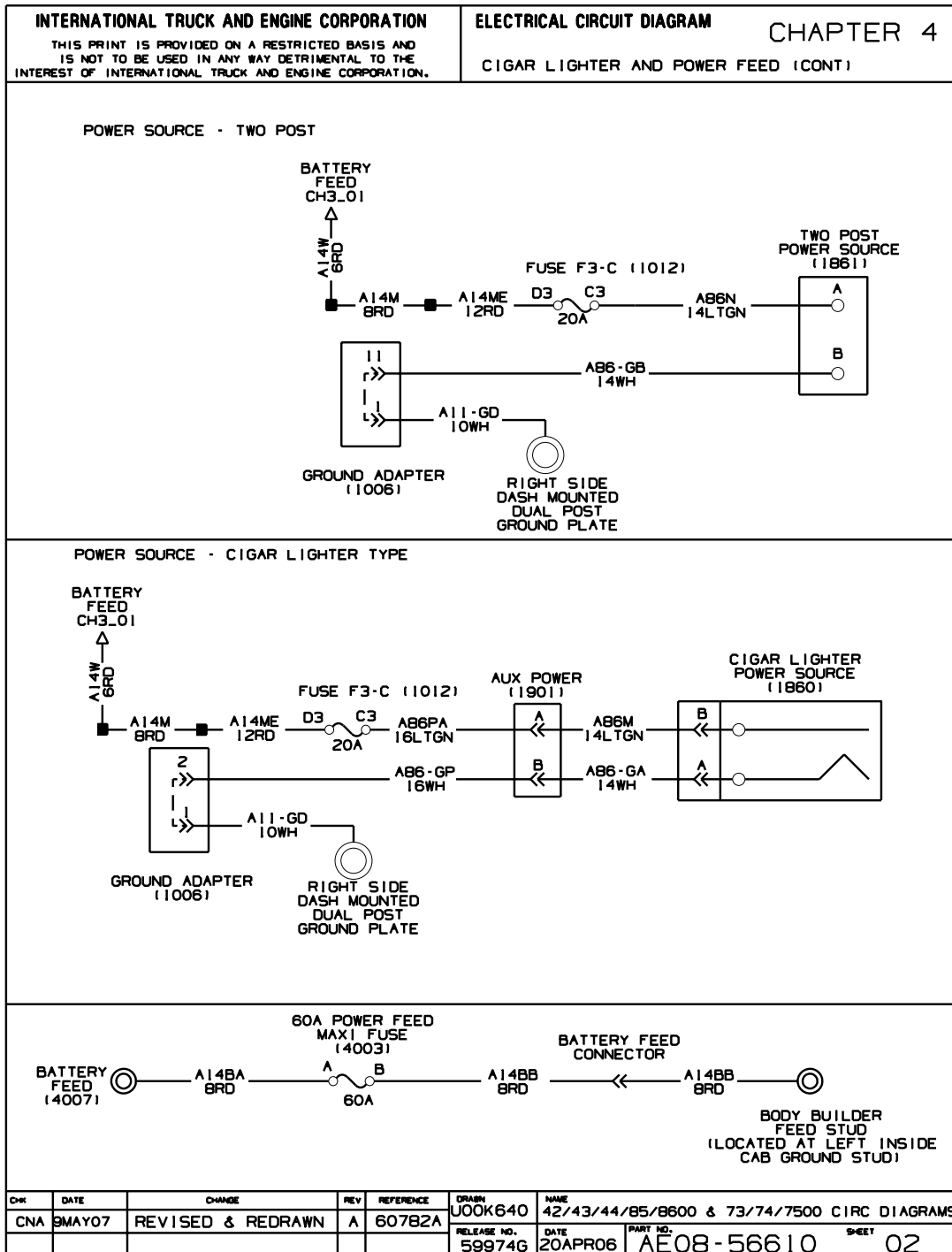


Figure 44 Cigar Lighter and Power Feed

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

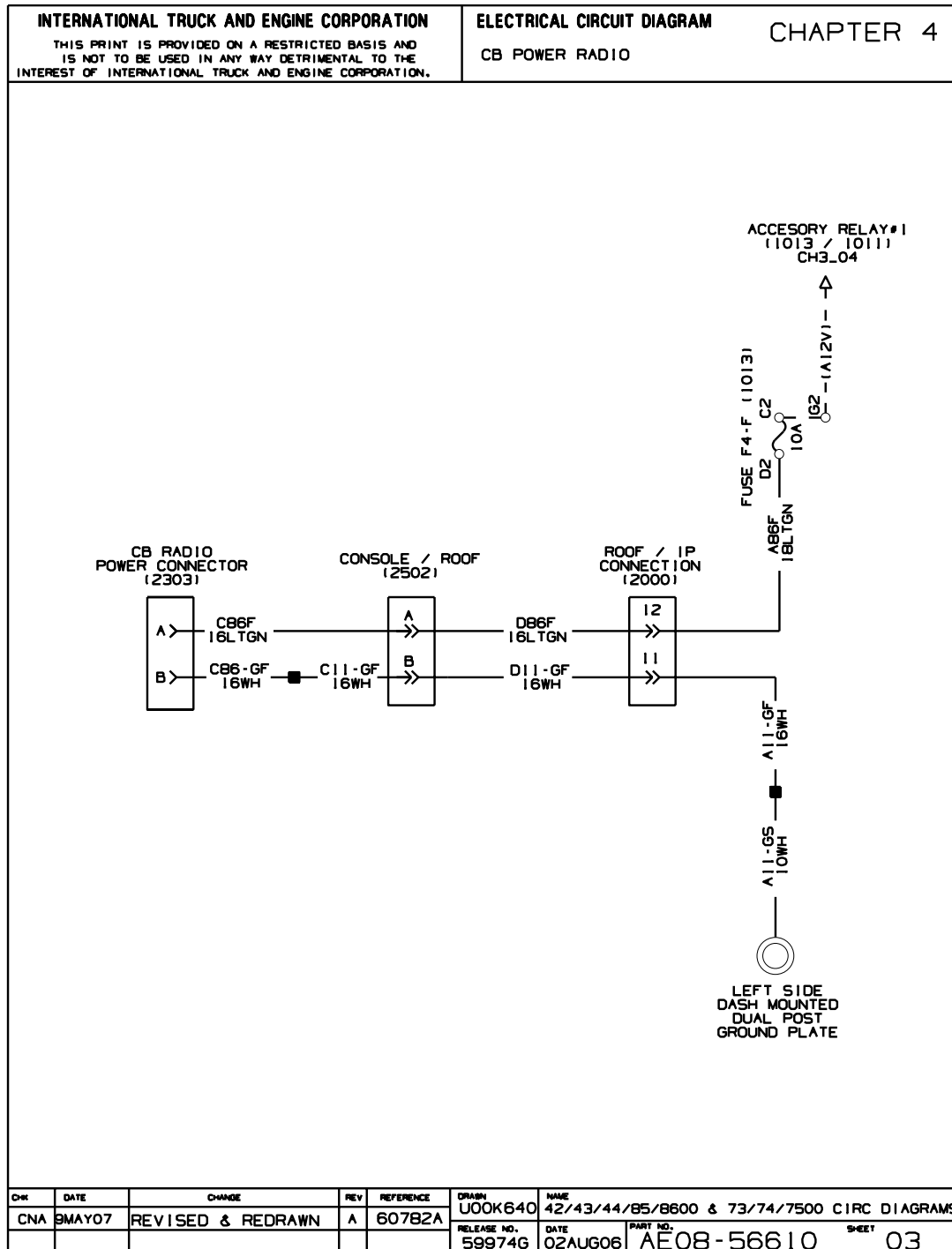


Figure 45 CB Power Radio

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

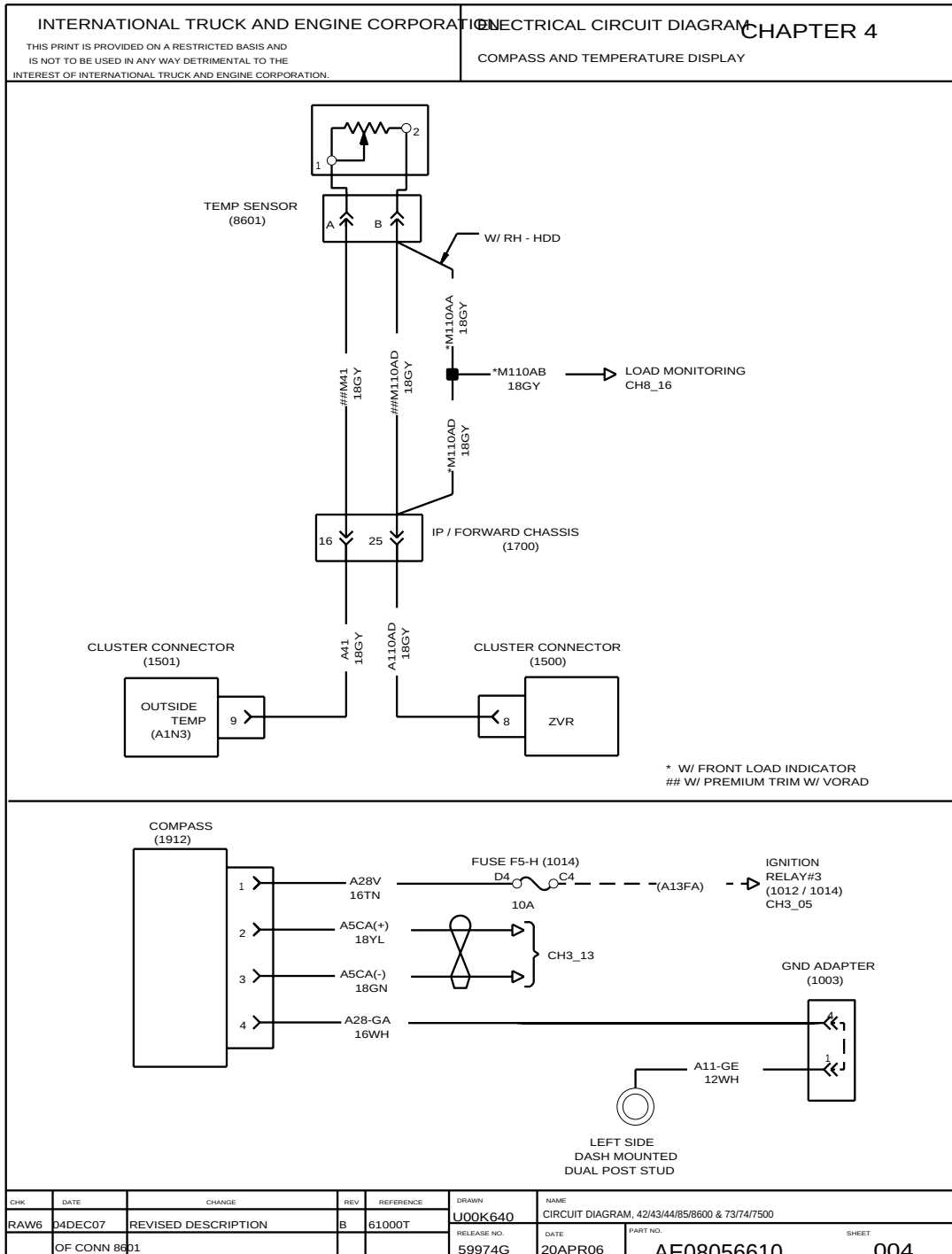


Figure 46 Compass and Temperature Display

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

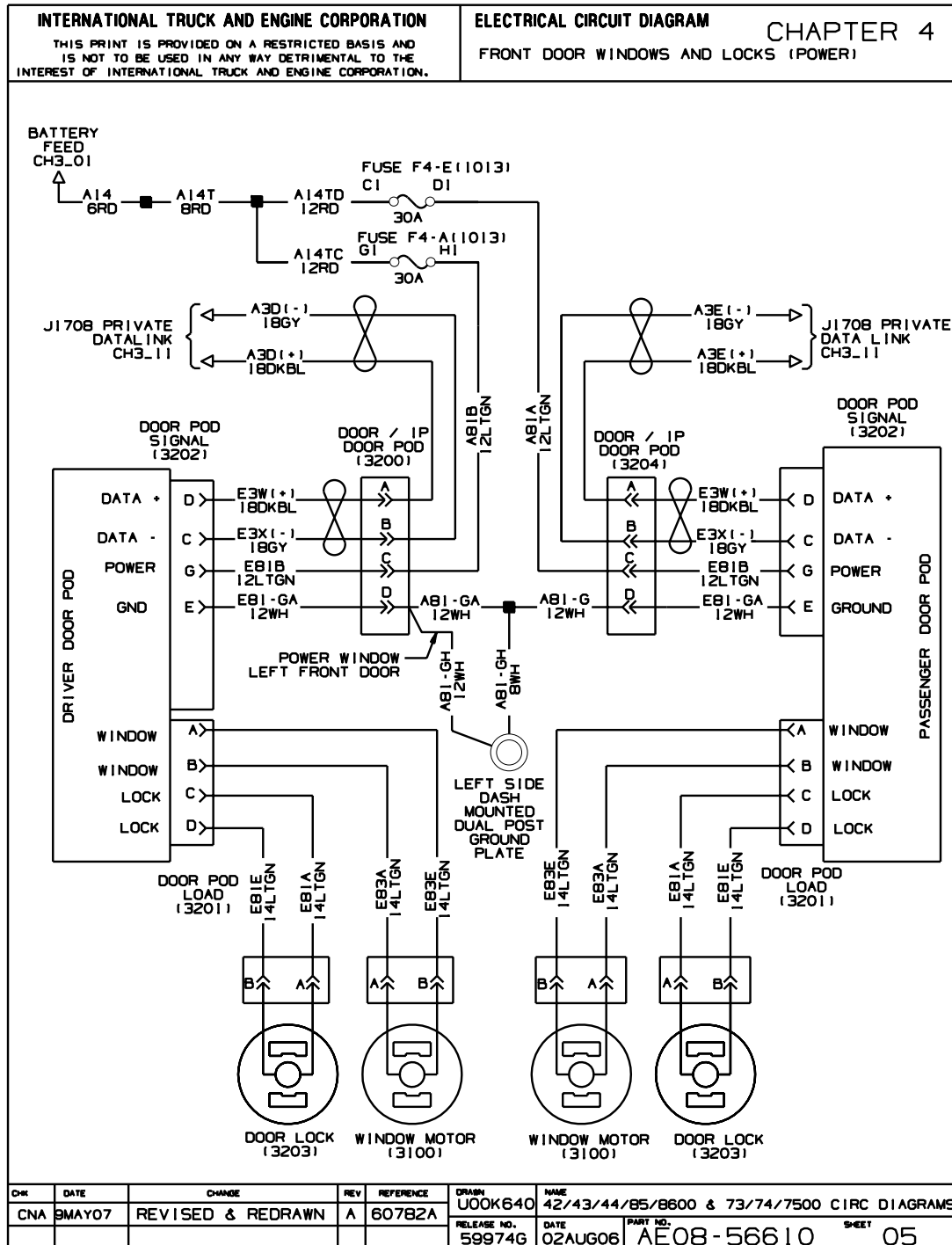


Figure 47 Front Door Windows and Locks (Power)

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

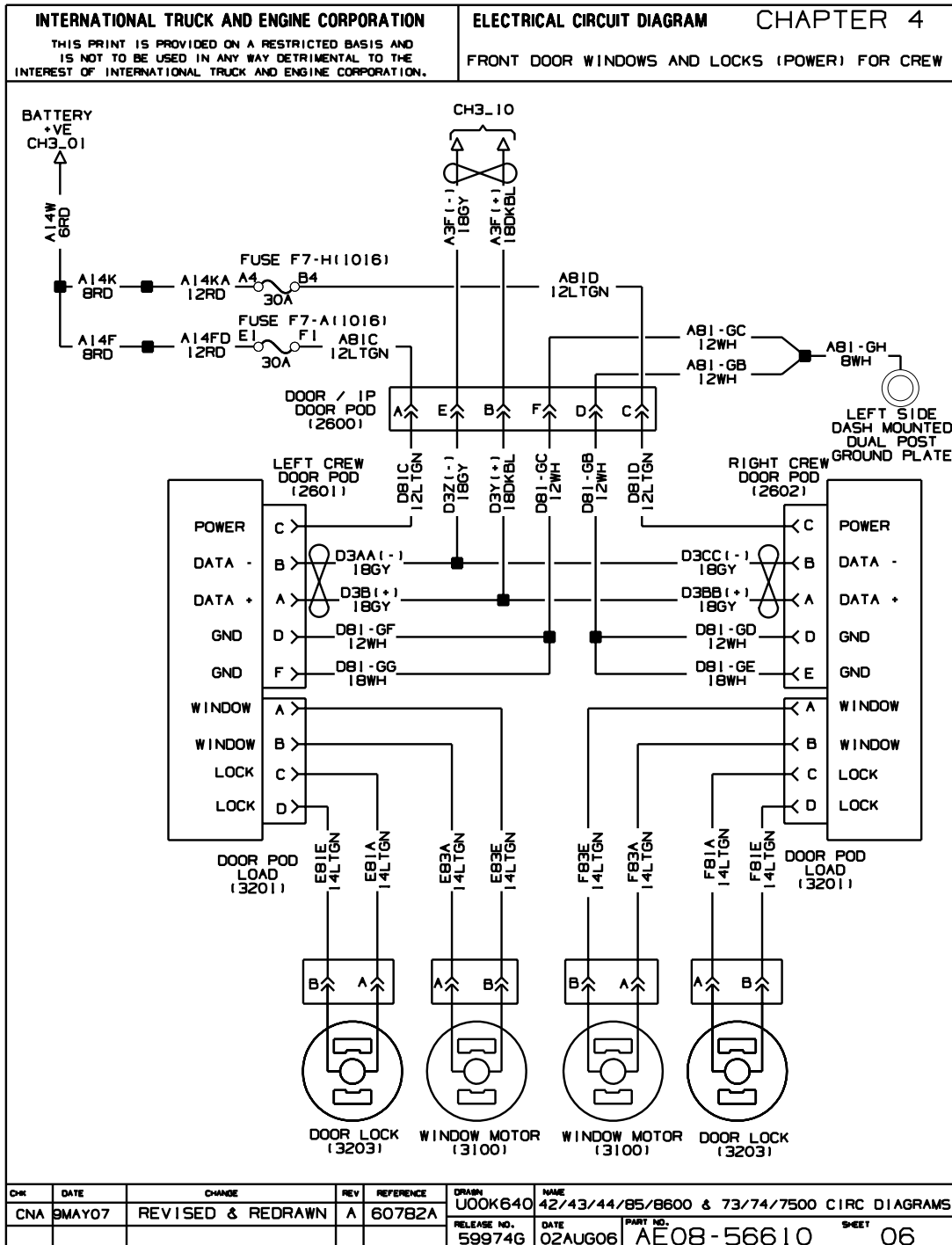


Figure 48 Front Door Windows and Locks (Power) for Crew

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

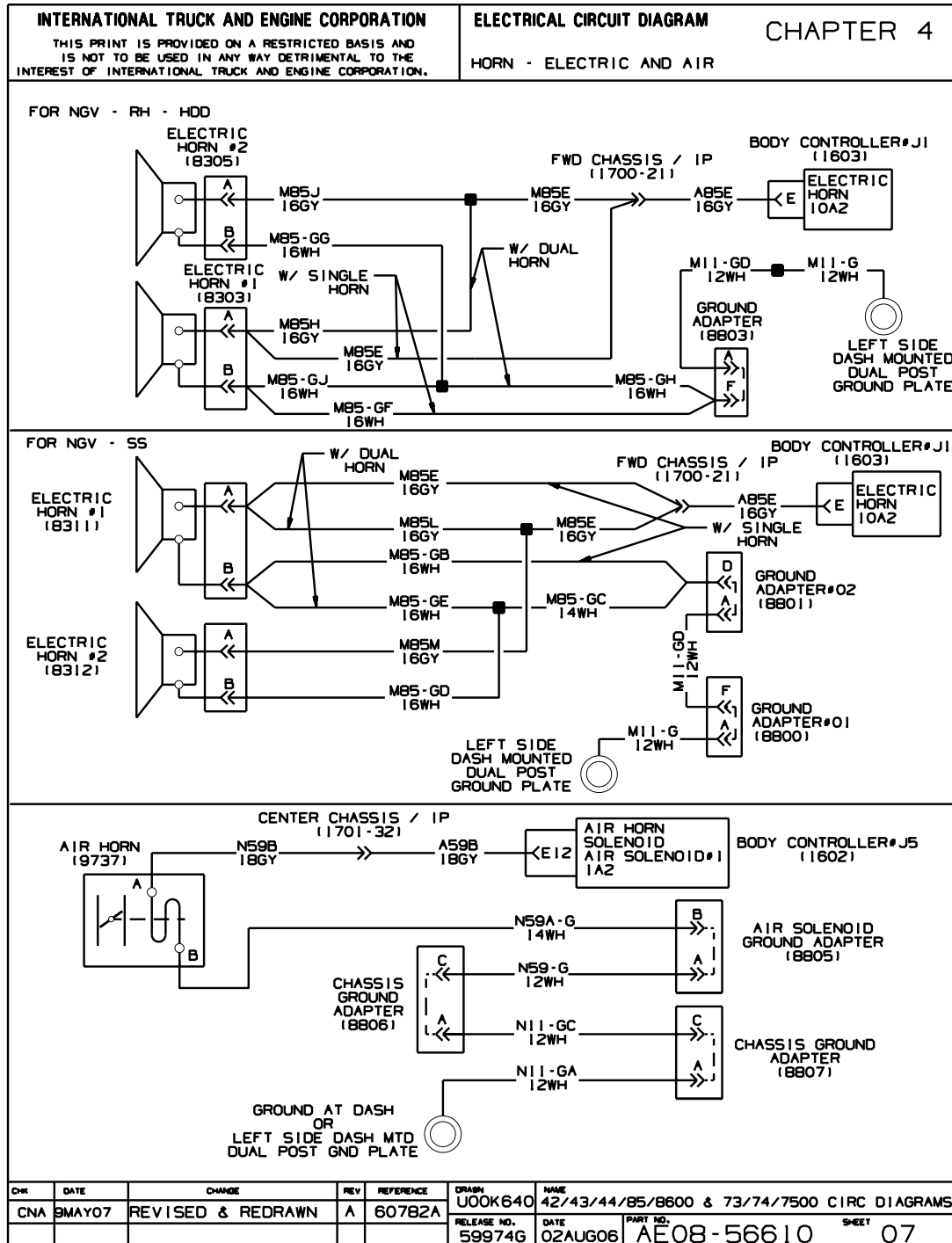


**Figure 49** Horn, Electric and Air

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

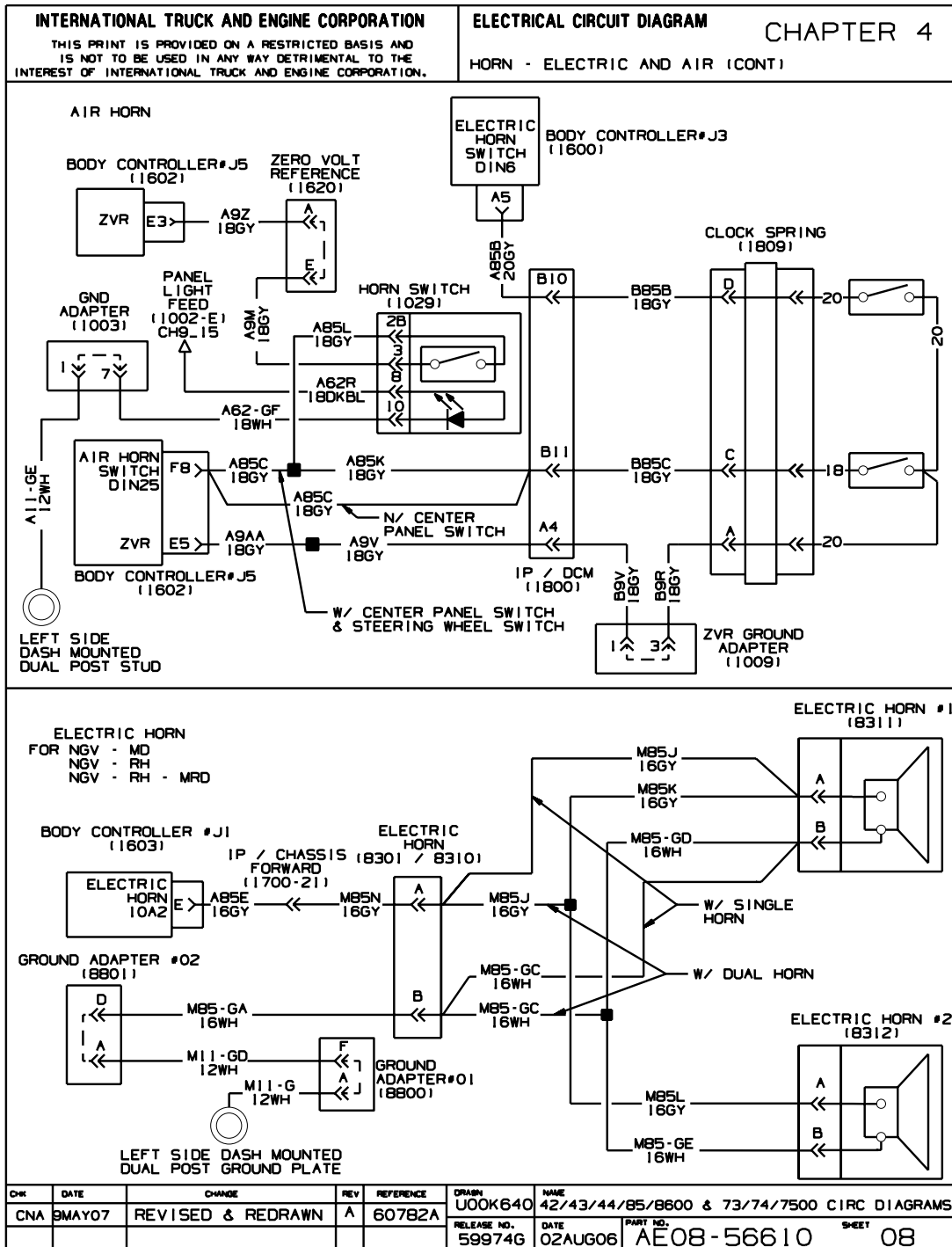


Figure 50 Horn, Electric and Air

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

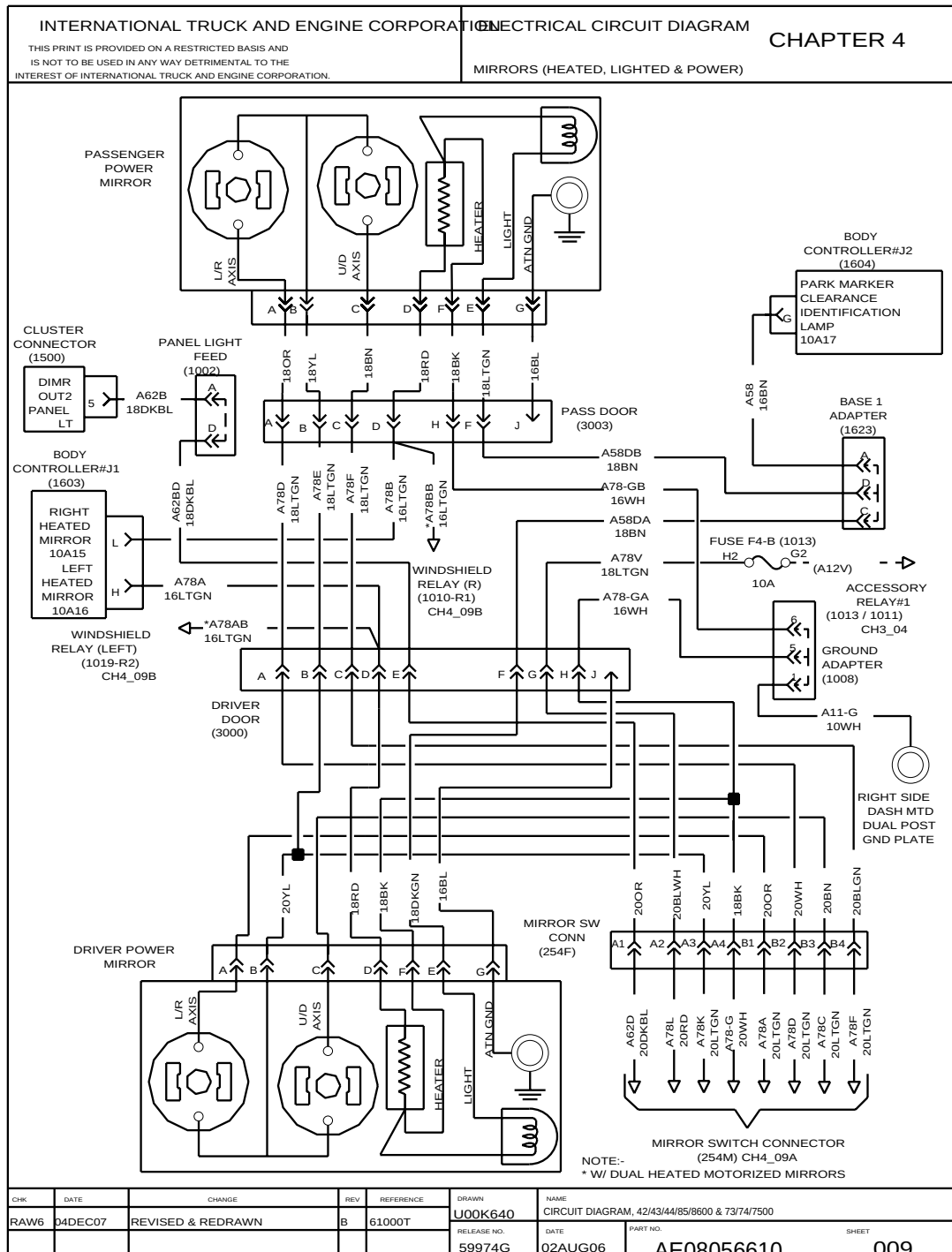


Figure 51 Mirrors (Heated, Lighted and Power)

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

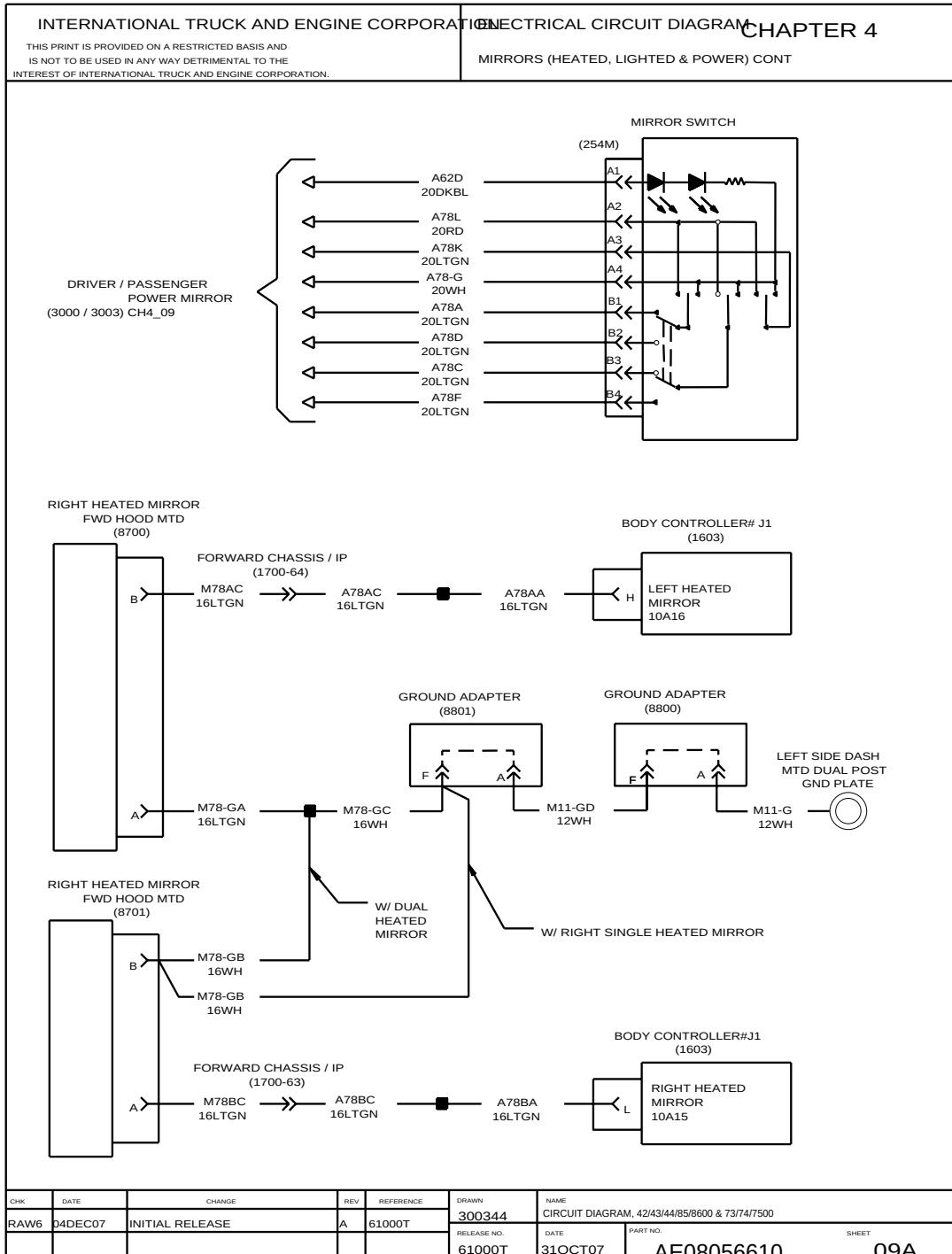


**Figure 52 Mirrors (Heated, Lighted and Power)**

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

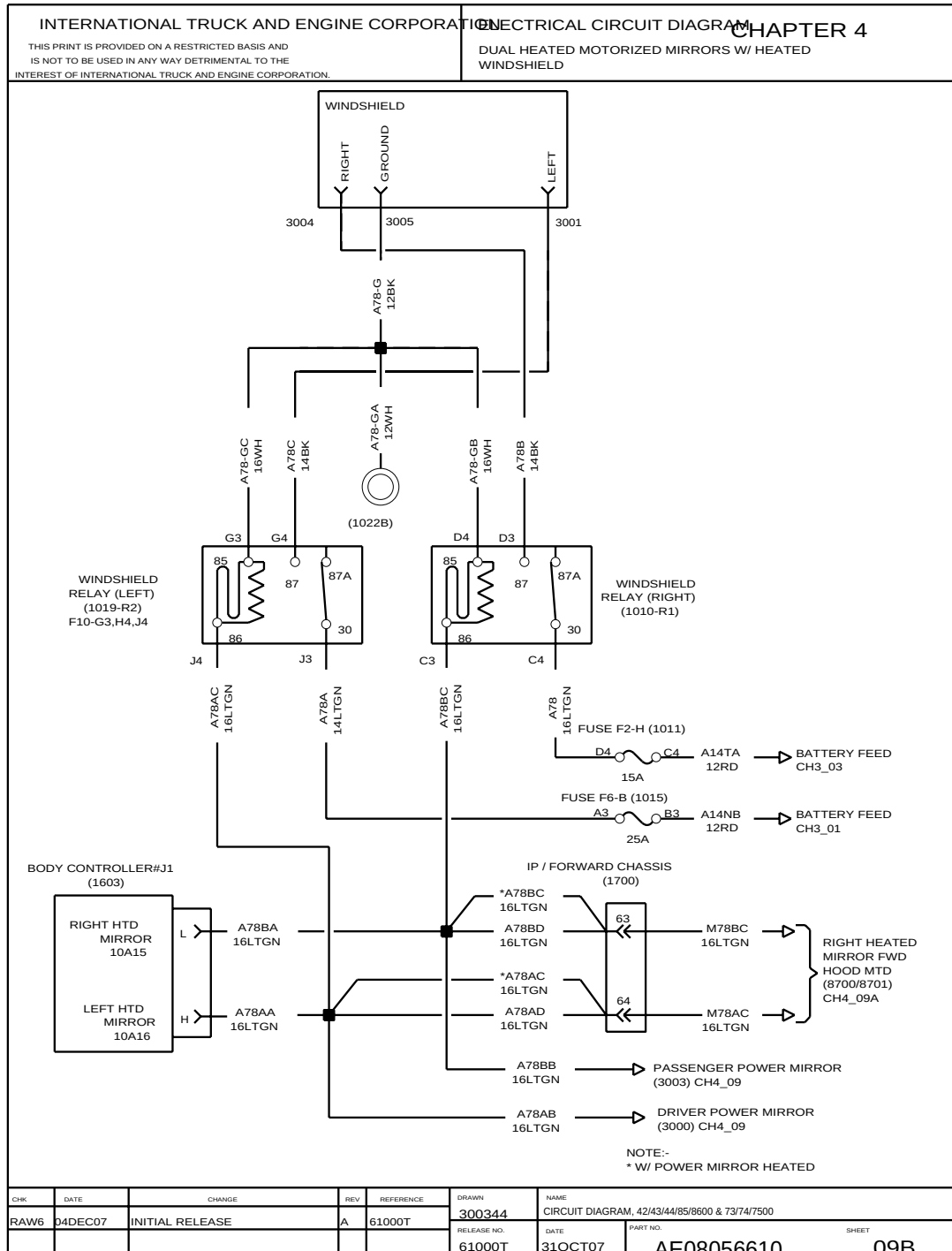


**Figure 53 Dual Heated Motorized Mirrors with Heated Windshield**

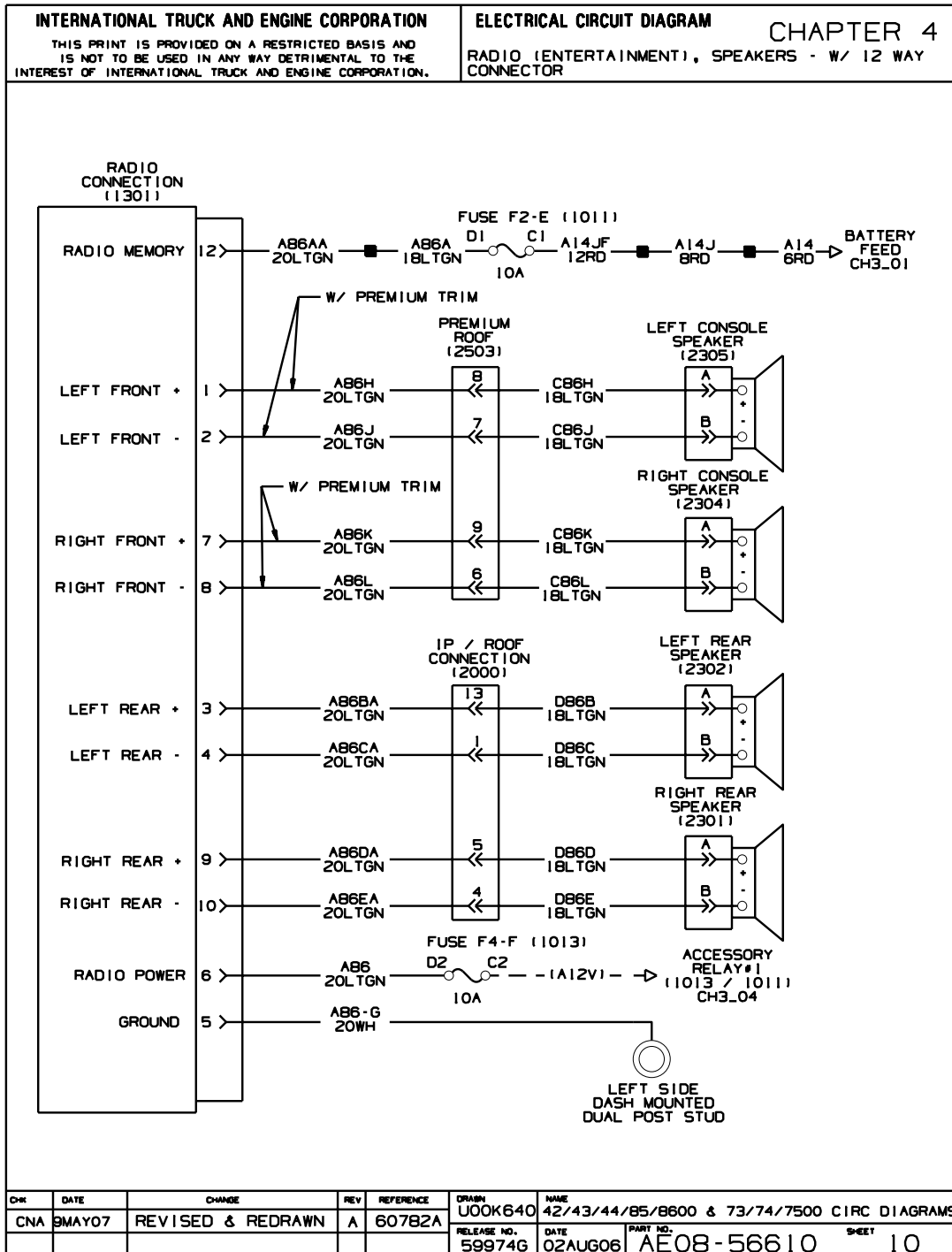
**4.12. RADIO (ENTERTAINMENT), SPEAKERS WITH 12 WAY CONN, P. 10**

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

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

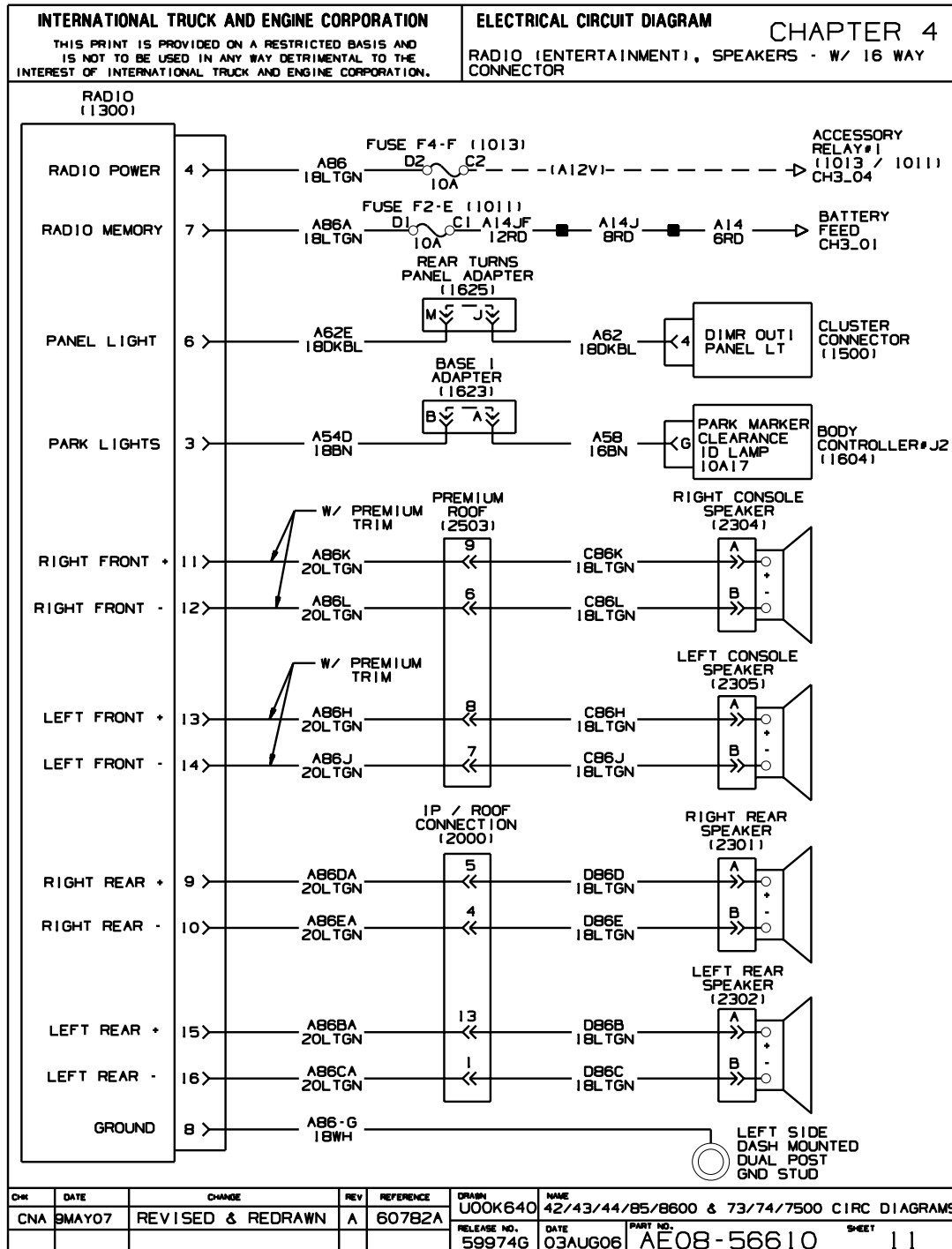


Figure 55 Radio (Entertainment), Speakers with 16 Way Connector

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

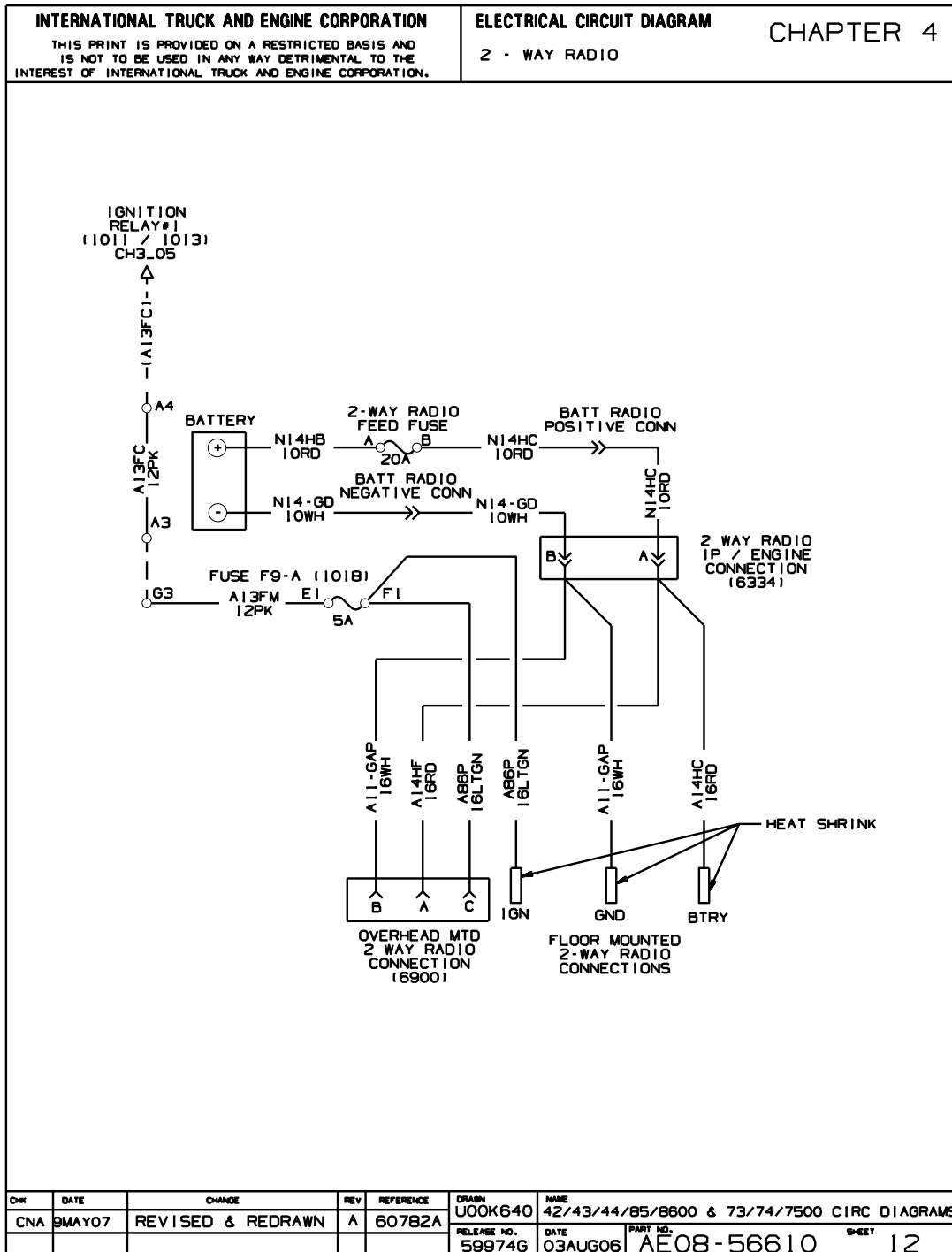


Figure 56 2-Way Radio

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

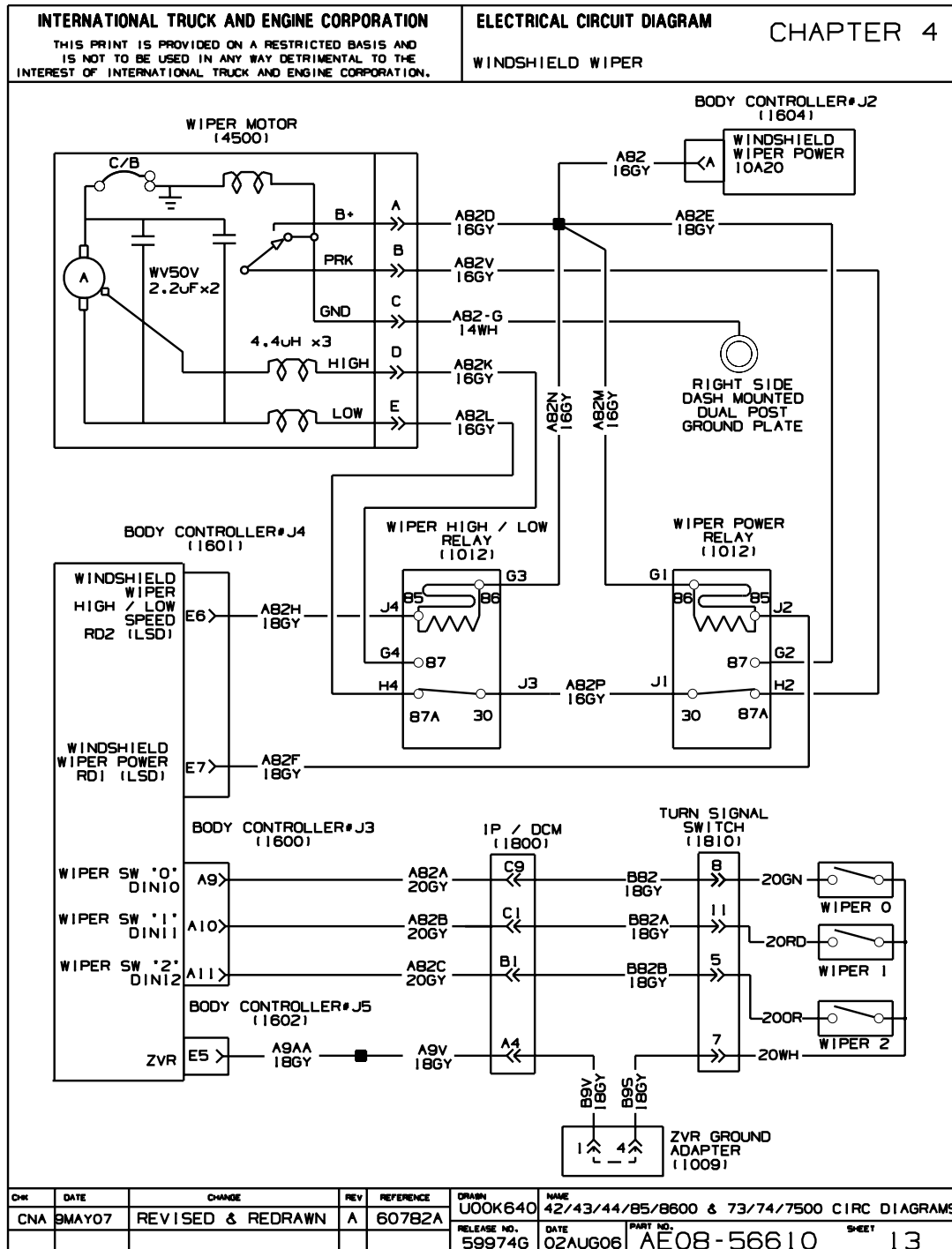


Figure 57 Windshield Wiper

## 4.16. WASHER PUMP, P. 14

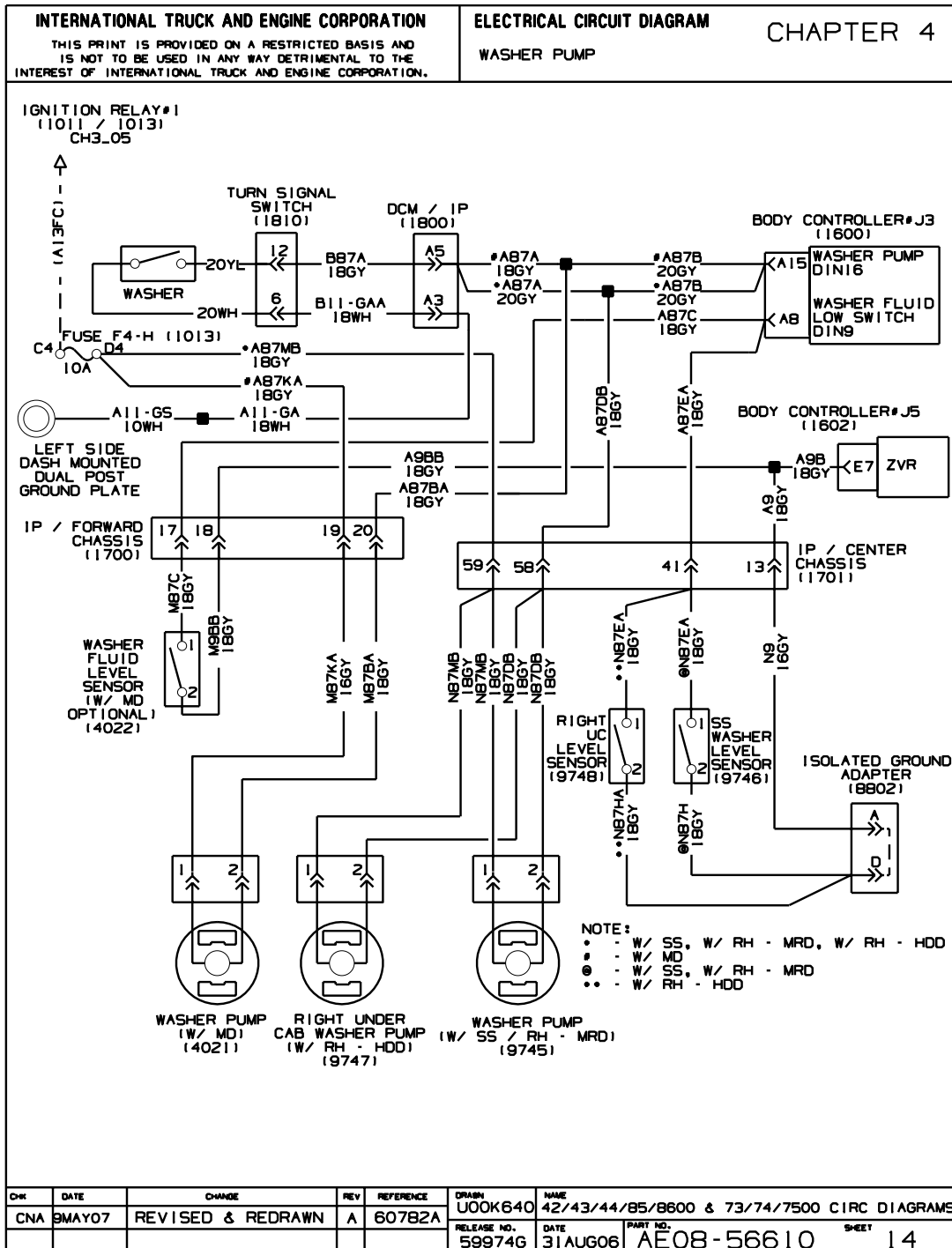


Figure 58 Washer Pump

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

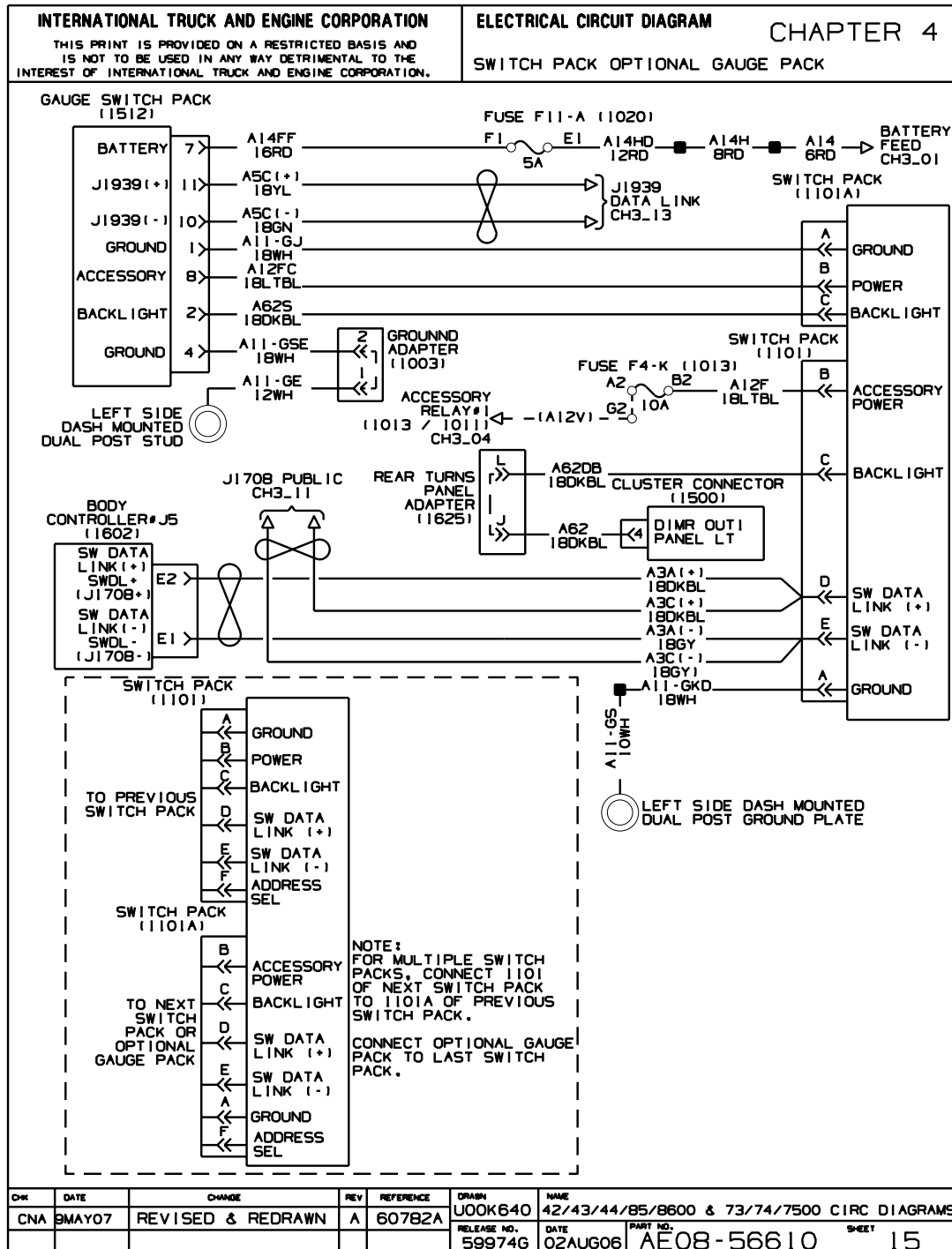
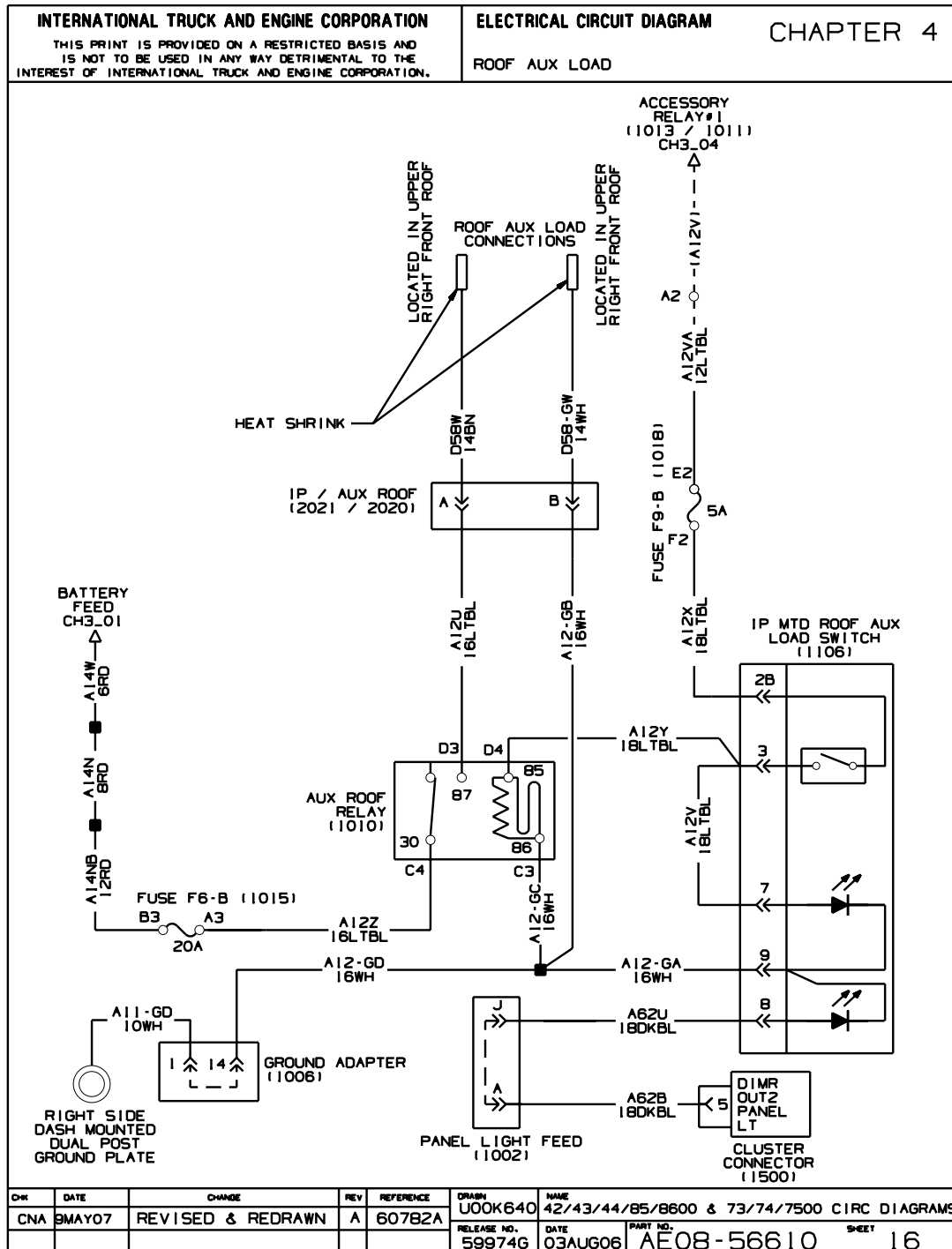


**Figure 59 Switch Pack Optional Gauge Pack**

#### 4.18. ROOF AUXILIARY LOAD, P. 16



### Figure 60 Roof Auxiliary Load

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

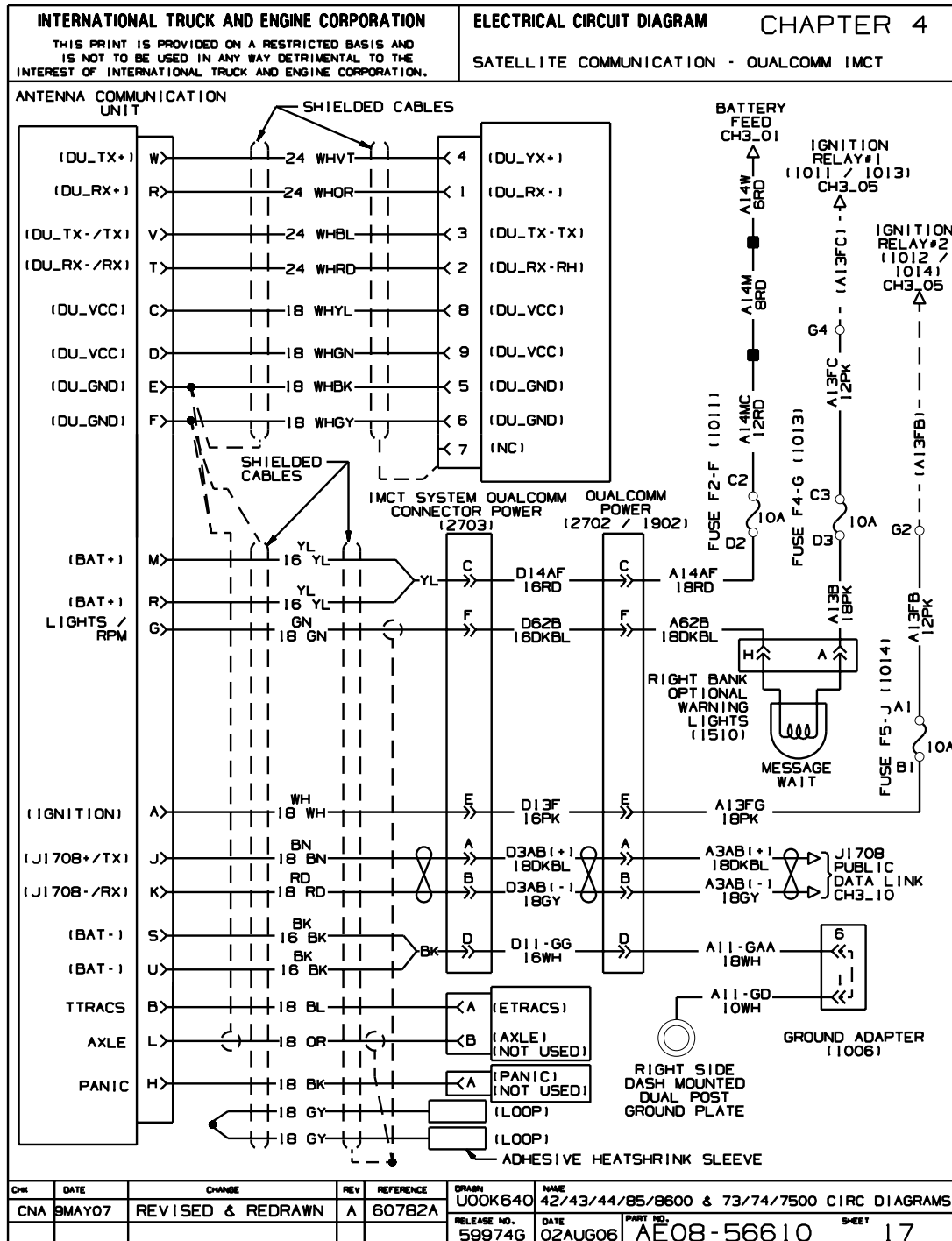


Figure 61 Satellite Communication — Qualcomm IMCT

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

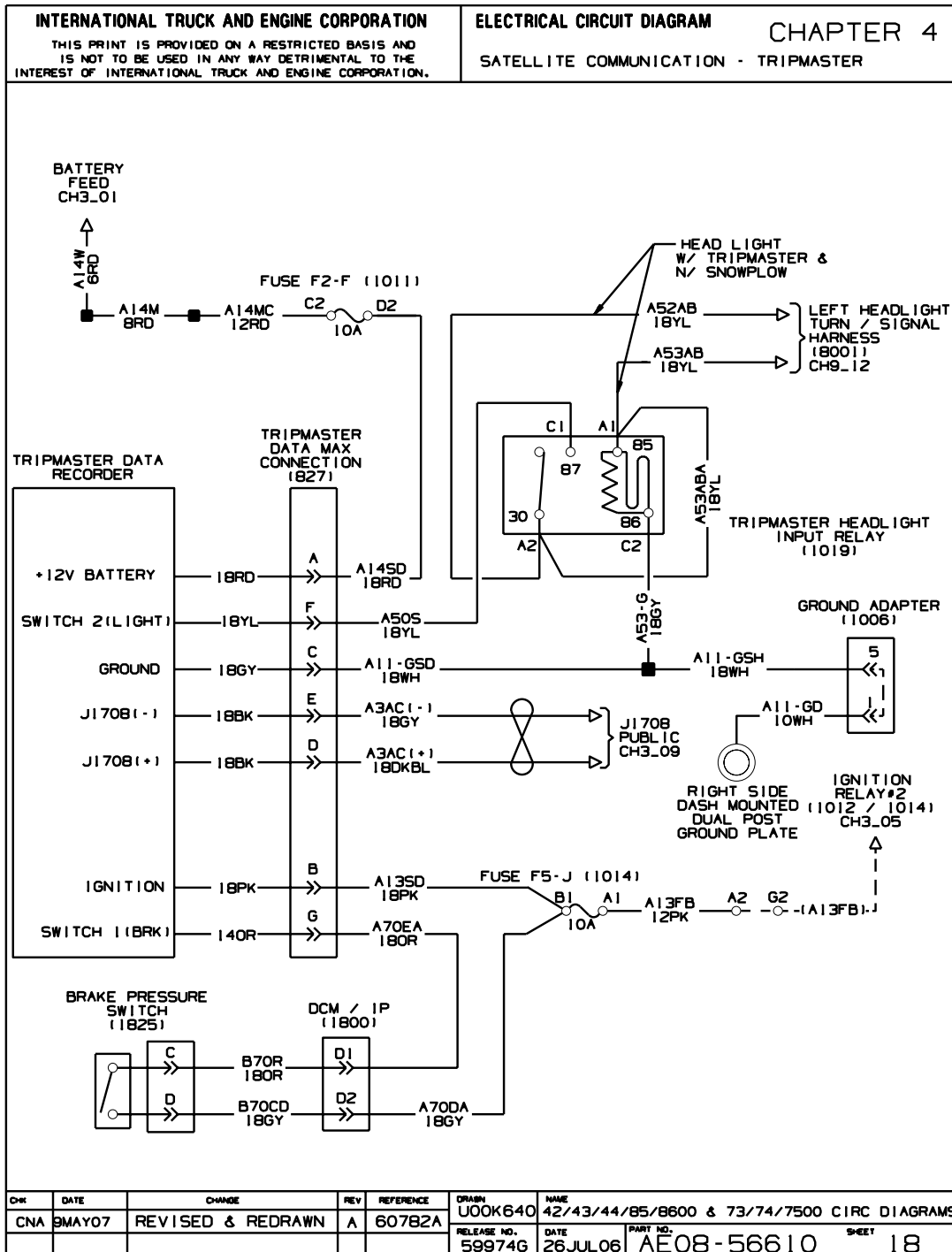


Figure 62 Satellite Communication — Tripmaster

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

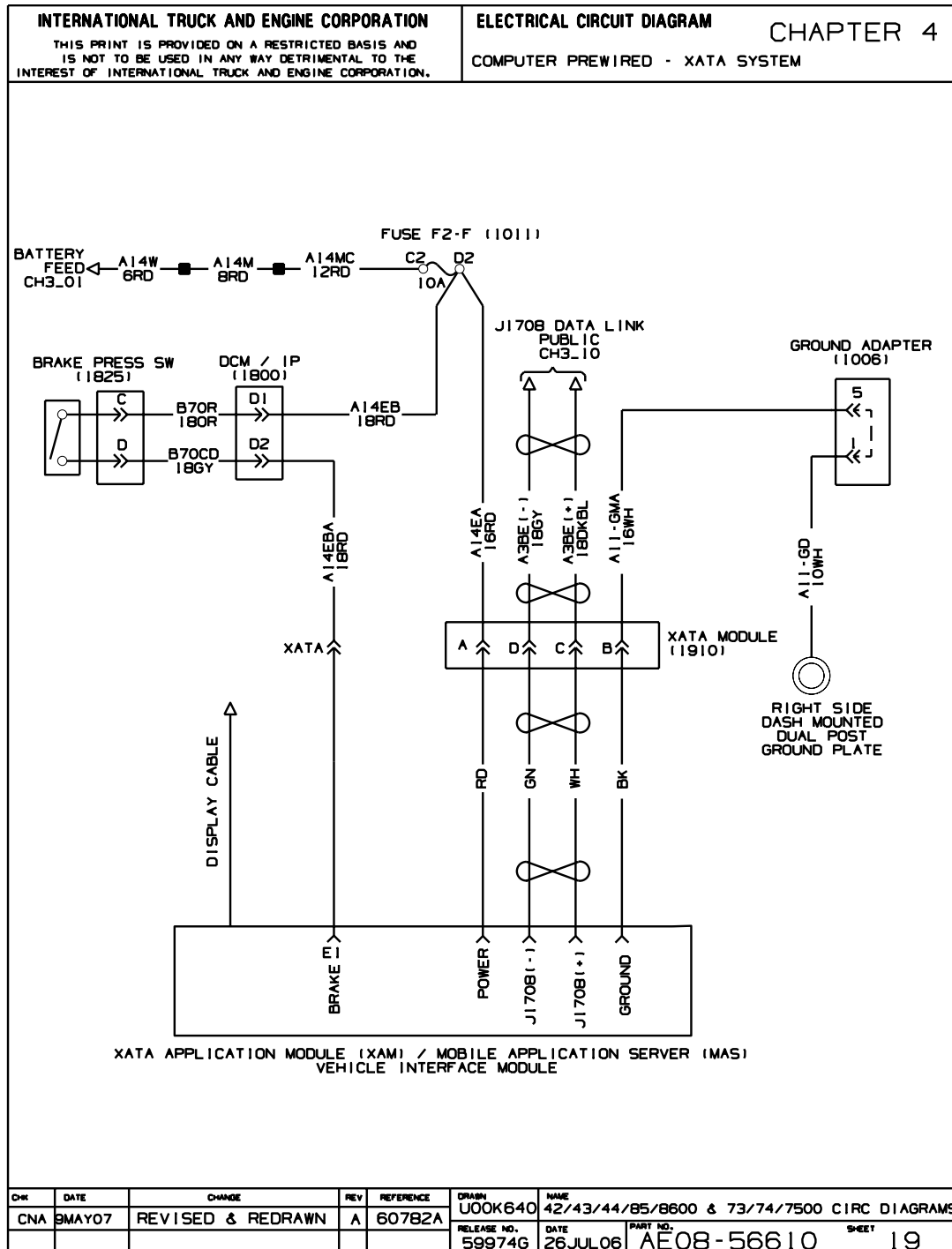


Figure 63 Computer Prewired — XATA System

## 4.22. CADEC GPS SYSTEM, P. 20

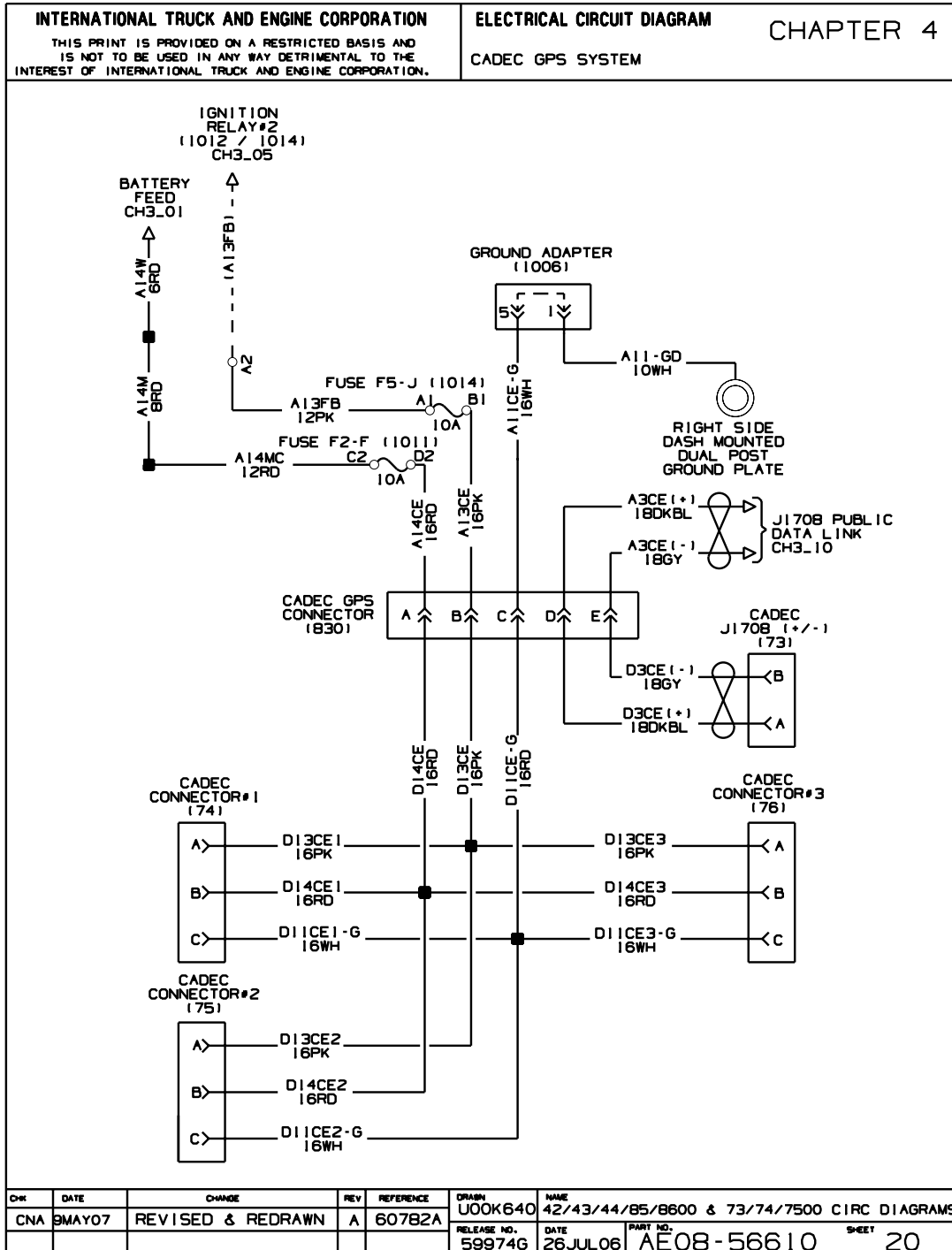


Figure 64 Cadec GPS System

#### 4.23. SATELLITE COMMUNICATION — MOBILEMAX, P. 21

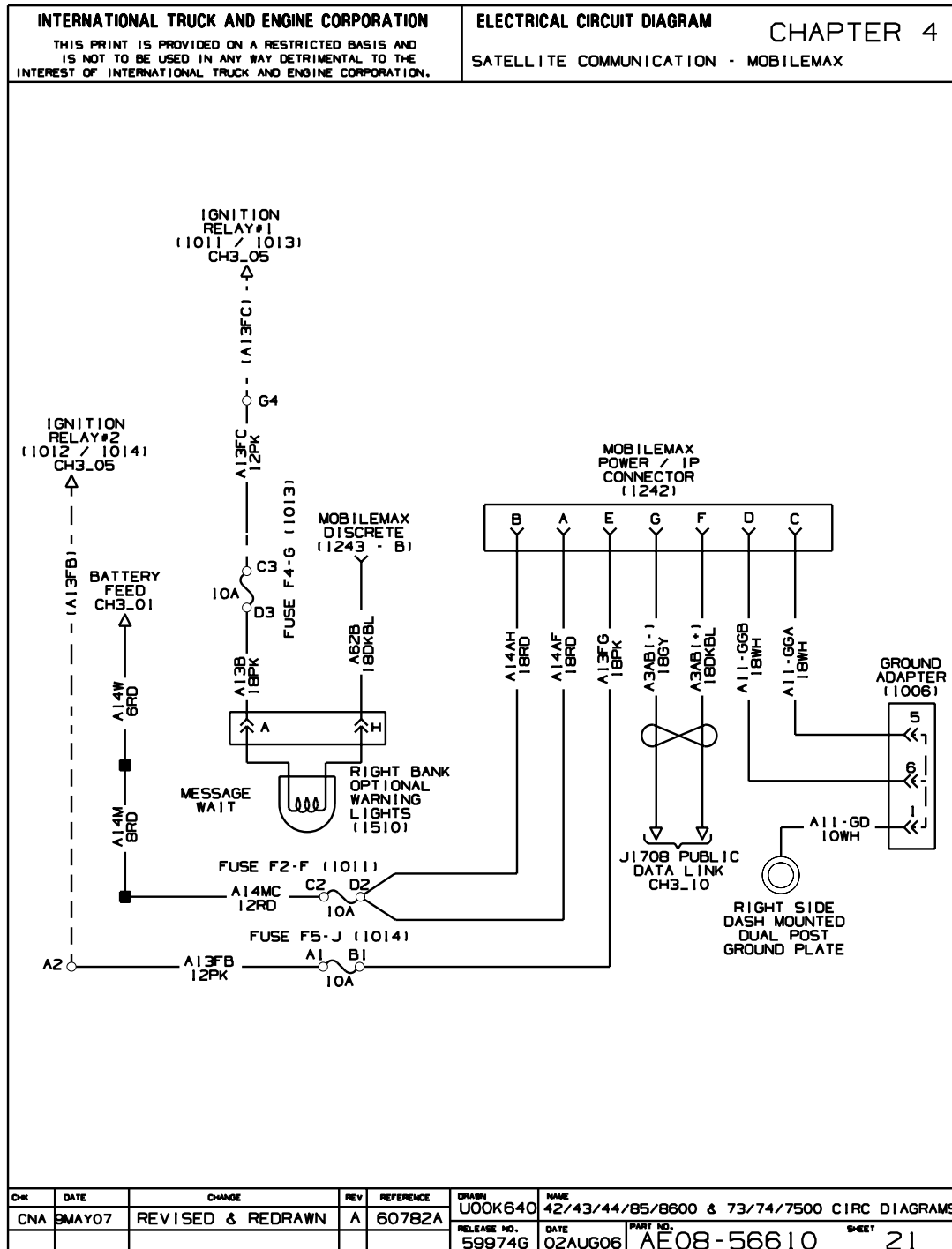


Figure 65 Satellite Communication — MobileMax

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

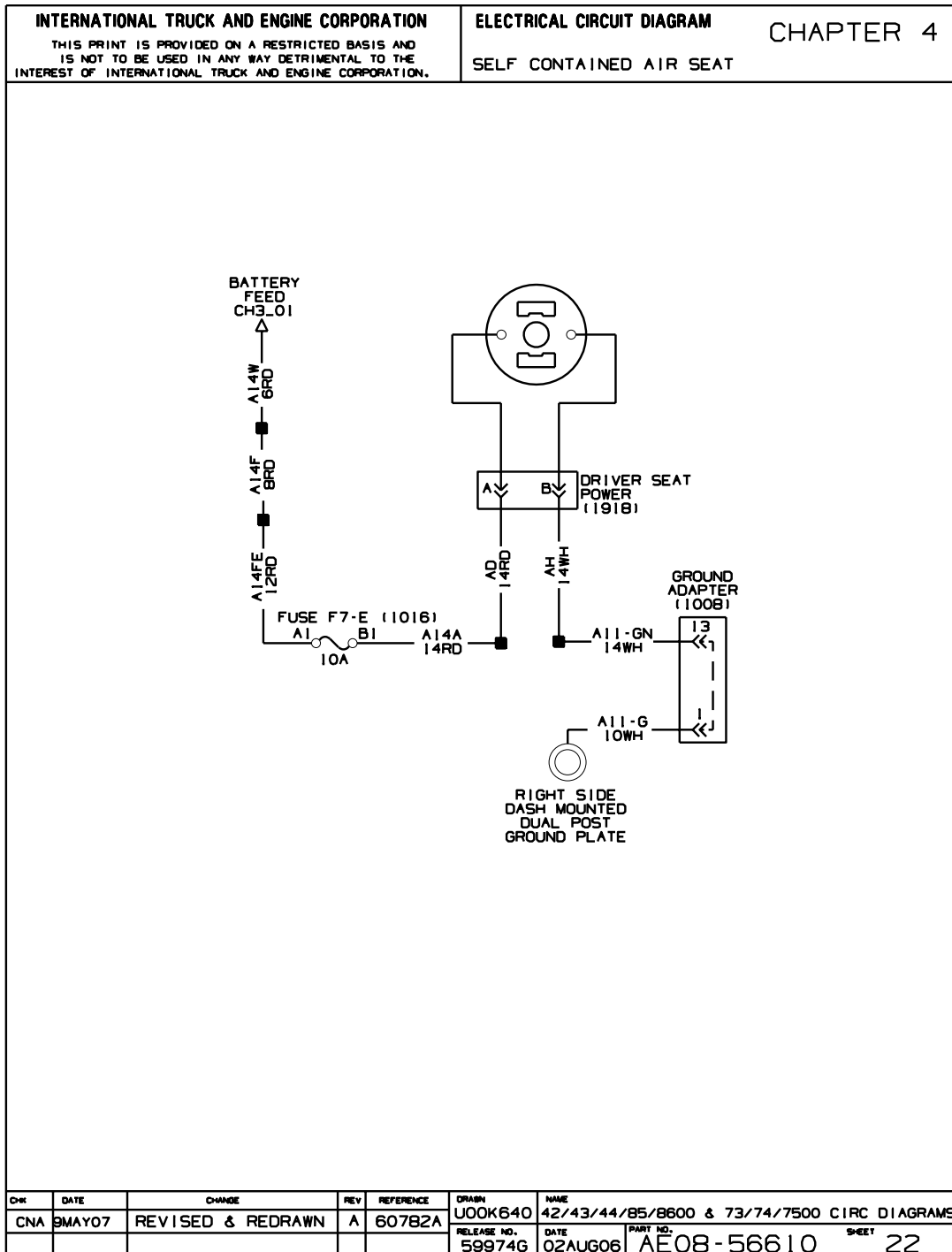


Figure 66 Self Contained Air Seat

#### 4.25. HEATED SEATS, P. 23

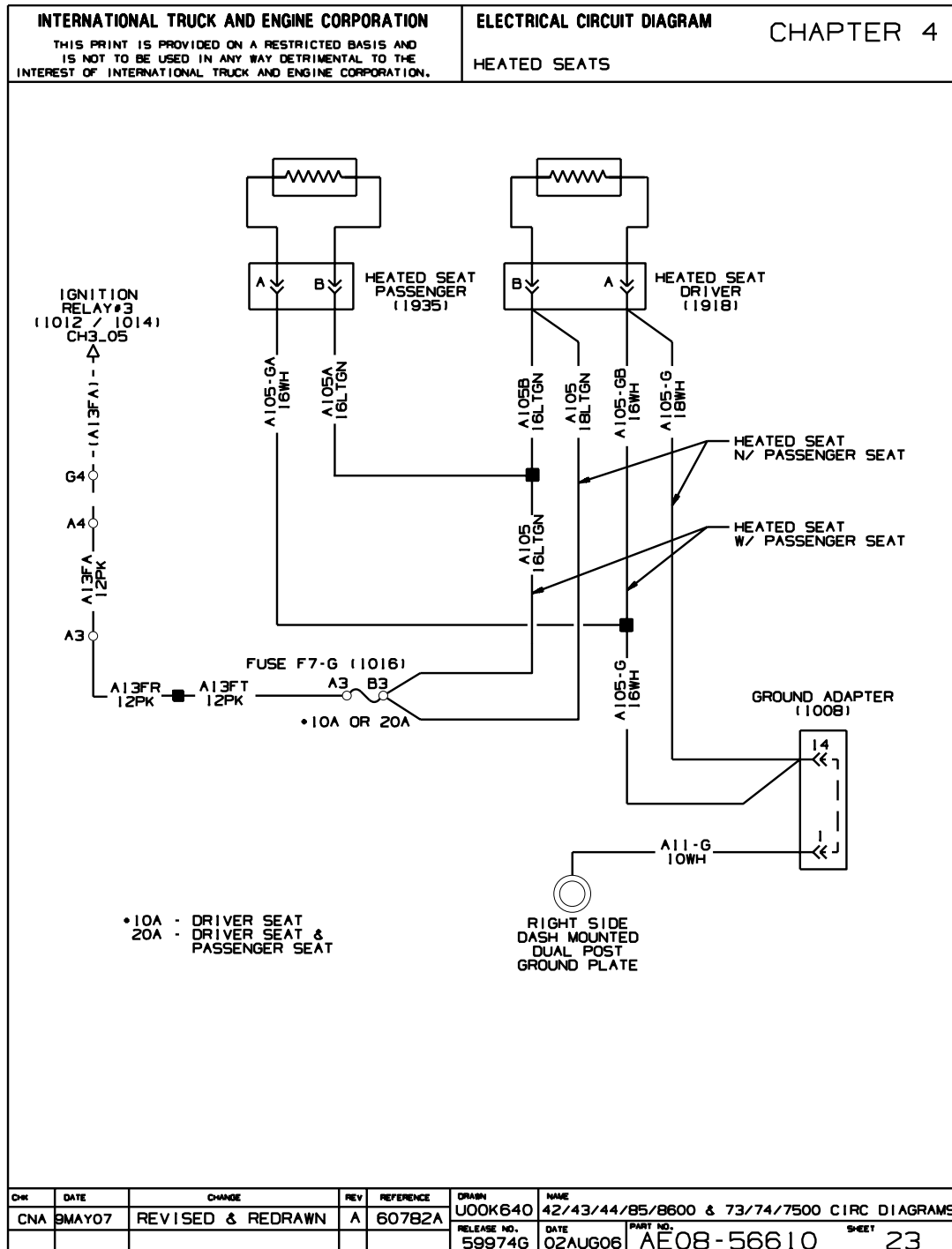
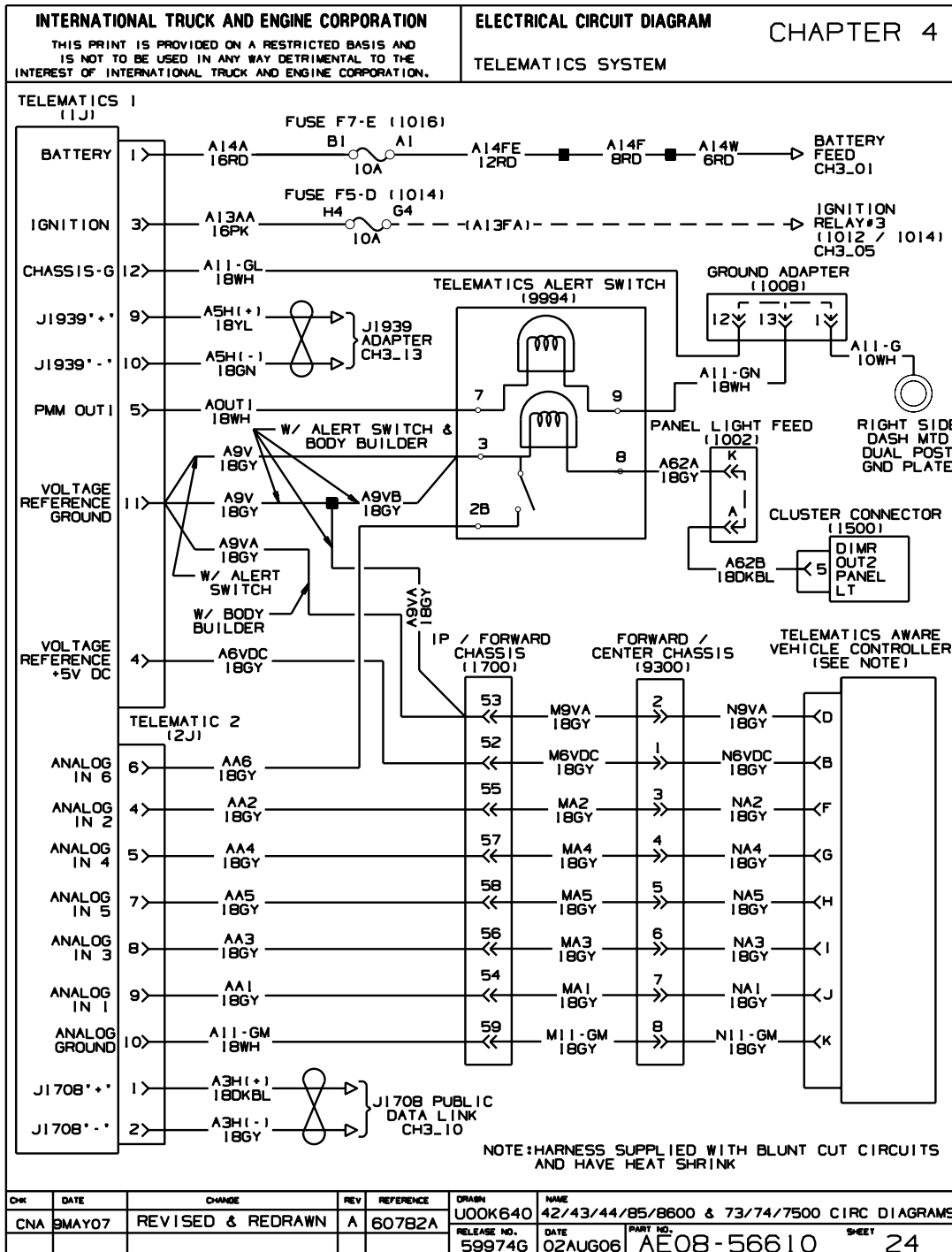


Figure 67 Heated Seats

#### 4.26. TELEMATICS SYSTEM, P. 24



### Figure 68 Telematics System

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

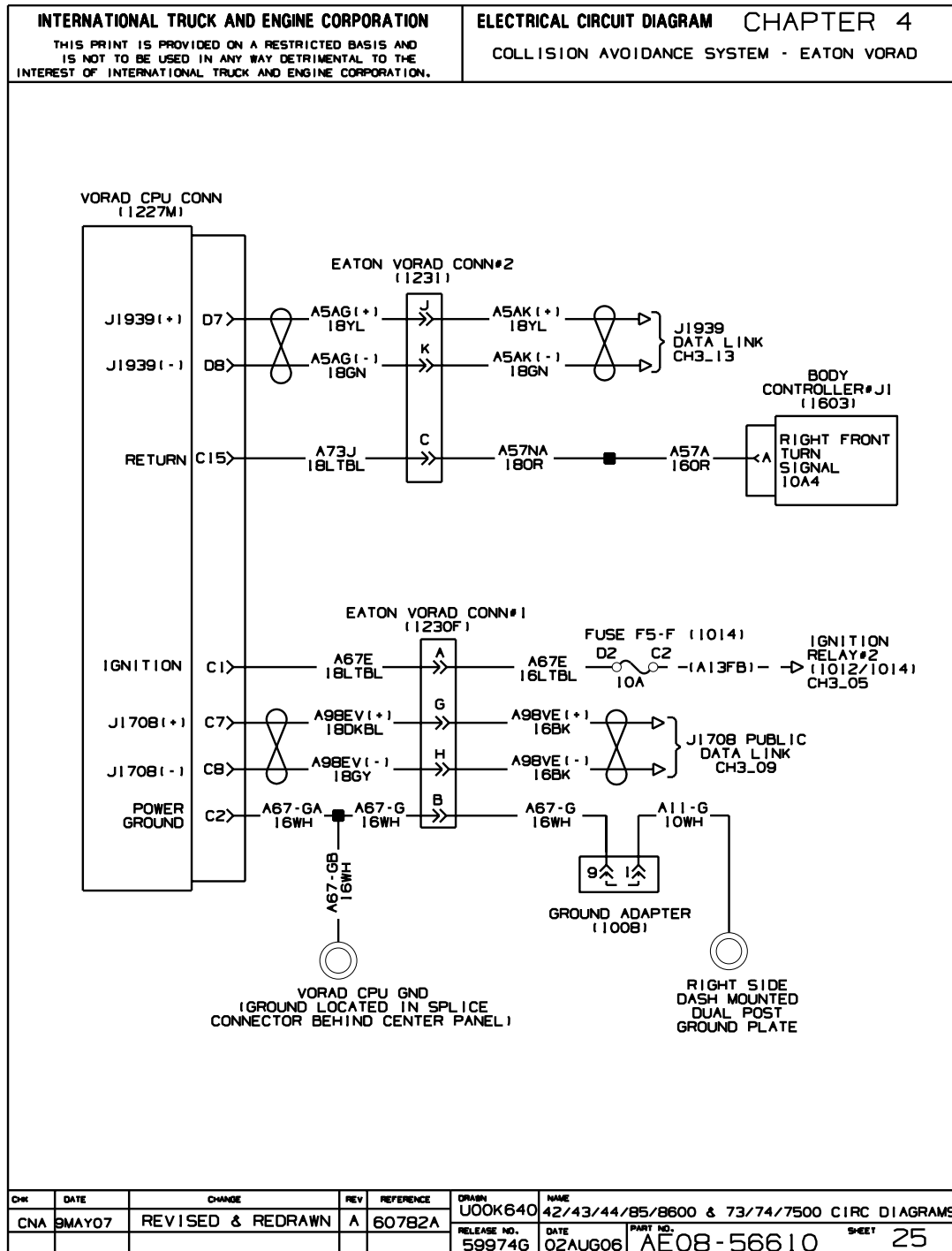


Figure 69 Eaton Vorad Collision Avoidance System

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

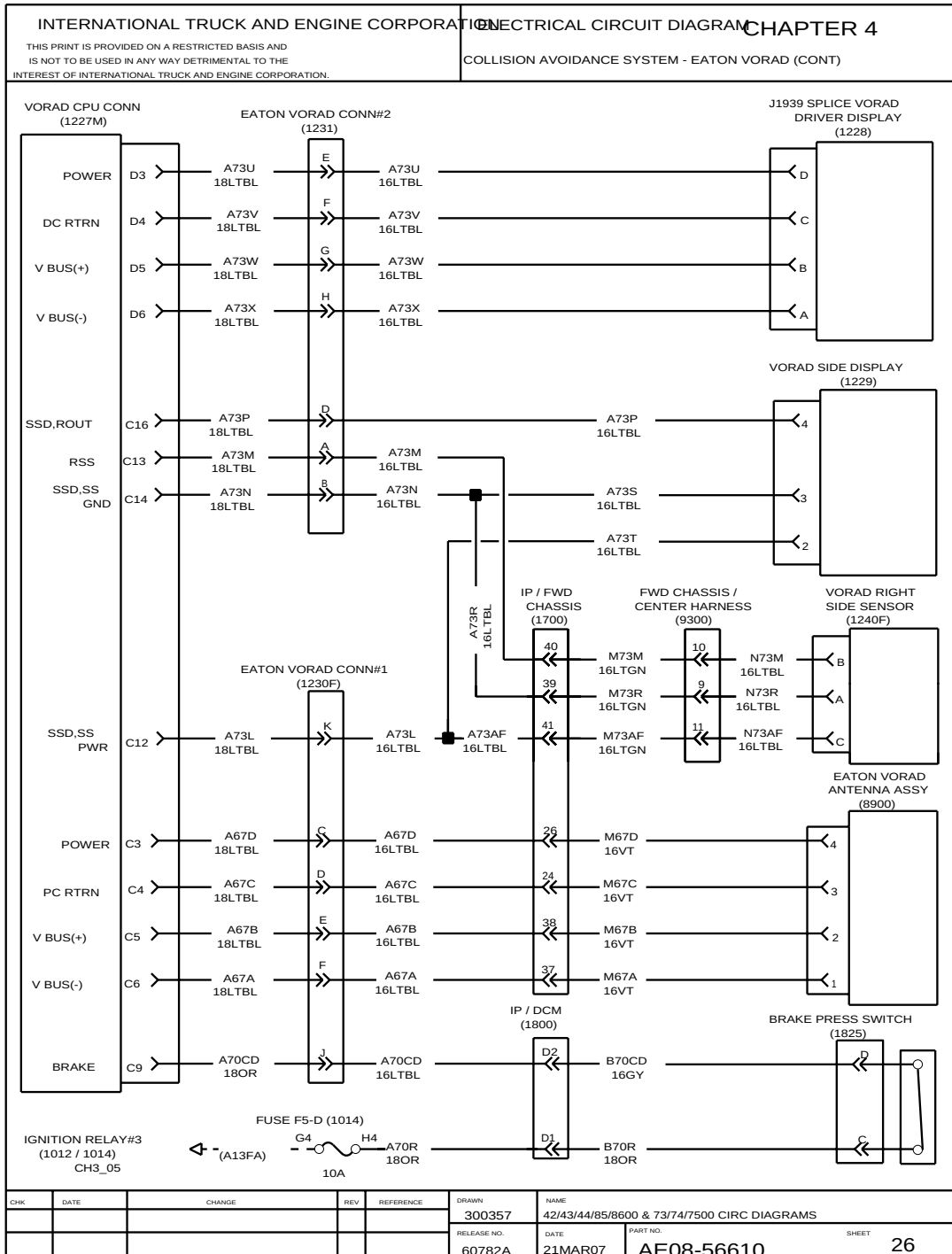


Figure 70 Eaton Vorad Collision Avoidance System

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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## 4.29. DRIVER DISPLAY, P. 27

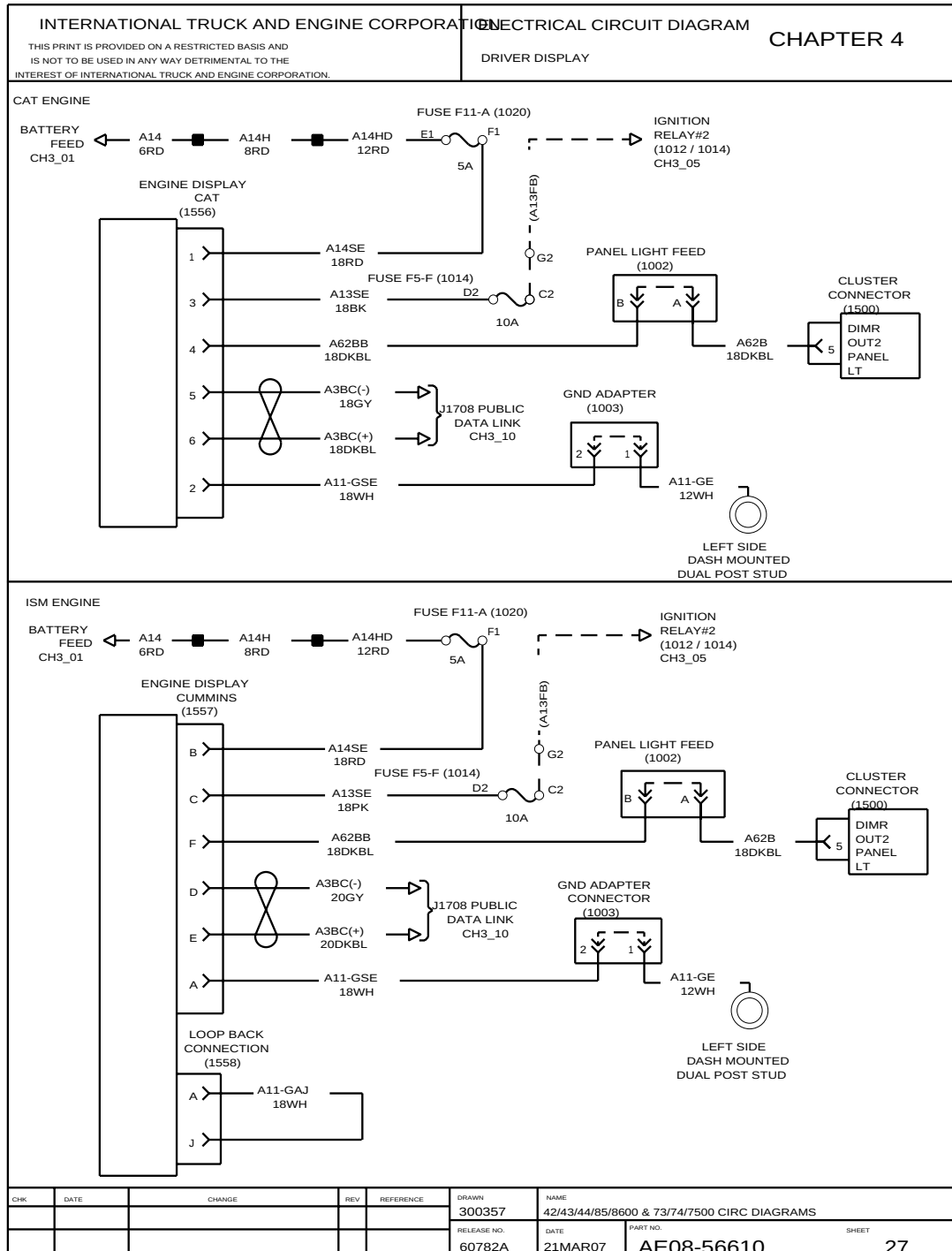


**Figure 71 Driver Display**

### 4.30. BACK-UP CAMERA, P. 28

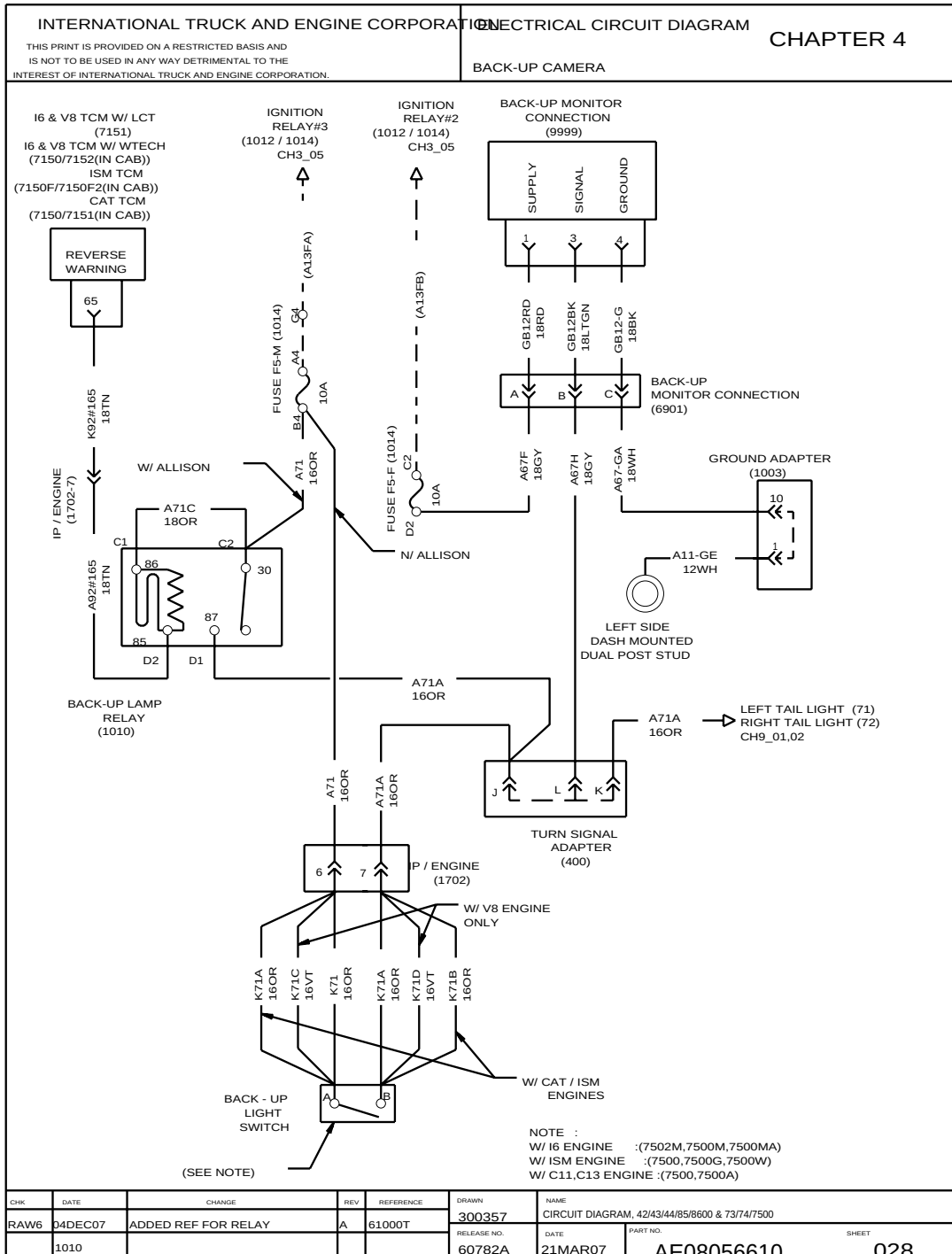


Figure 72 Back-Up Camera

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

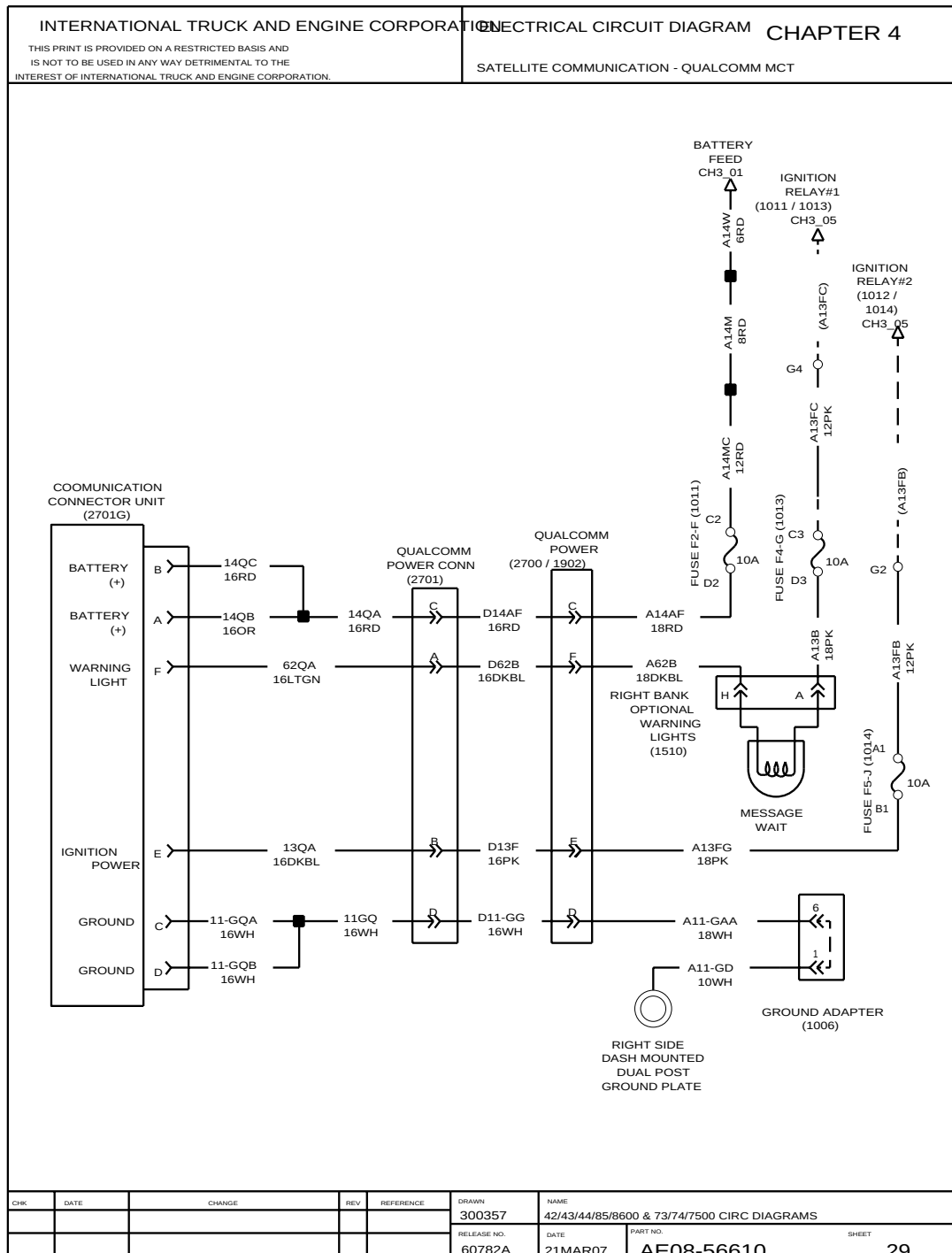
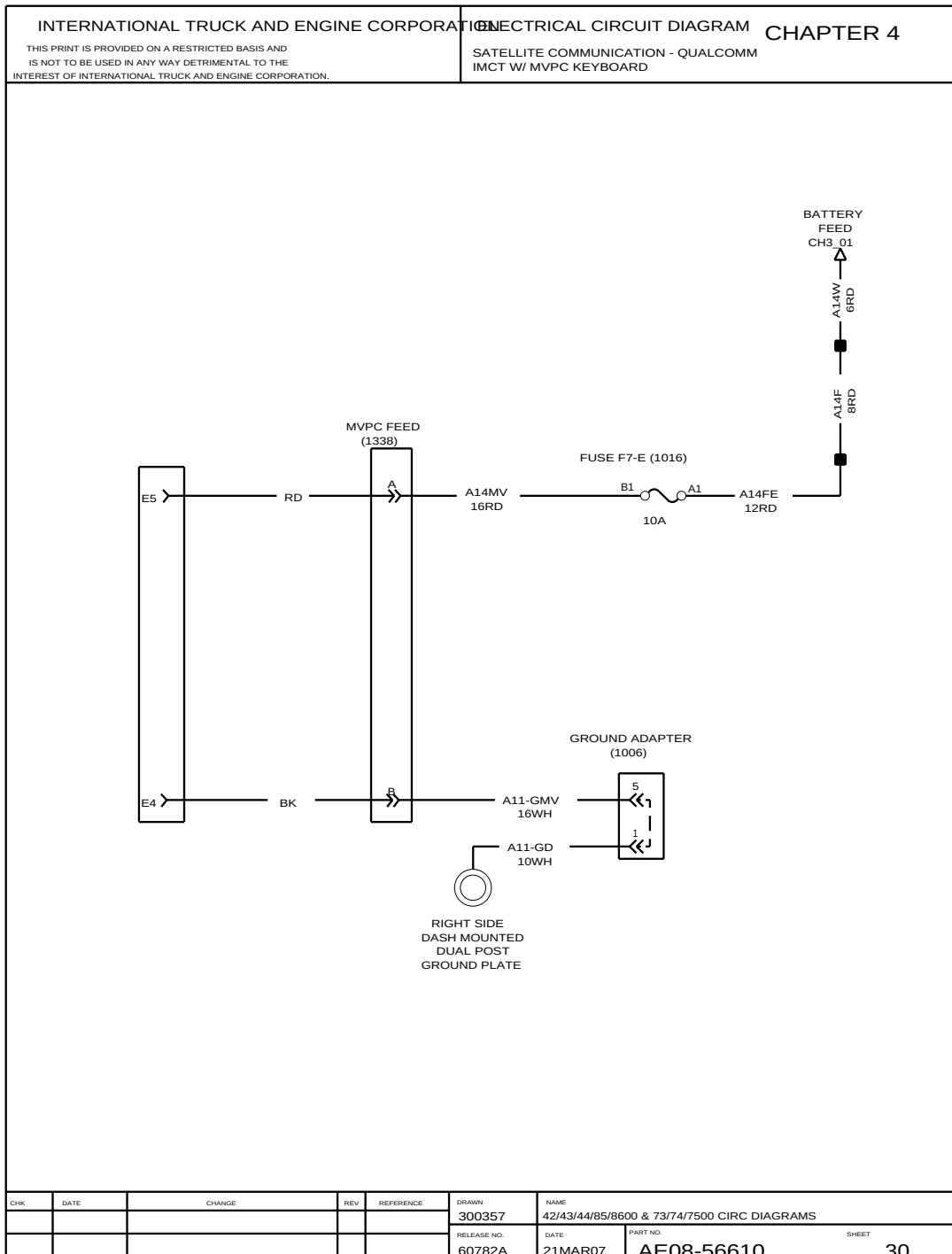


**Figure 73 Satellite Communication — Qualcomm MCT**

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

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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### 4.33. SATELLITE COMMUNICATION — QUALCOMM TMCT, P. 31

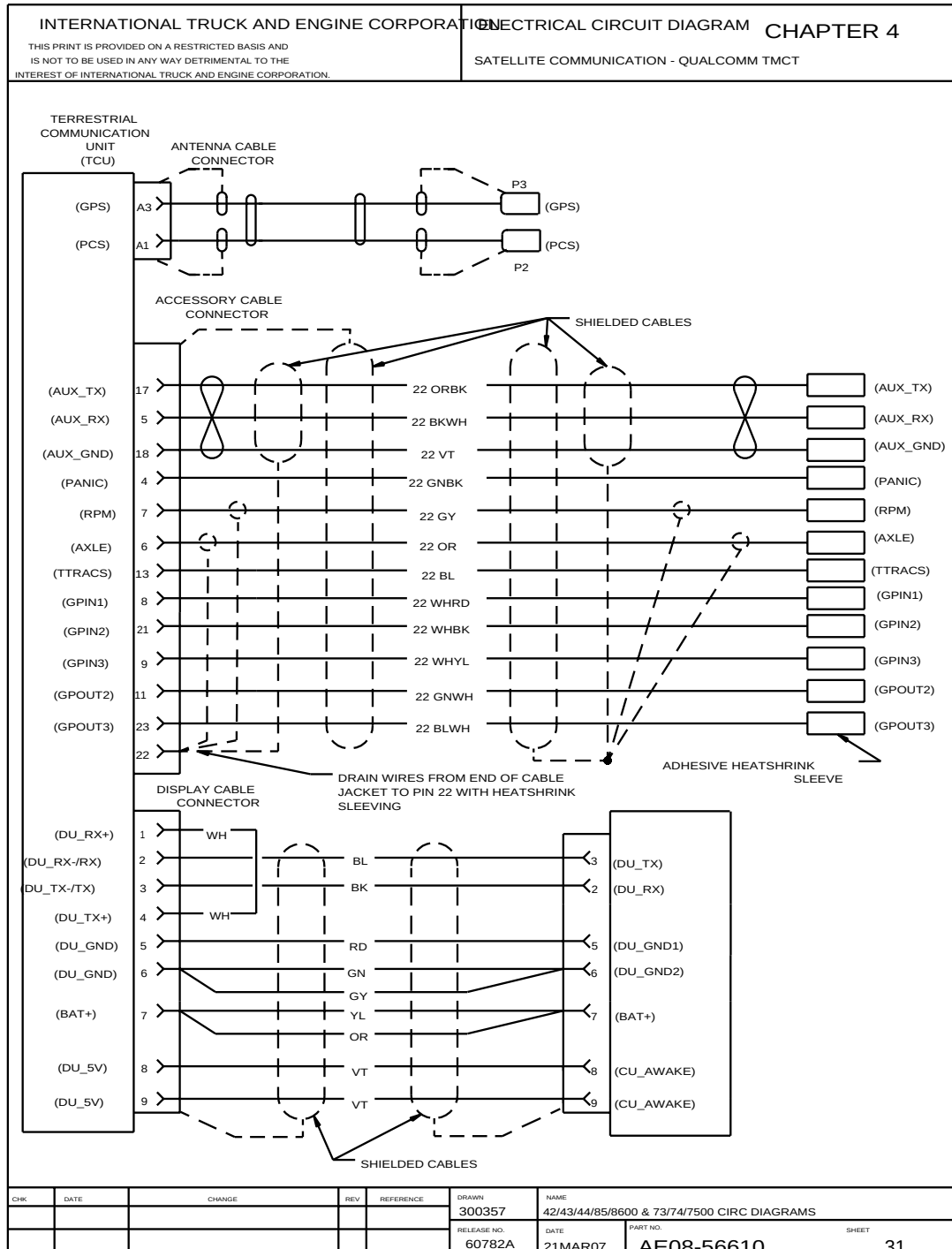


**Figure 75 Satellite Communication — Qualcomm TMCT**

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

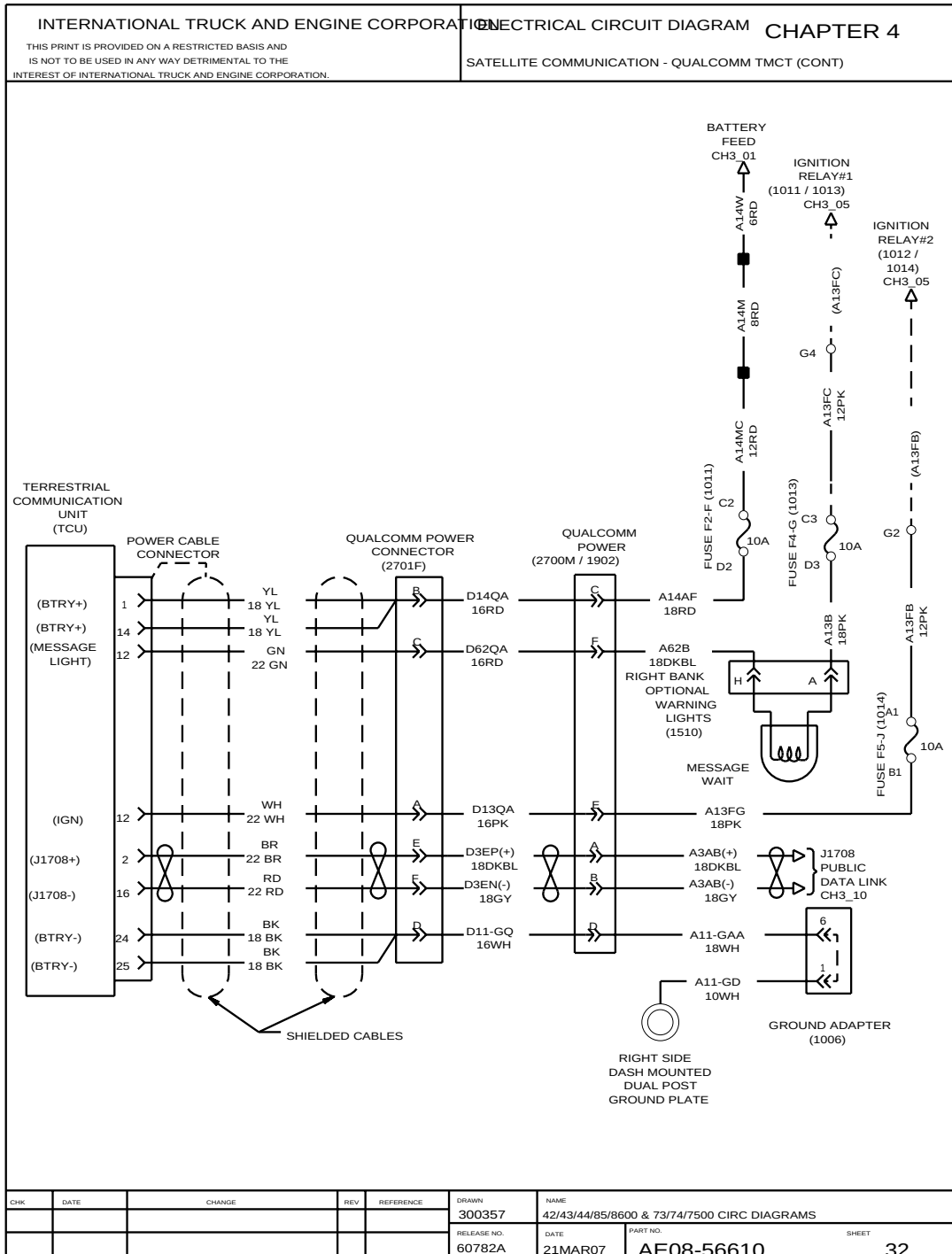


Figure 76 Satellite Communication — Qualcomm TMCT

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

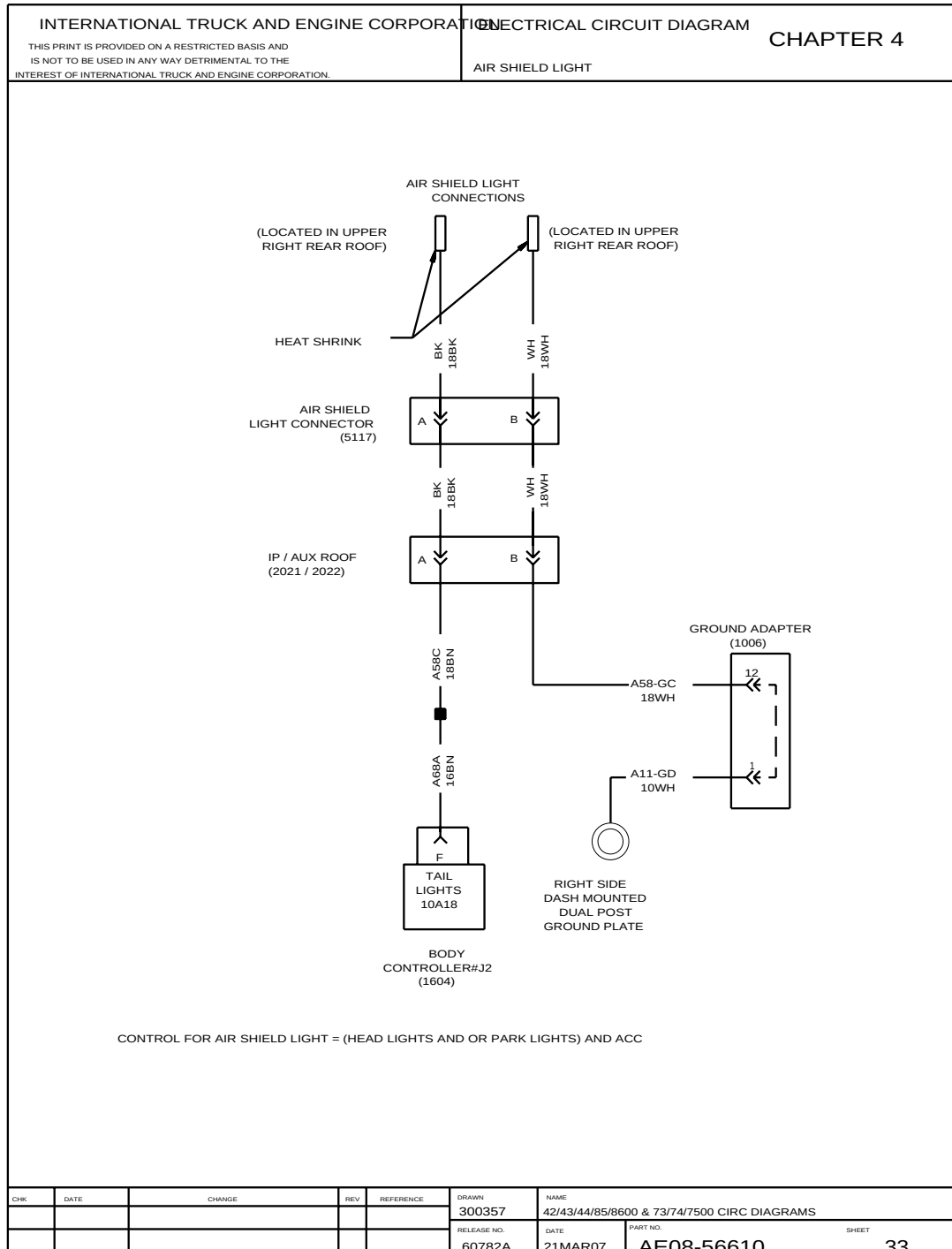


Figure 77 Air Shield Light

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

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

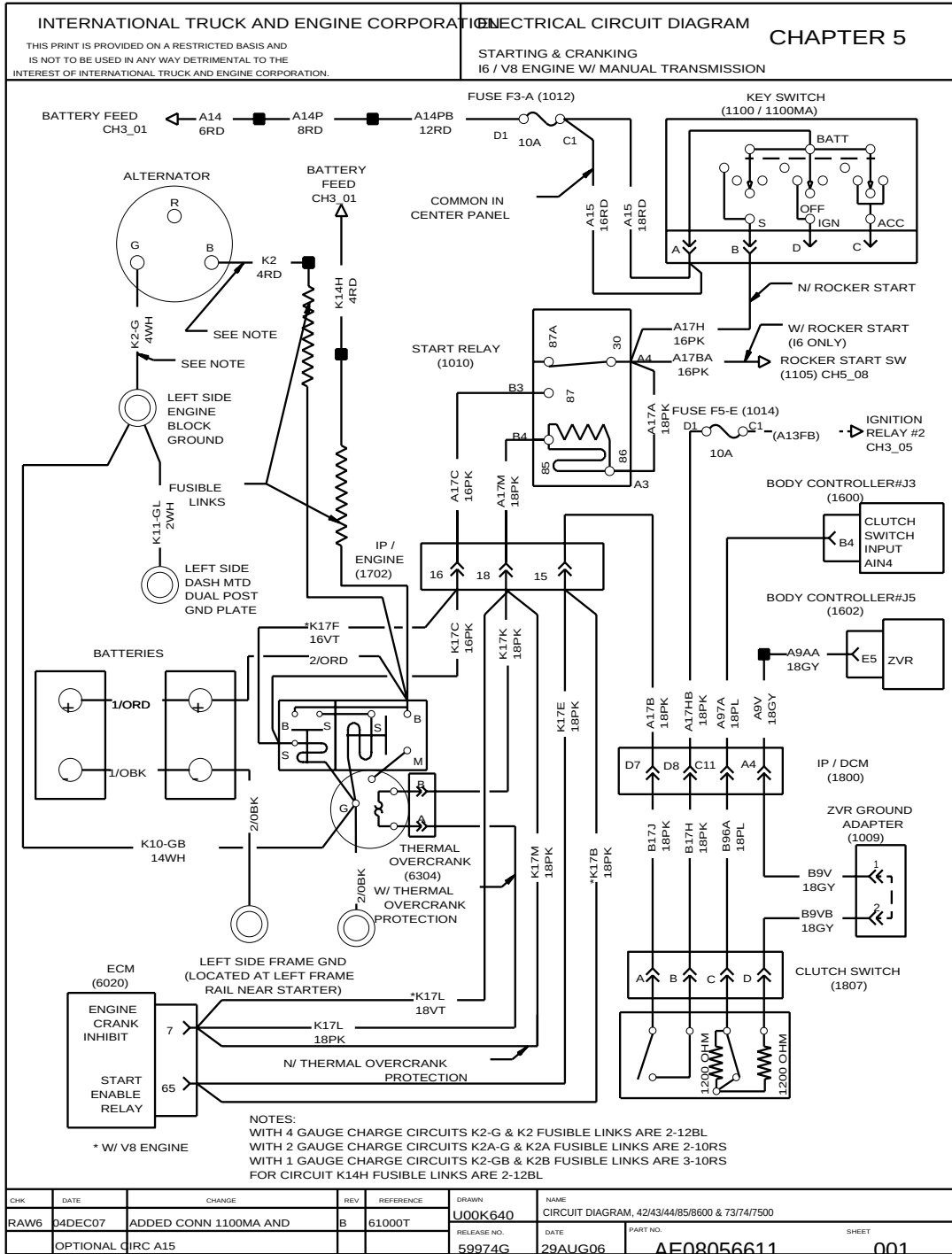


Figure 78 I6 / V8 Engines with Manual Transmission

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

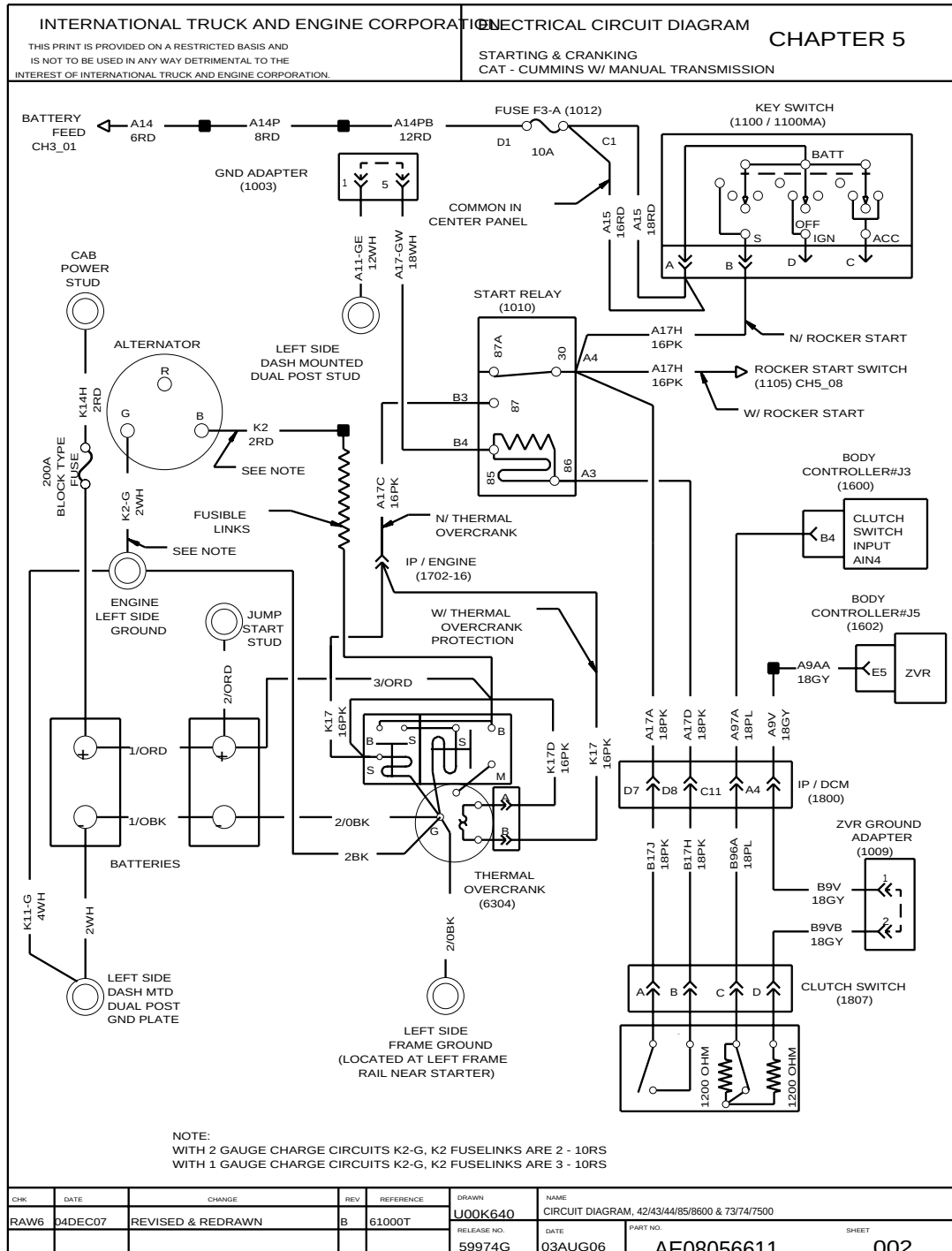


**Figure 79 Cat — Cummins Engines with Manual Transmission**

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

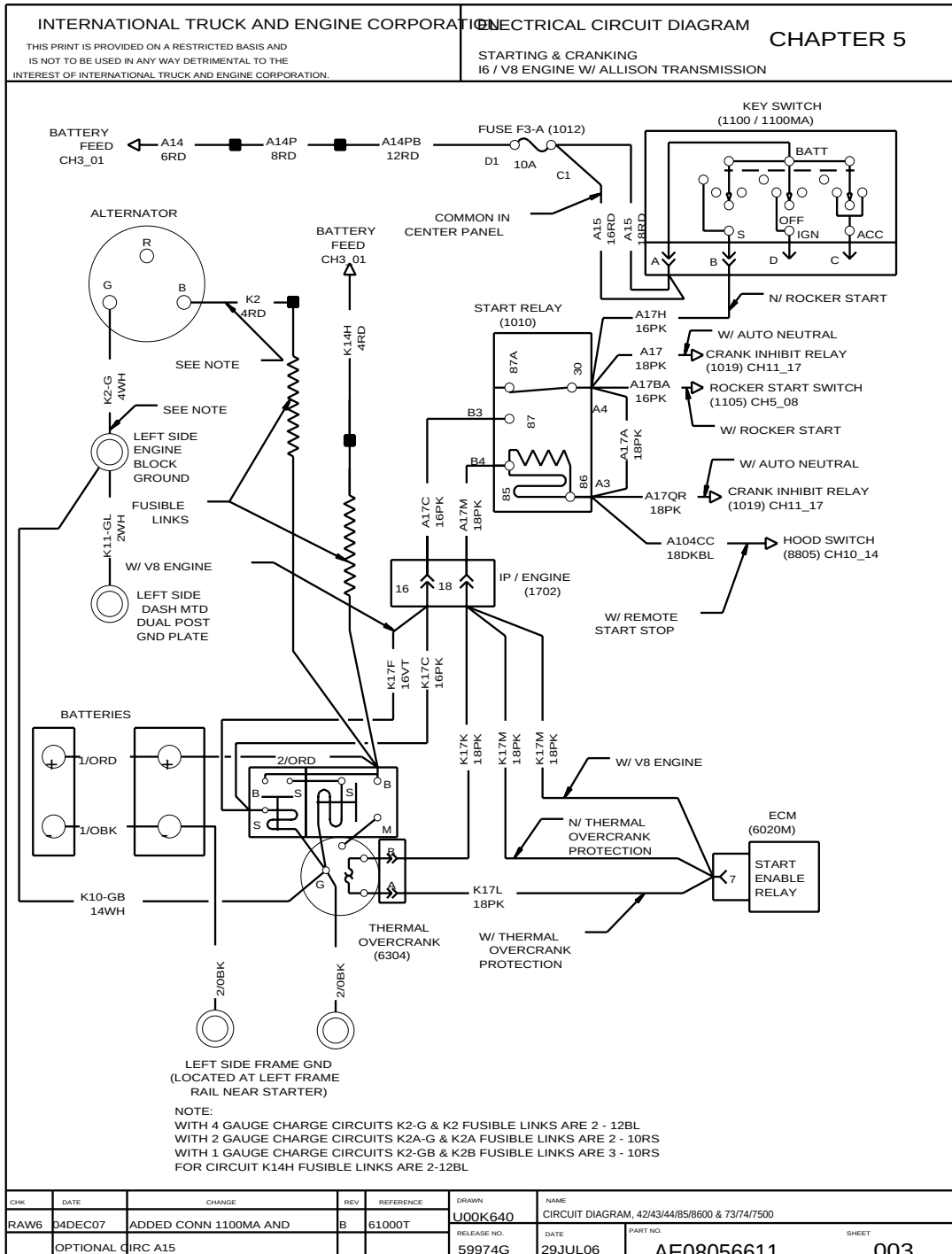


Figure 80 I6 / V8 Engines with Allison Transmission

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

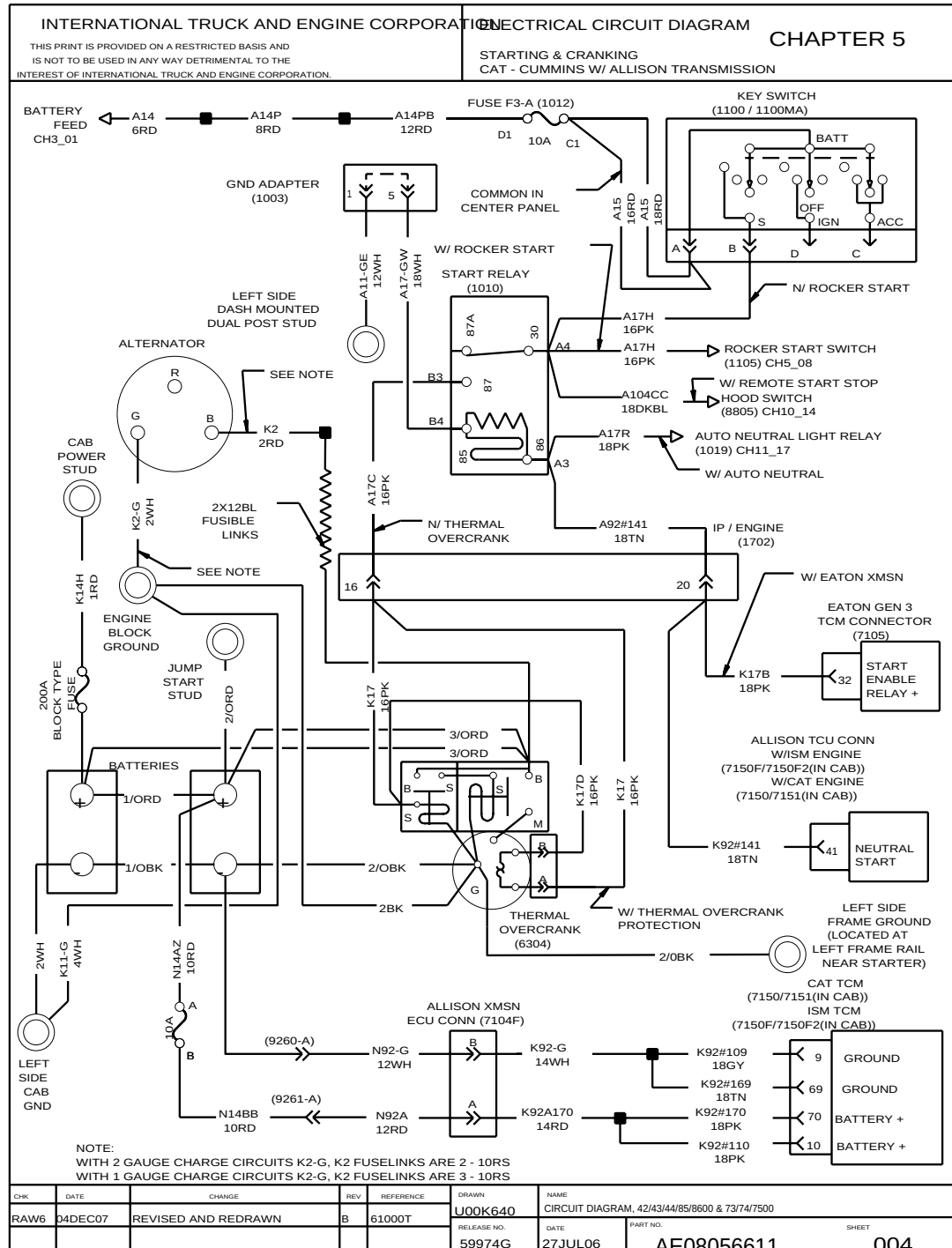


**Figure 81 Cat — Cummins Engines with Allison Transmission**

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

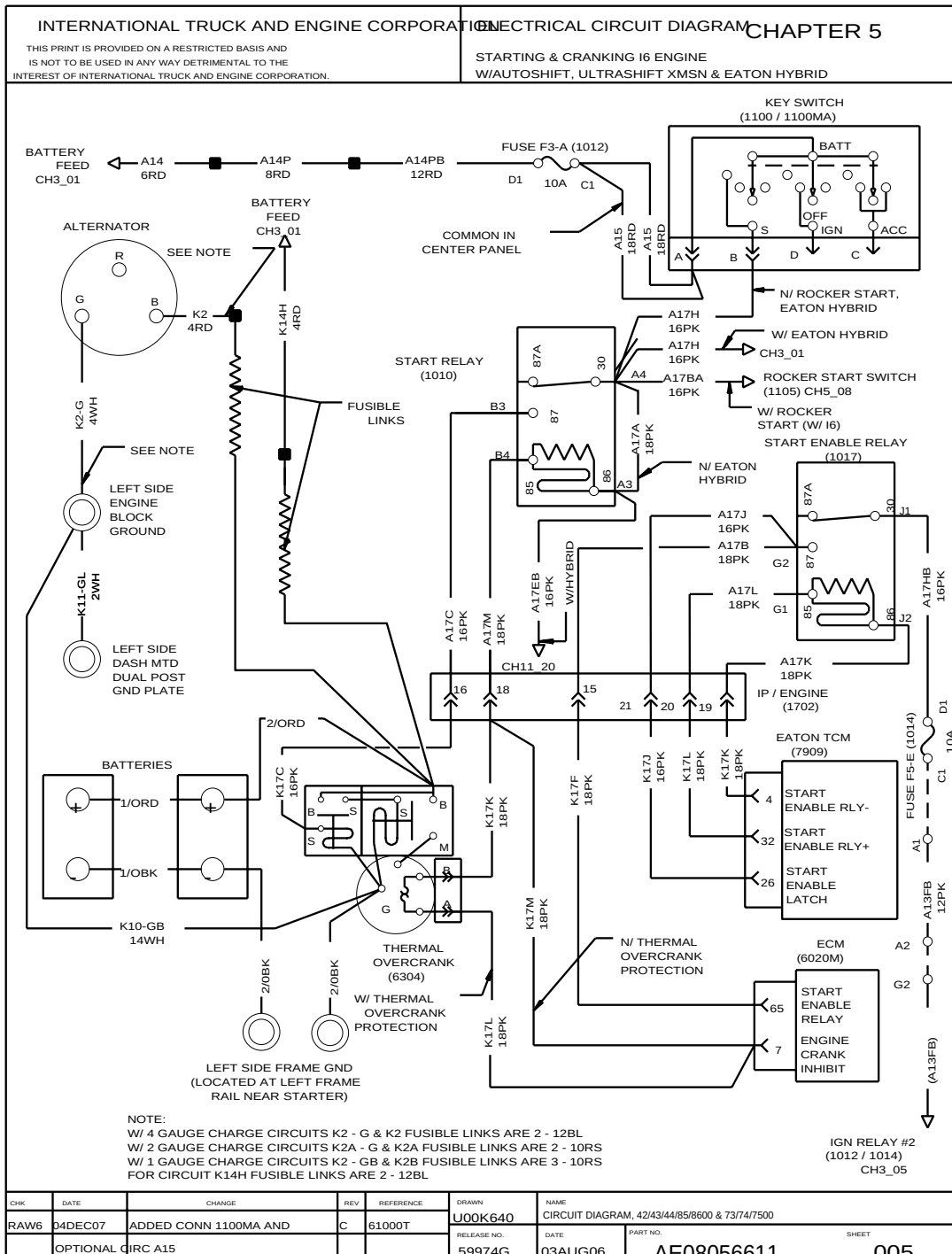


Figure 82 I6 Engine with Autoshift, Ultrashift, and Eaton Hybrid Transmission

3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS

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

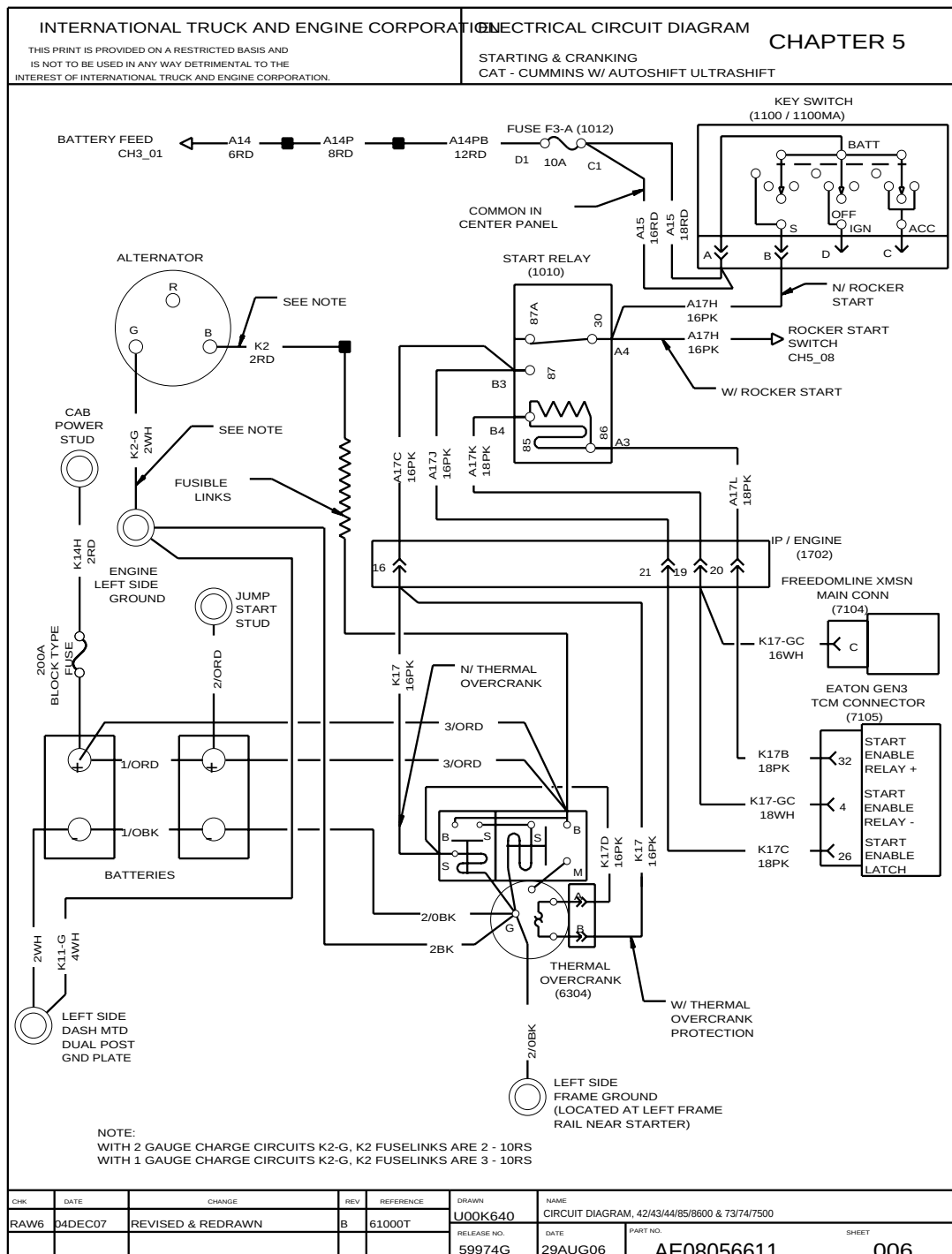


Figure 83 Cat — Cummins Engines with Autoshift and Ultrashift Transmission

## 5.7. I6 POWER PACK, P. 7

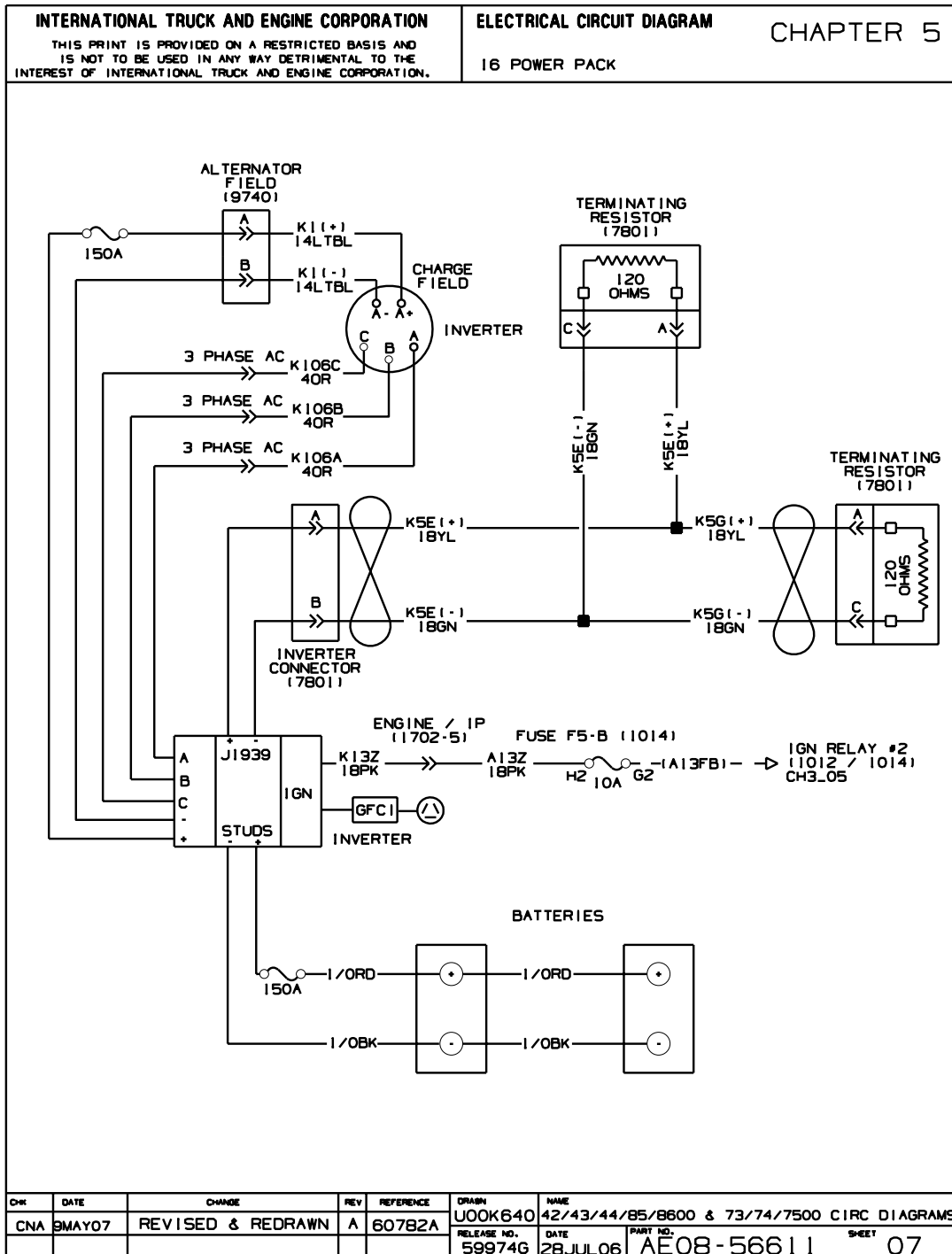


Figure 84 I6 Power Pack

## 5.8. ROCKER START, P. 8

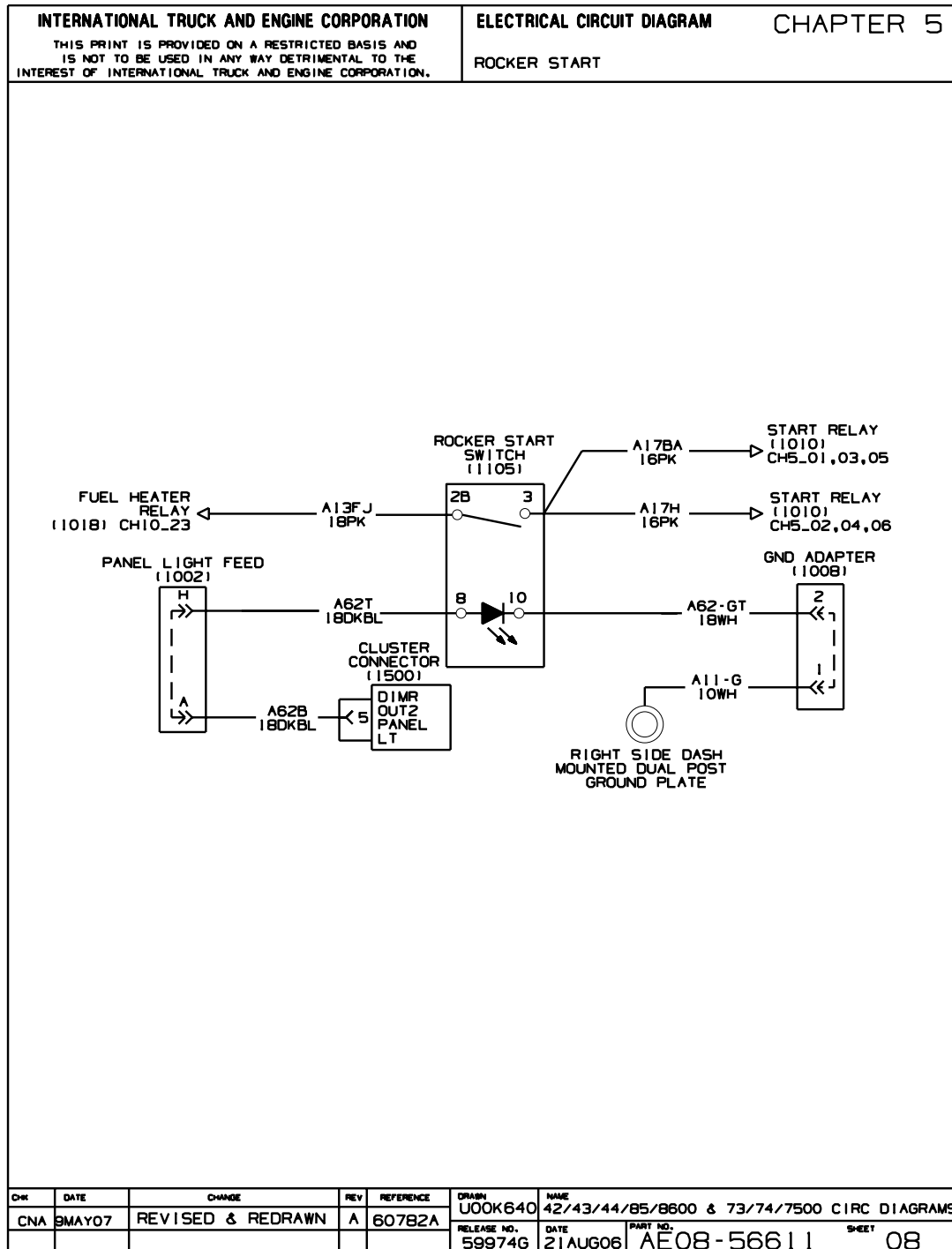


Figure 85 Rocker Start

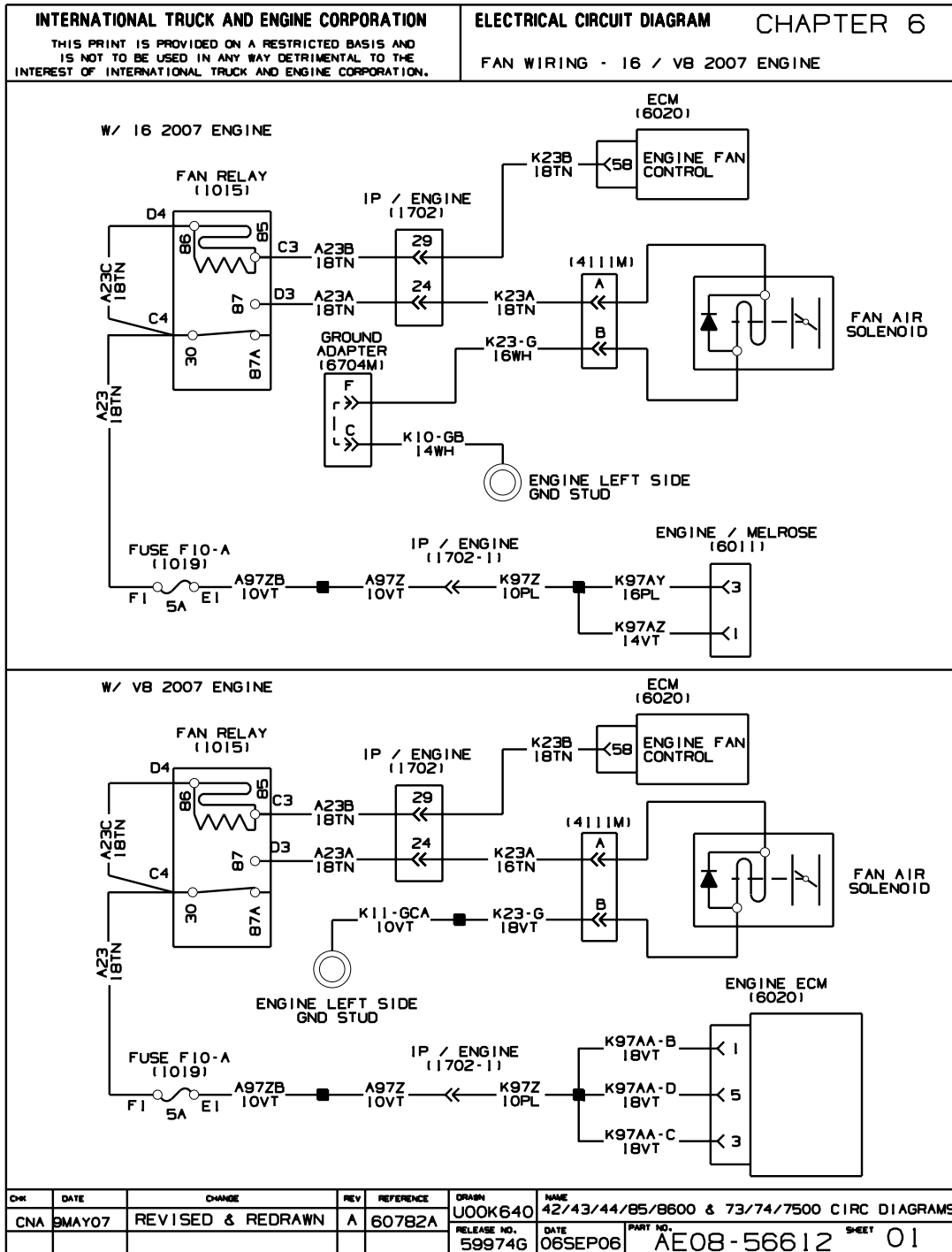
**6. FANS AND ENGINE ACCESSORIES (CHAPTER 6)****6.1. FAN WIRING, I6 / V8 2007 ENGINES, P. 1**

Figure 86 Fan Wiring, I6 / V8 2007 Engines

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

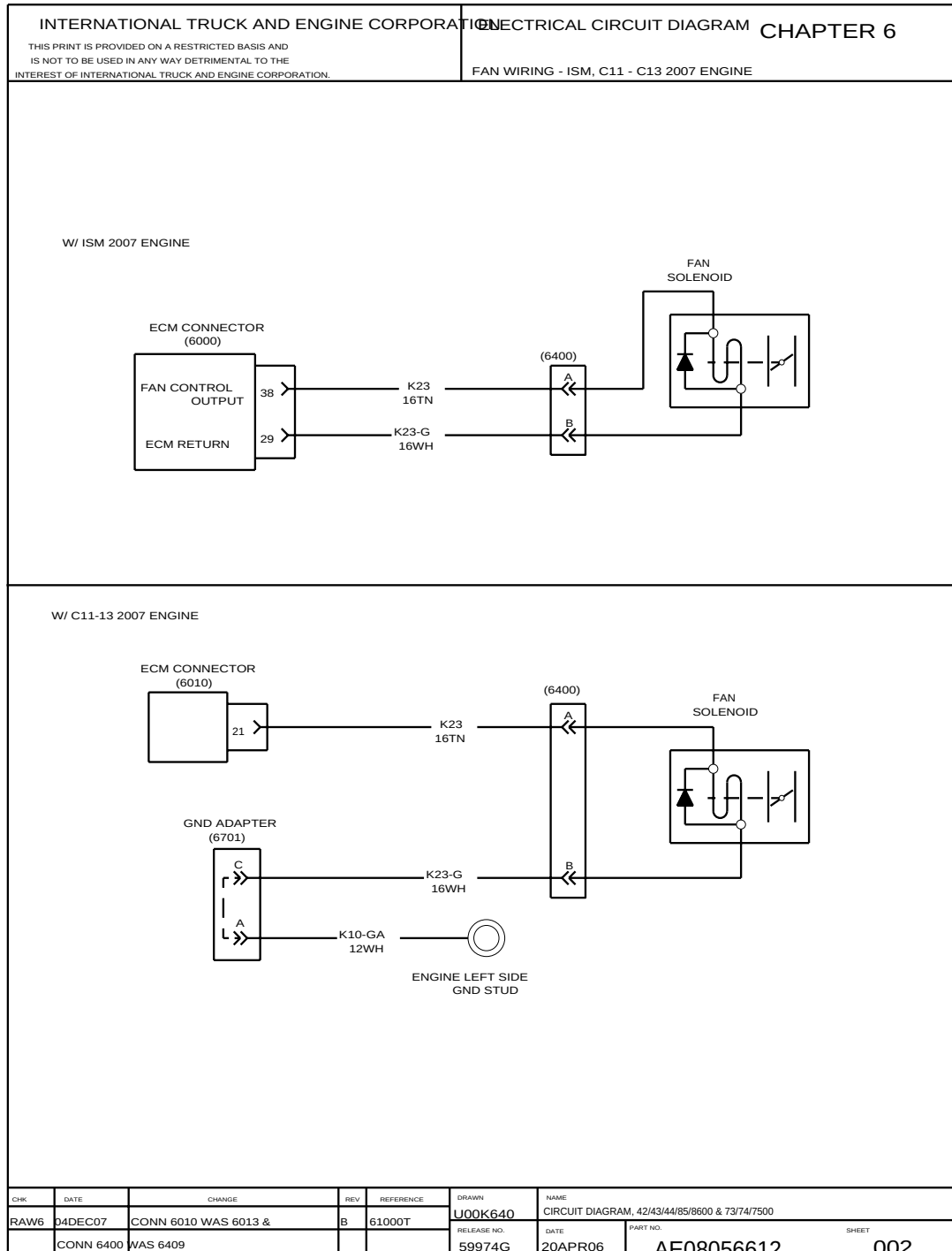


Figure 87 Fan Wiring, ISM, C11-C13 2007 Engines

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

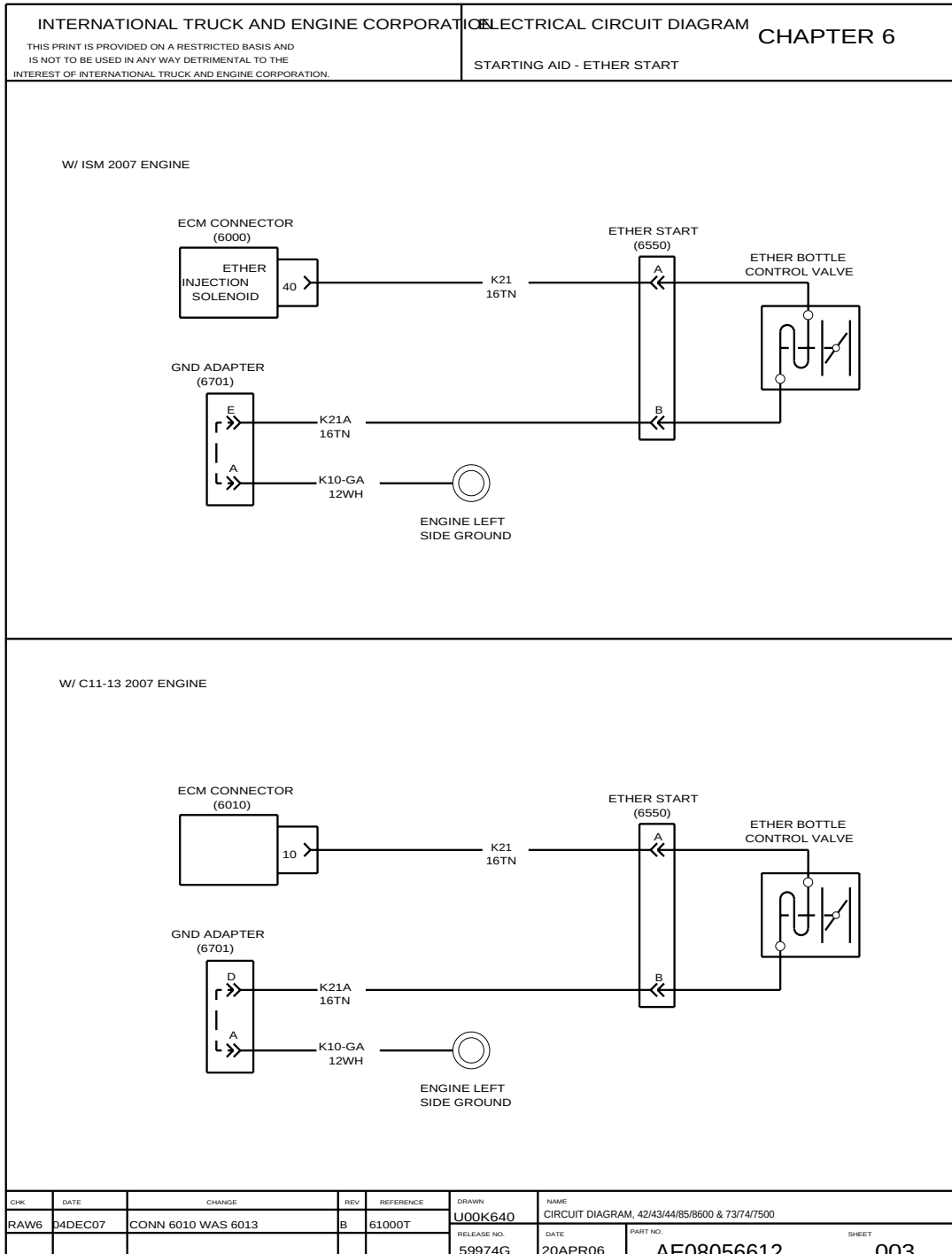


**Figure 88 Starting Aid — Ether Start**

## 6.4. SNOW VALVE, P. 4

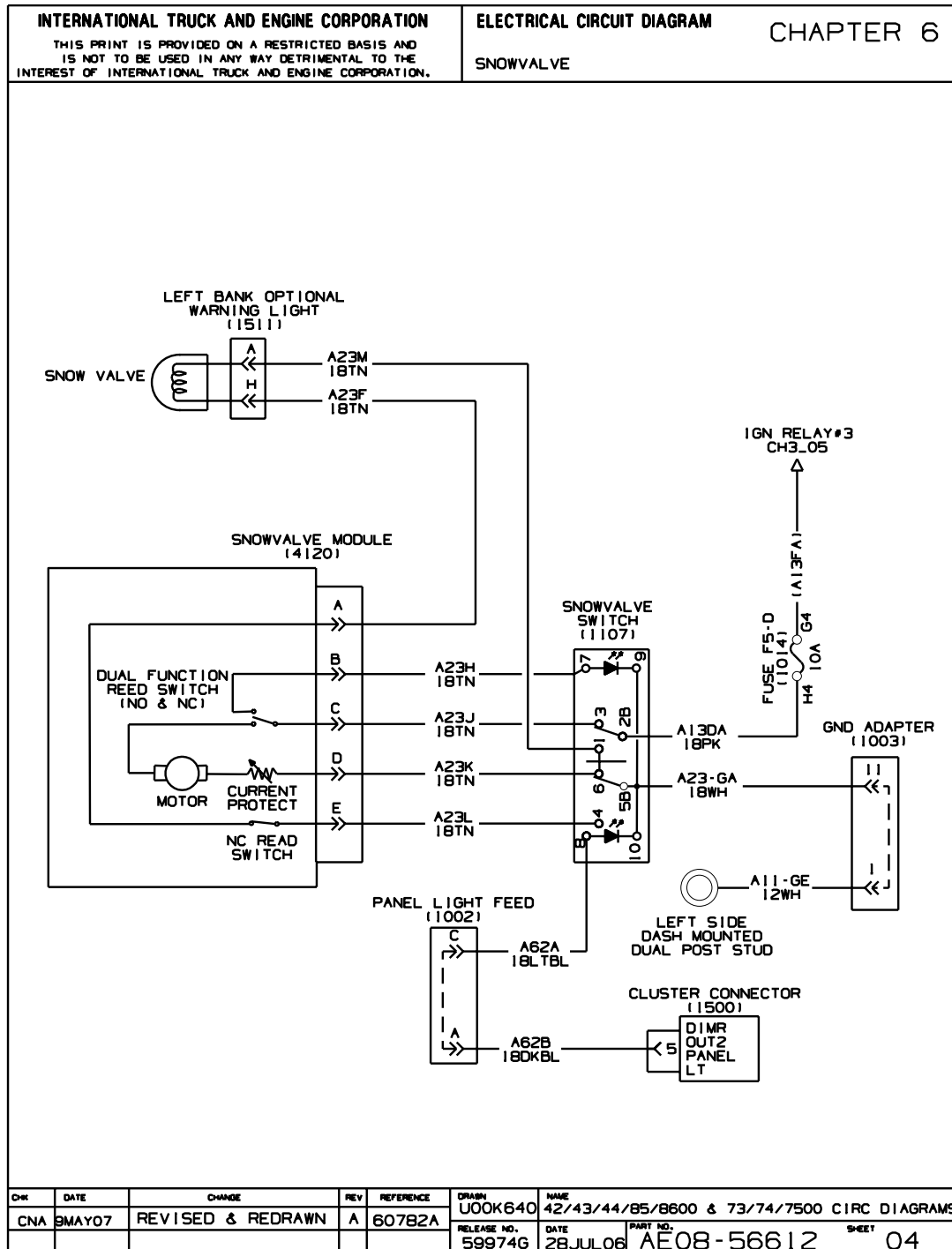


Figure 89 Snow Valve

## 7. ELECTRONIC ENGINES (CHAPTER 7)

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

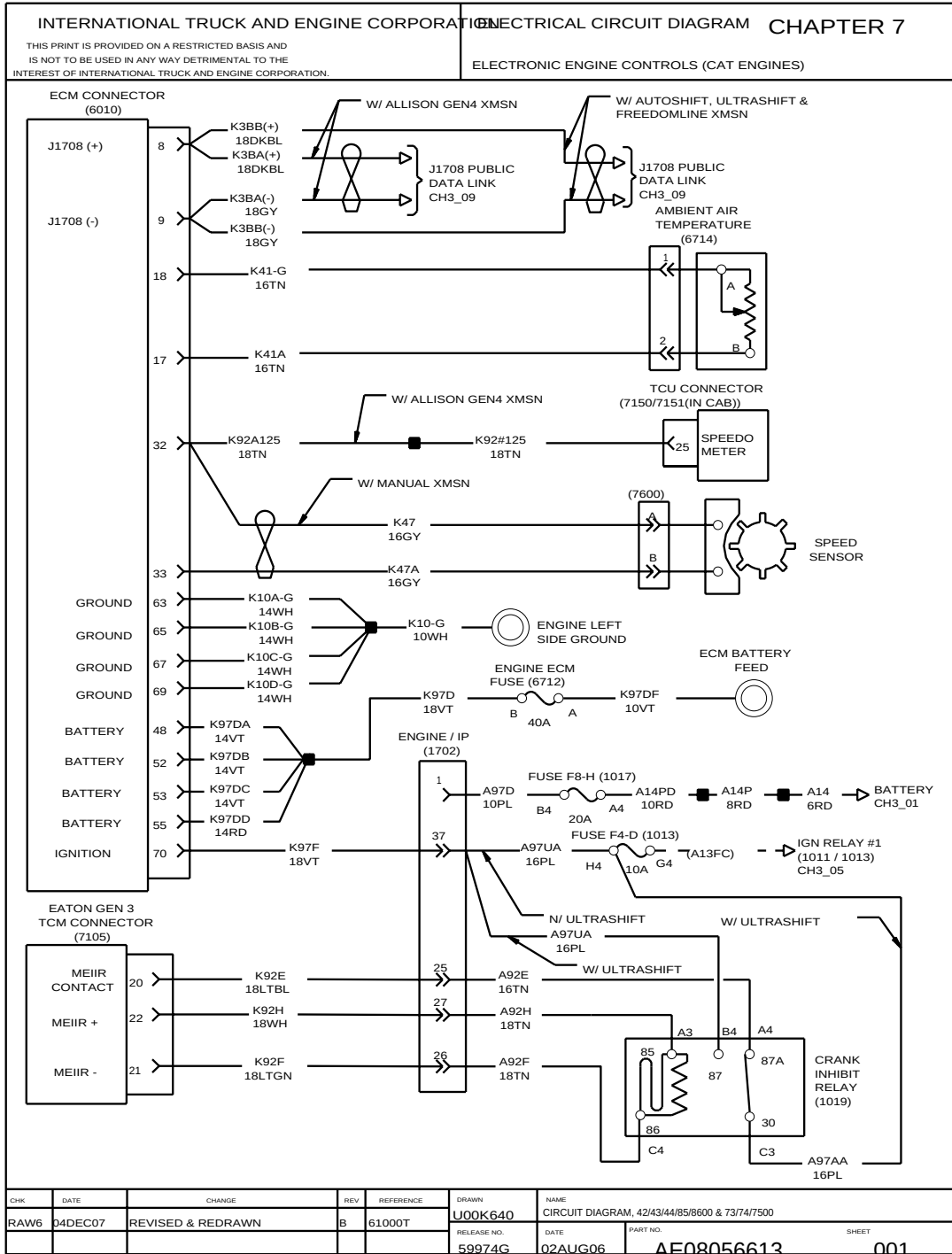


Figure 90 Electronic Engine Controls, Cat Engines

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

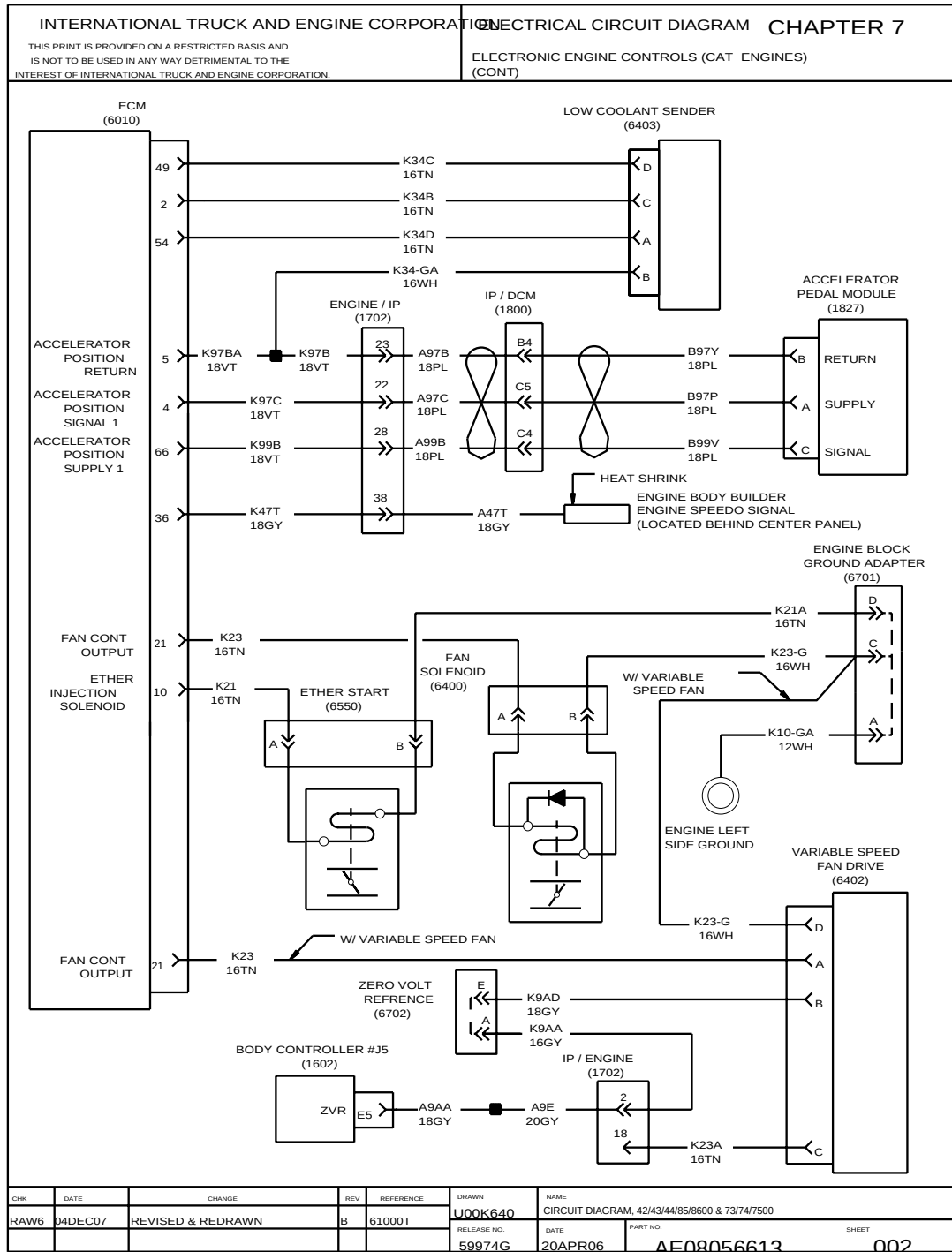


**Figure 91 Electronic Engine Controls, Cat Engines (Cont.)**

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

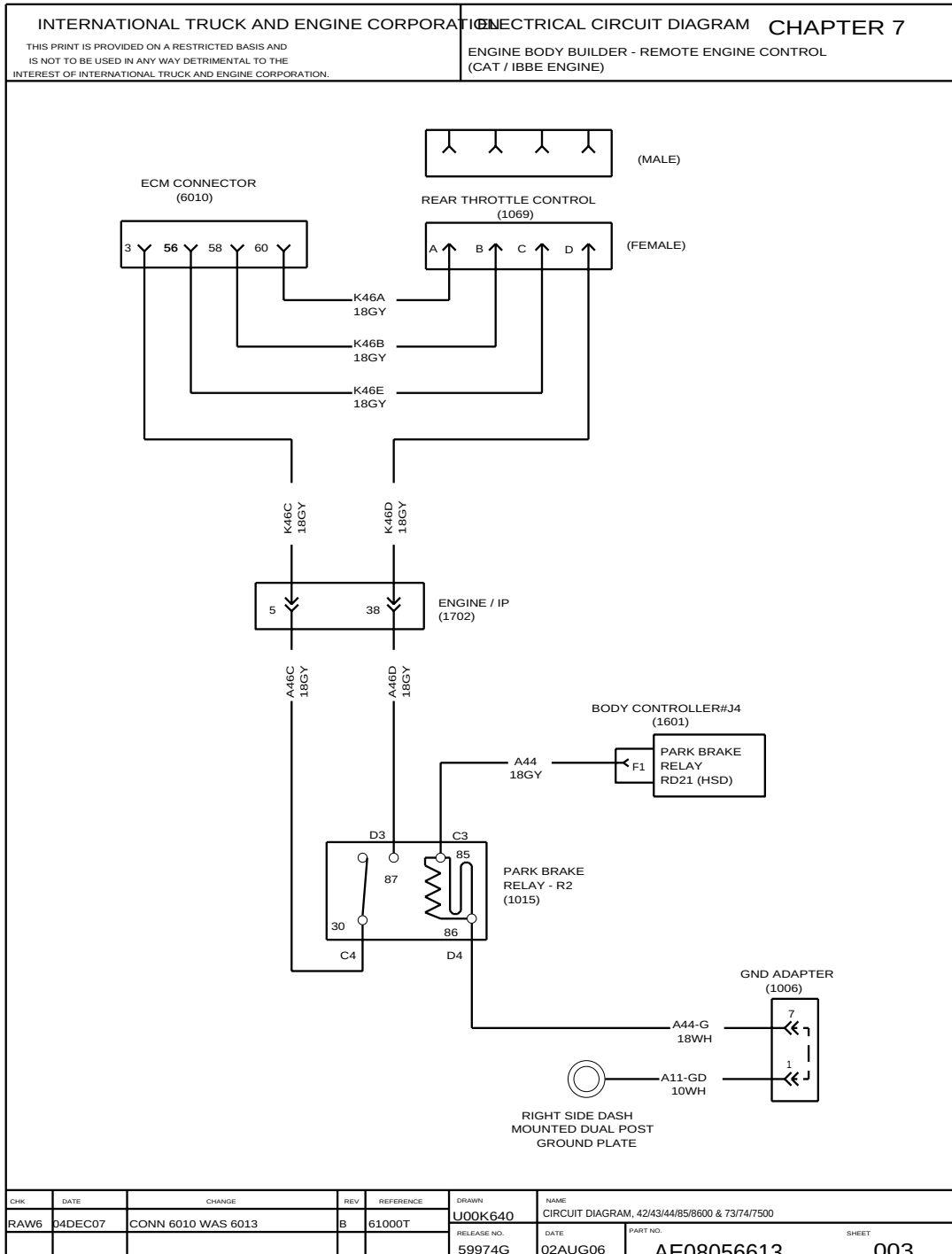


Figure 92 Engine Body Builder — Remote Engine Control (Cat/IBBE Engine)

**3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, RXT Models Built  
March 1, 2007 to March 18, 2008 — ELECTRICAL CIRCUIT DIAGRAMS**

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

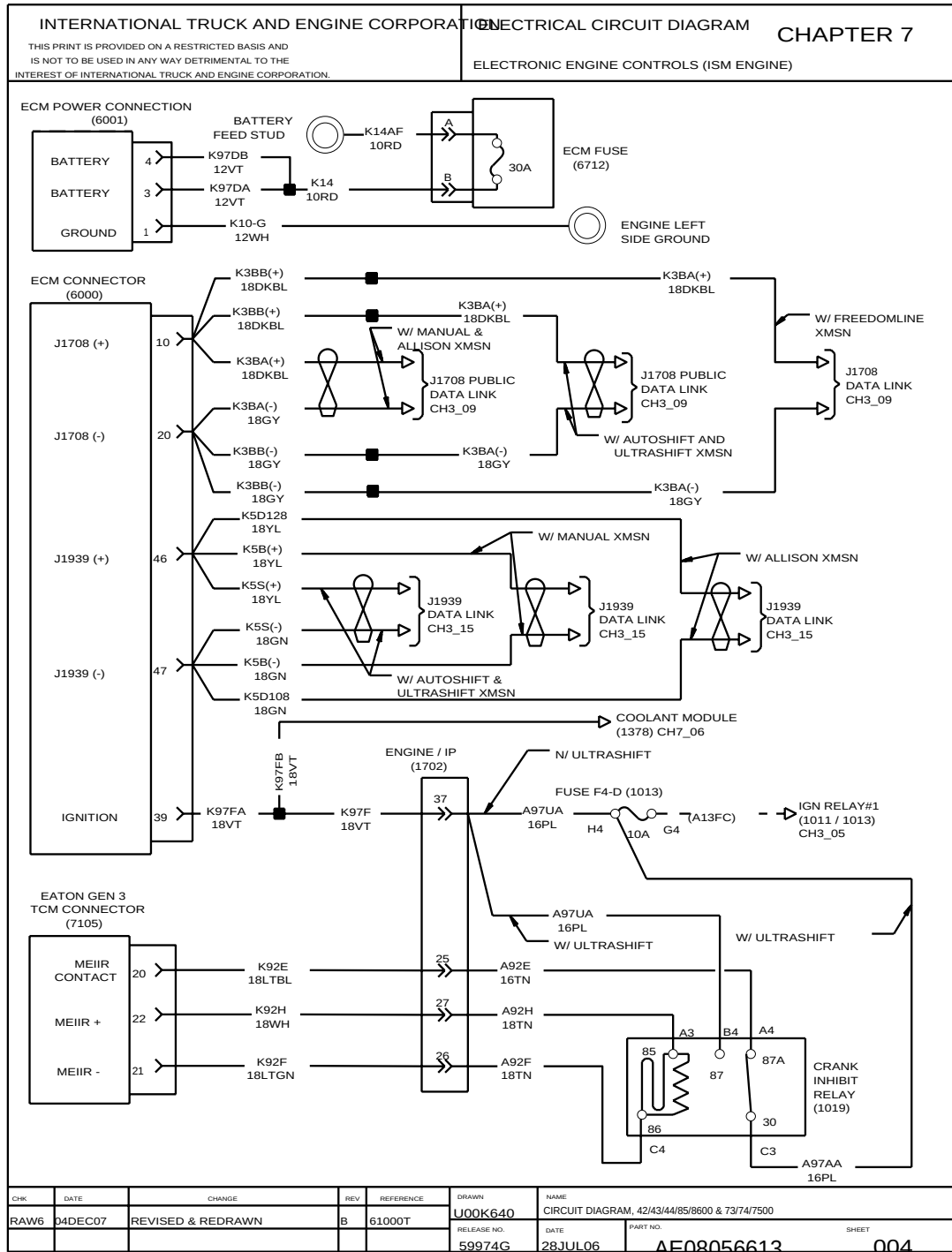


**Figure 93 Electronic Engine Controls, ISM Engines**

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

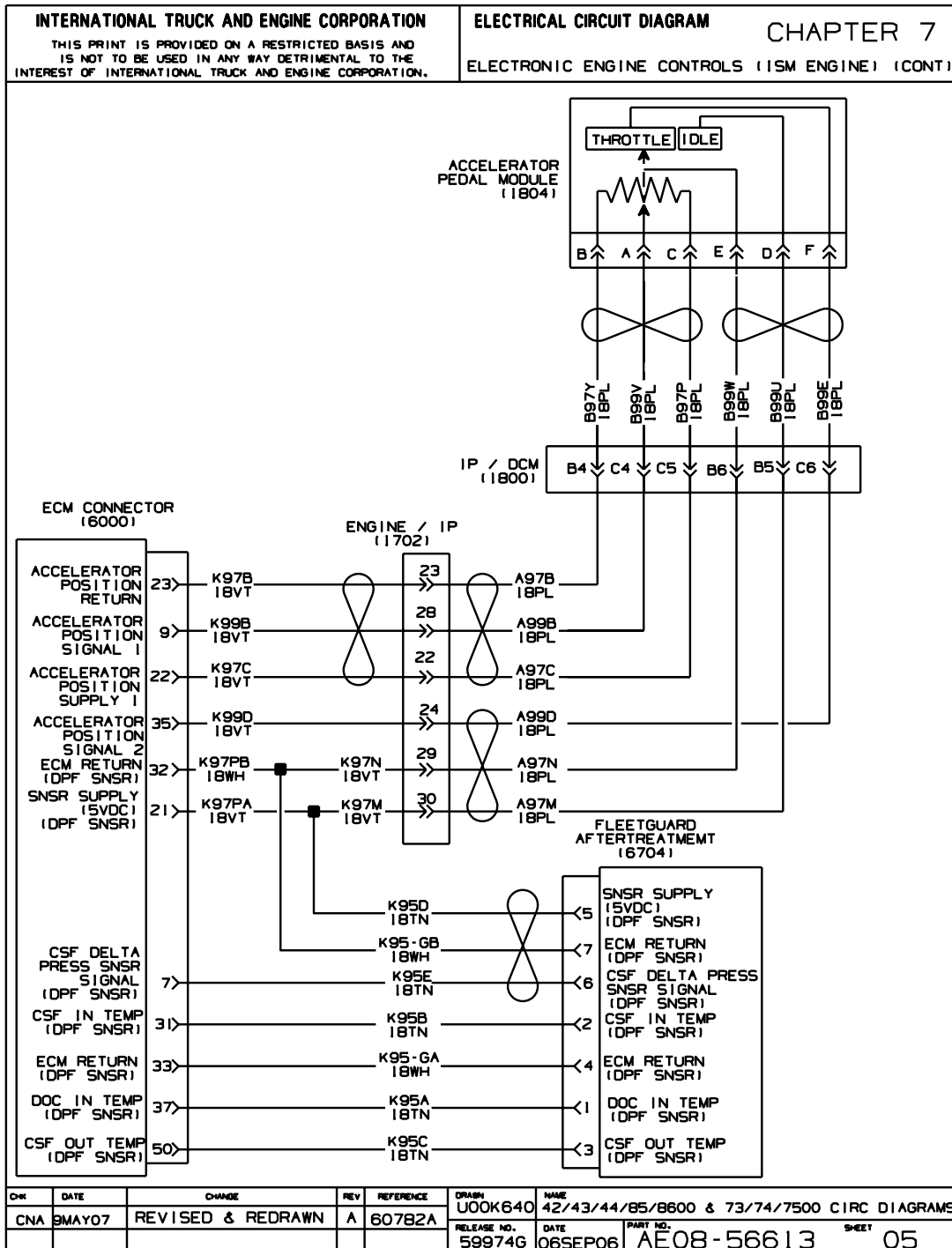


Figure 94 Electronic Engine Controls, ISM Engines (Cont.)

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

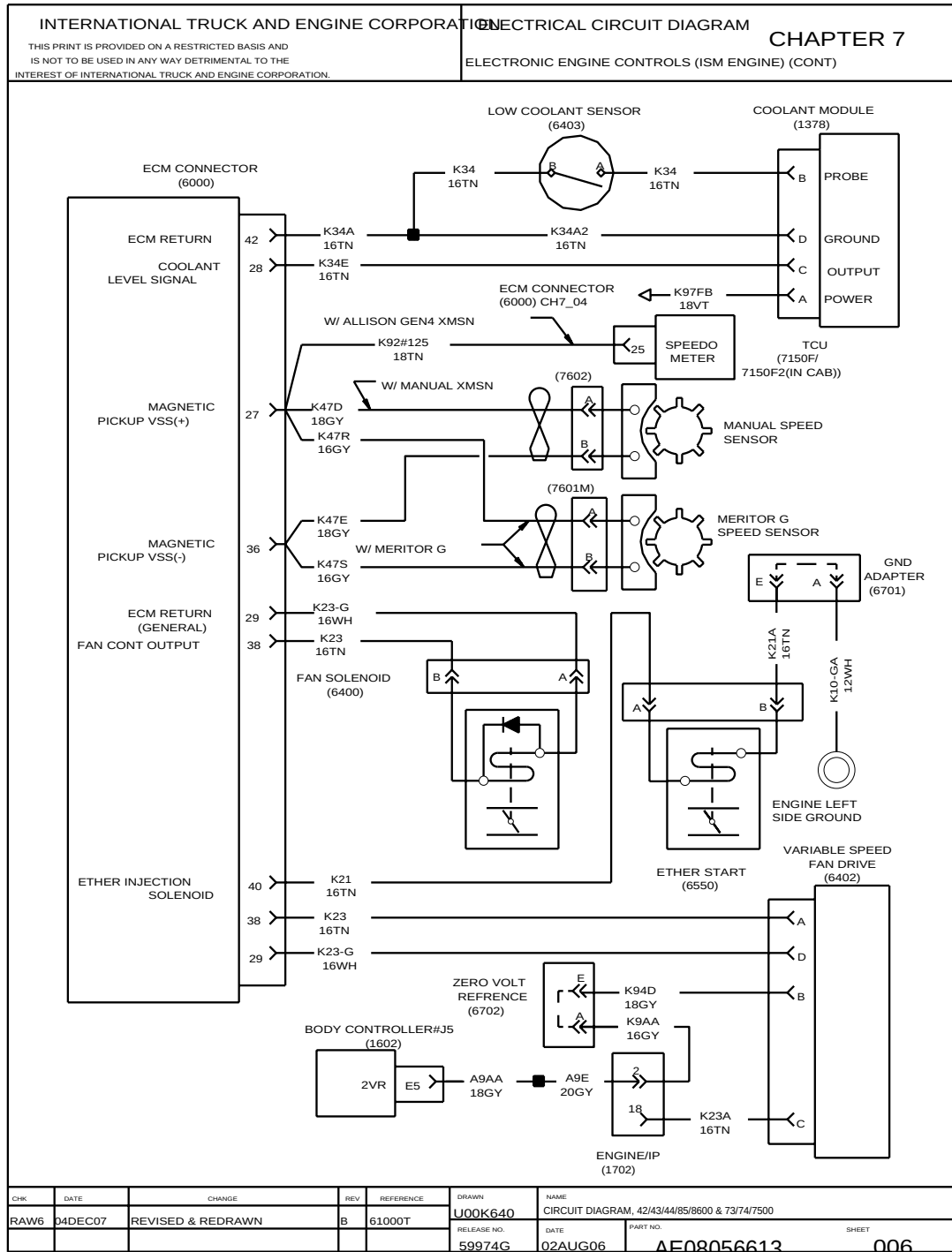


Figure 95 Electronic Engine Controls, ISM Engines (Cont.)

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

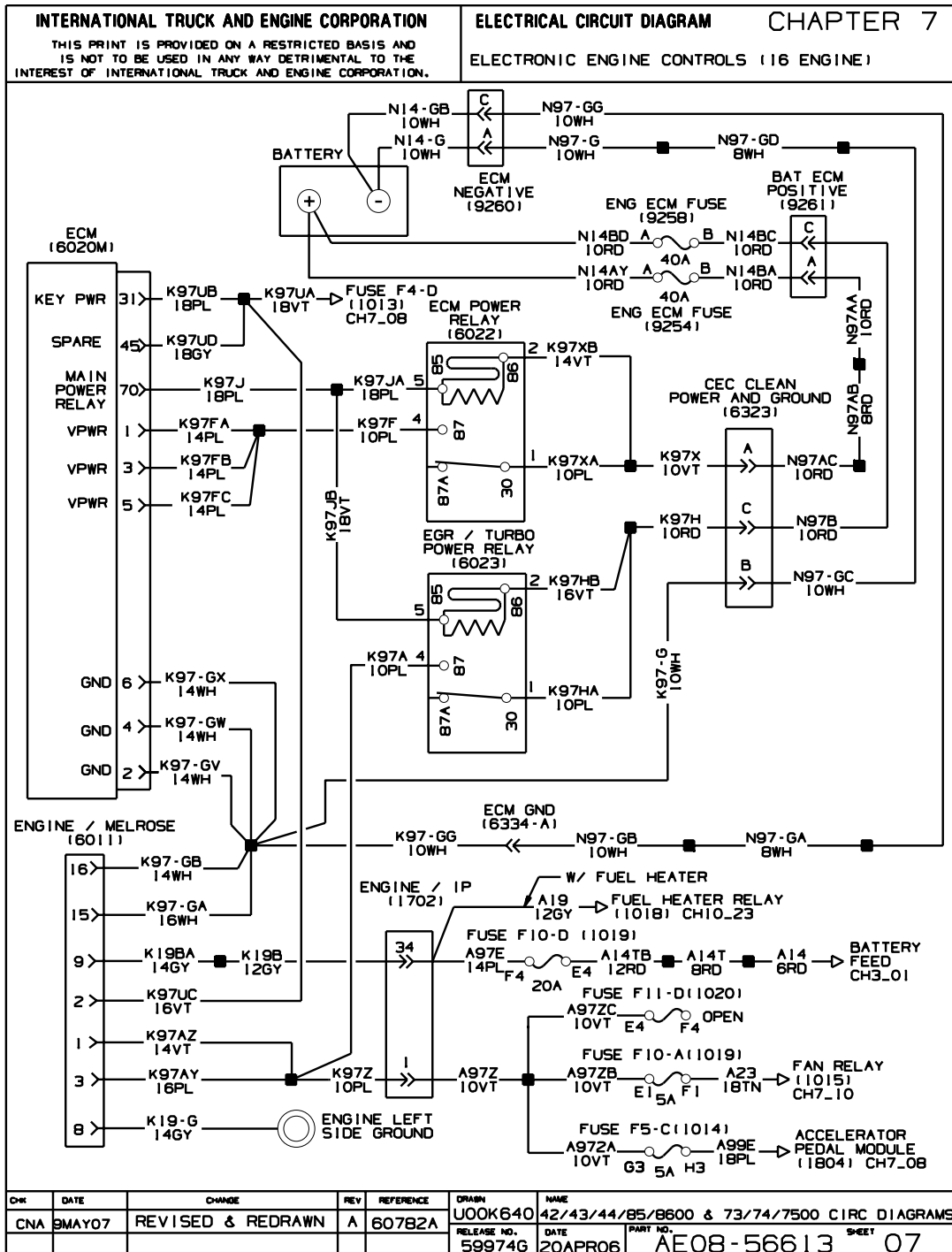


Figure 96 Electronic Engine Controls, I6 Engines

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

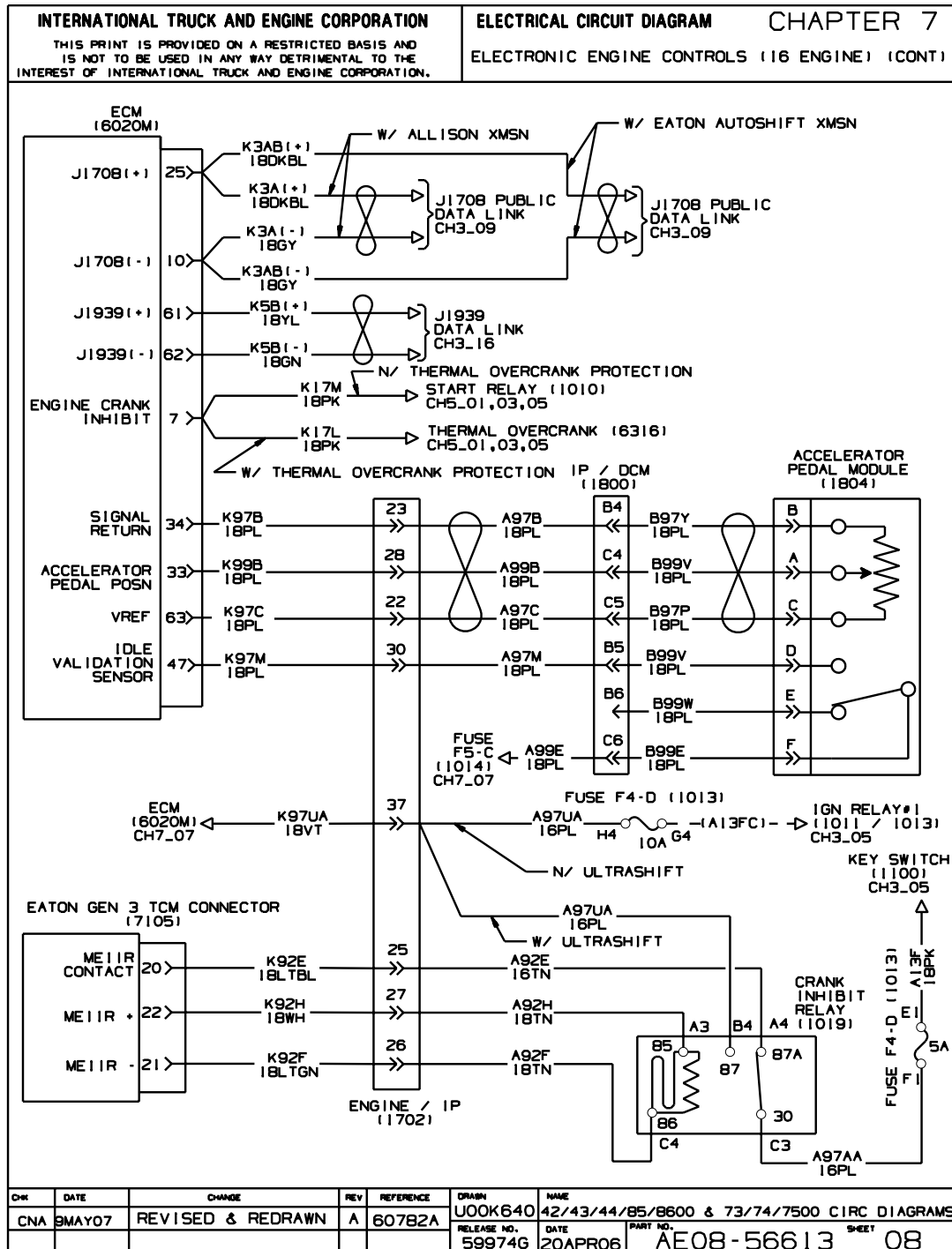
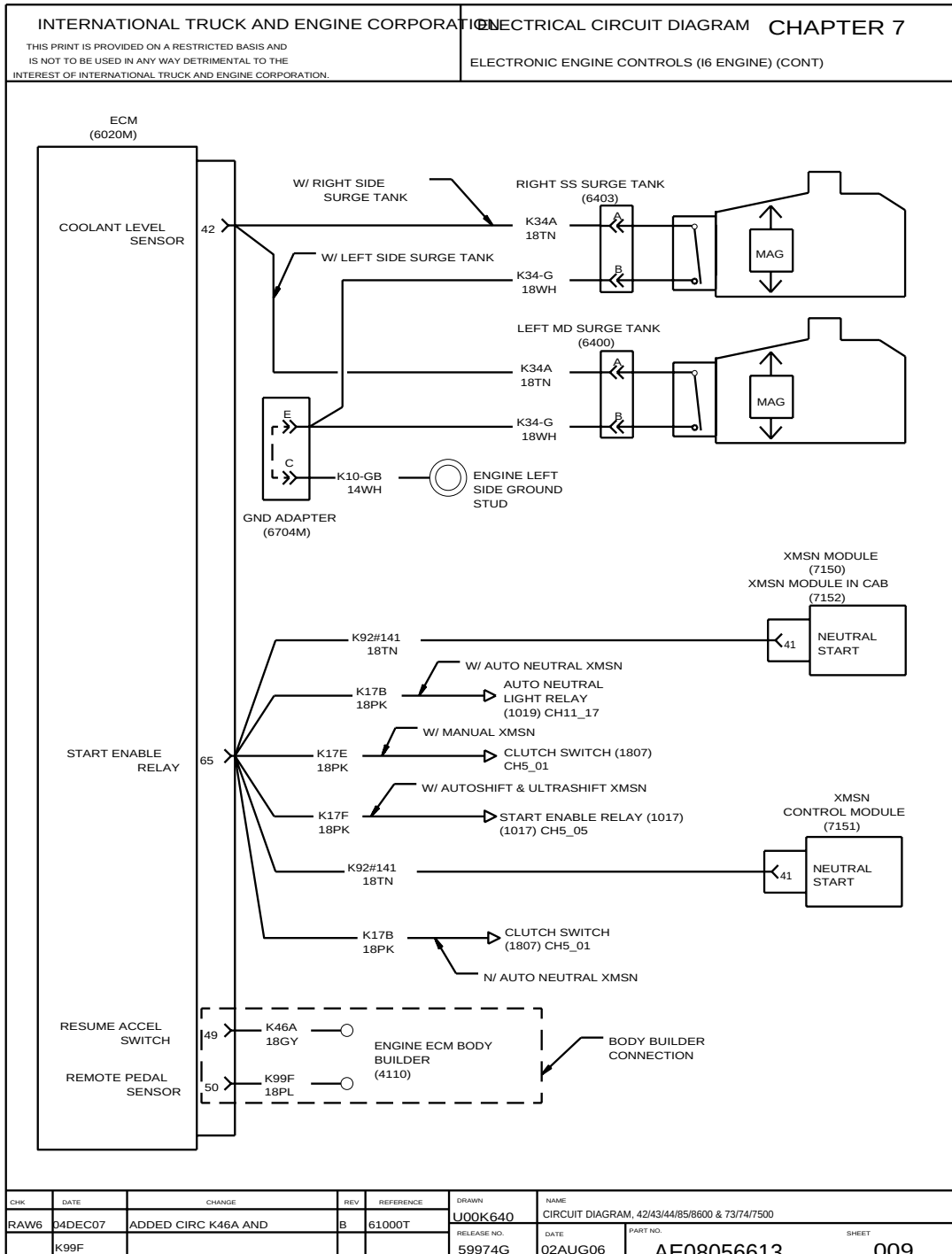


**Figure 97 Electronic Engine Controls, I6 Engines (Cont.)**

**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

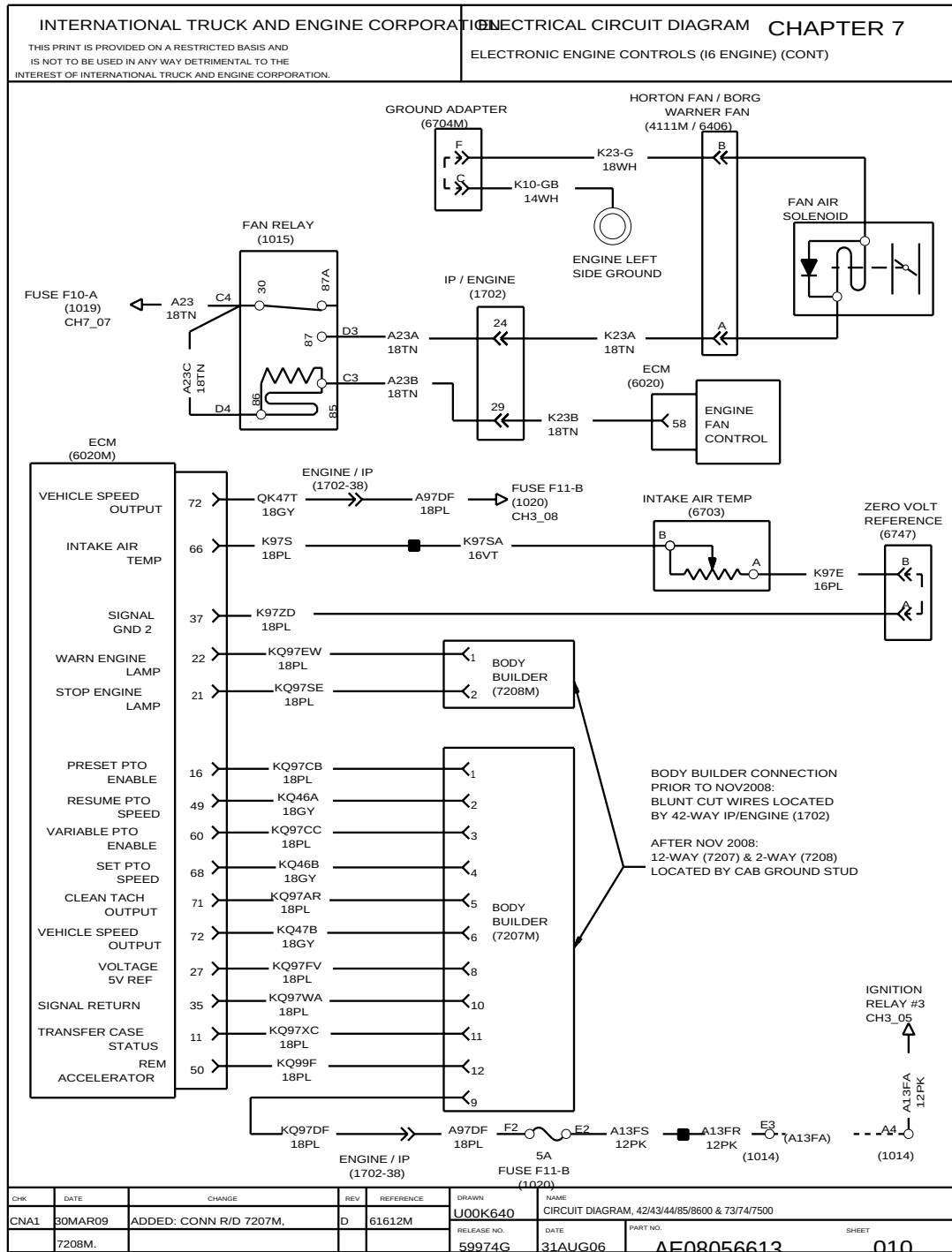
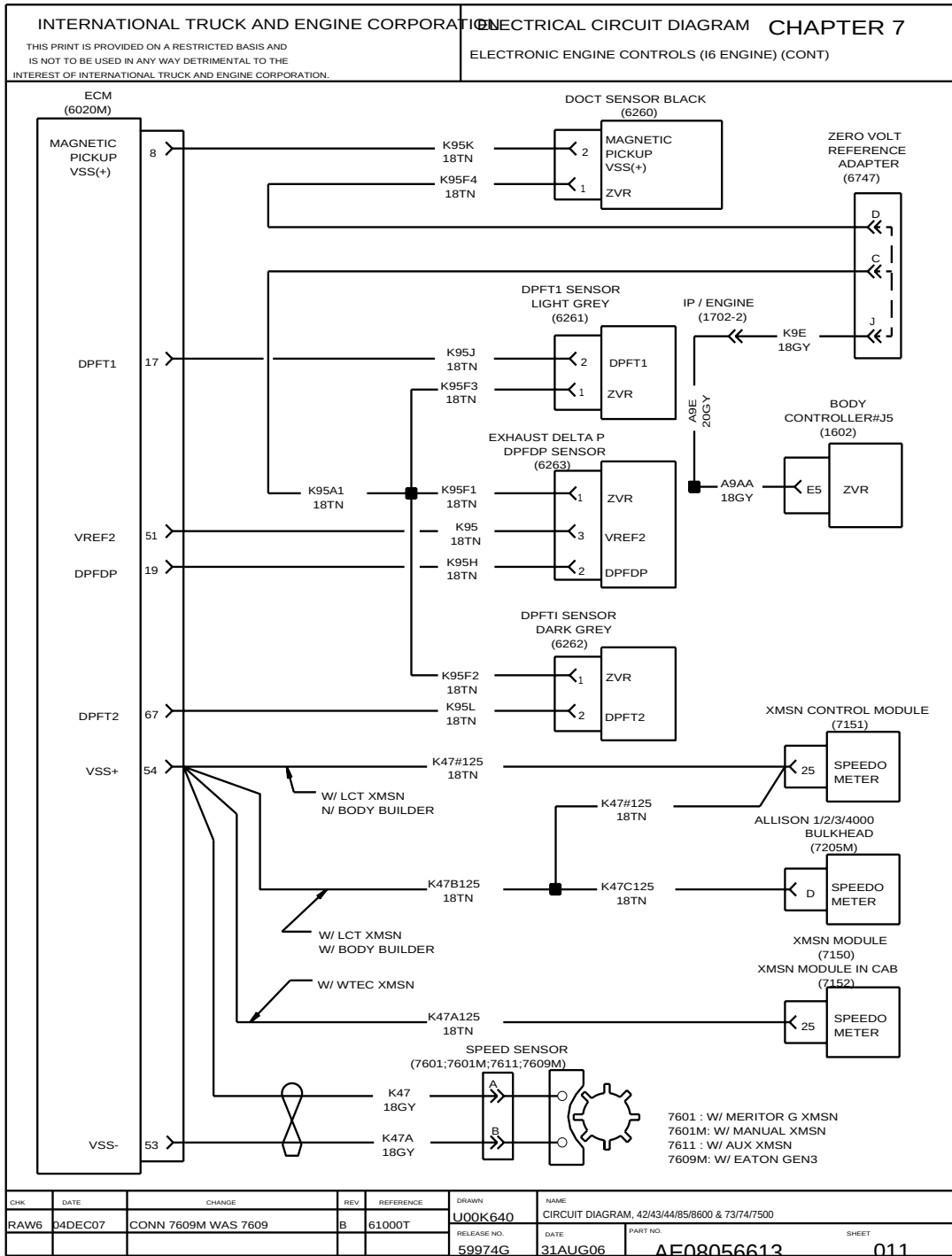


**Figure 99 Electronic Engine Controls, I6 Engines (Cont.)**

**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

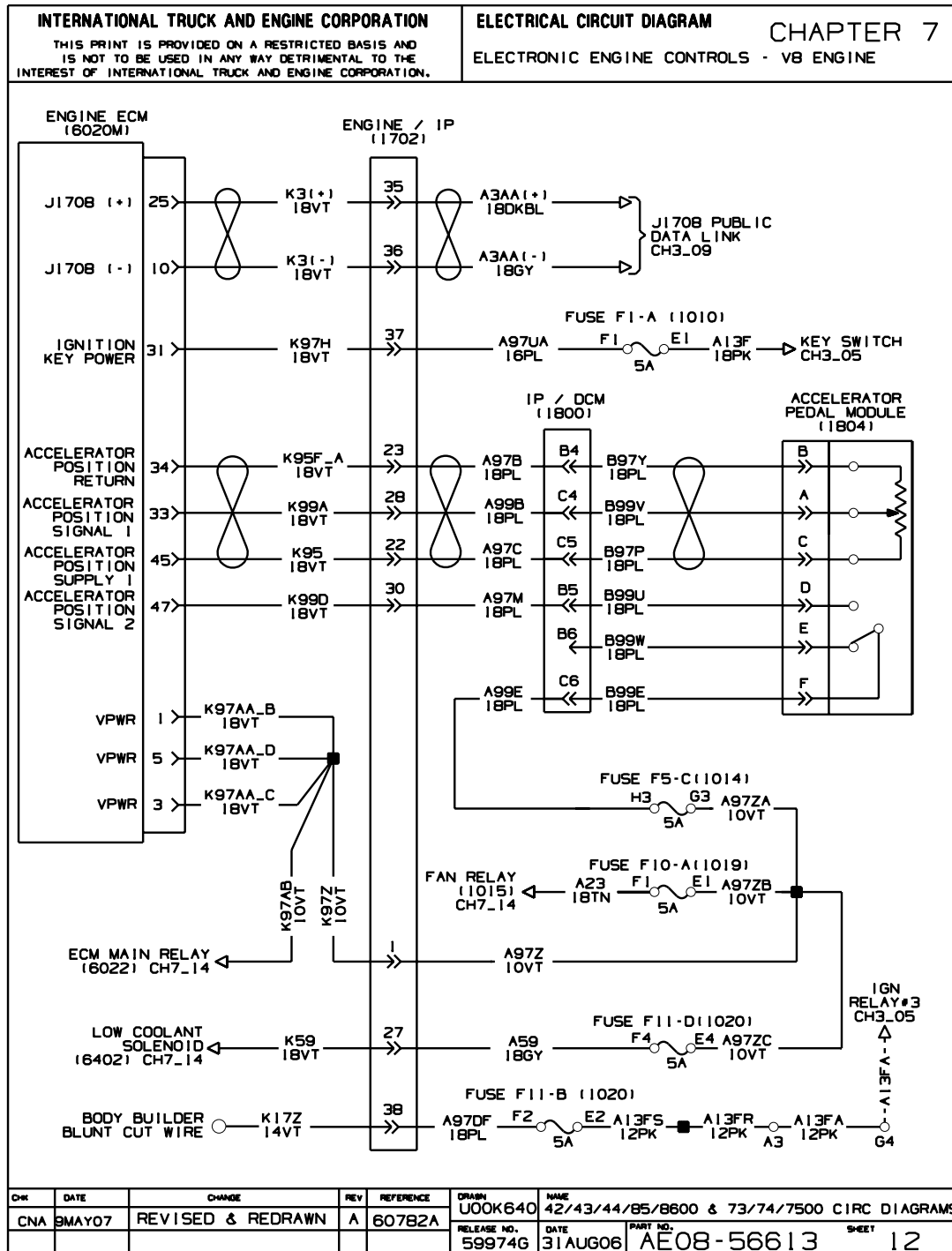
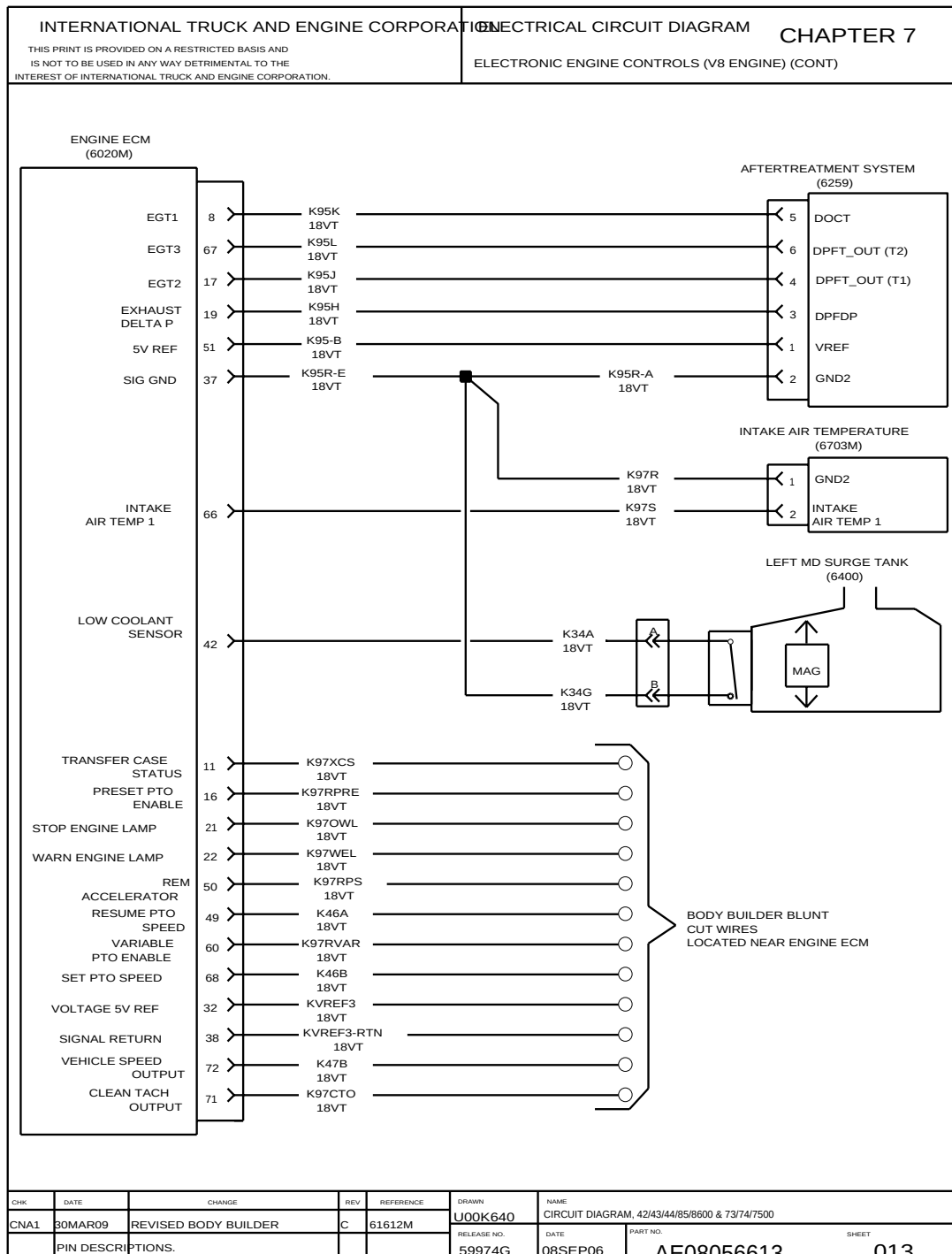


Figure 101 Electronic Engine Controls — V8 Engines

**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

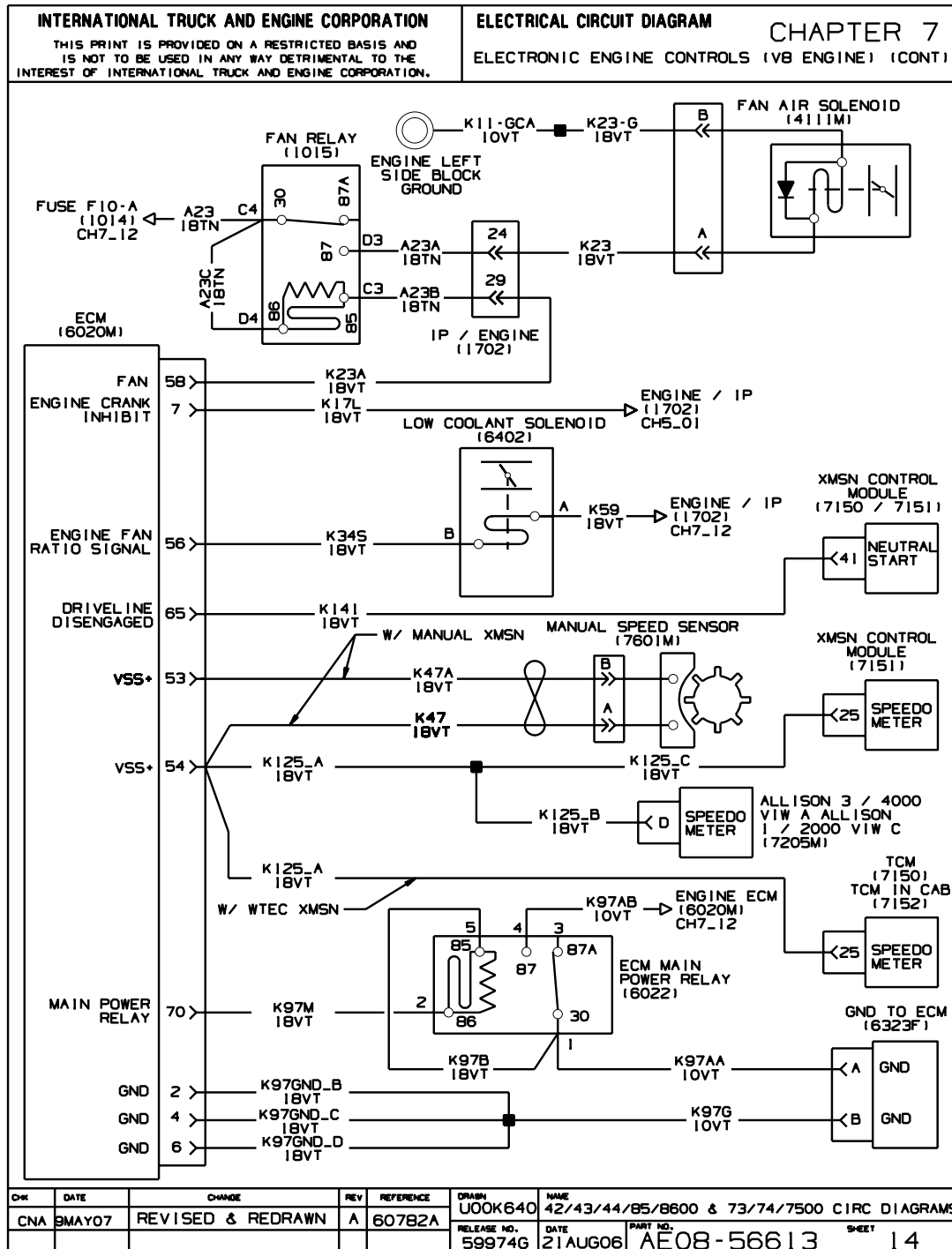


Figure 103 Electronic Engine Controls — V8 Engines

## 7.15. CRUISE CONTROL, P. 15

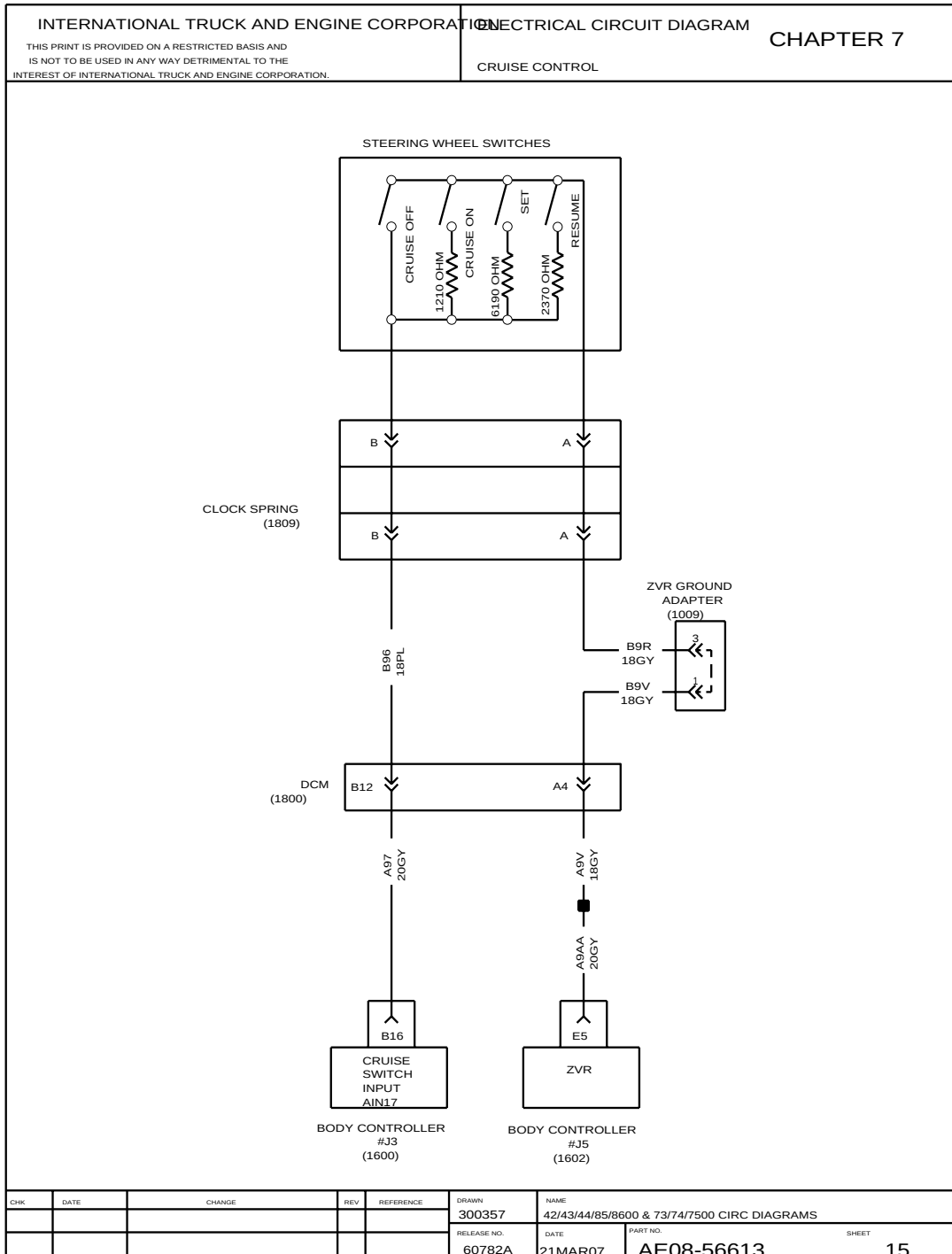


Figure 104 Cruise Control