

FPDP GEN II

CS P/N A042G185
SS P/N A042G187

TERMINAL BLOCK LEGEND

TB1 AUTO/MANUAL
TB2 CRANK TERMINATION SWITCH
TB3 OVERSPEED SWITCH
TB4 LOW LUBRICANT PRESSURE SWITCH
TB5 HIGH ENGINE TEMPERATURE SWITCH
TB6 BATTERY 1 POSITIVE

TB8 BATTERY 2 POSITIVE
TB9 MAIN BATTERY CONTACT 1 COIL
TB10 MAIN BATTERY CONTACT 2 COIL
TB11 COMMON BATTERY 1 AND 2 NEGATIVE
TB301 ELECTRONIC CONTROL MODULE SWITCH
TB302 FUEL INJECTION MALFUNCTION

TB303 ELECTRONIC CONTROL MODULE WARNING
TB304 ELECTRONIC CONTROL MODULE FAILURE
TB310 RAW WATER HIGH INLET TEMPERATURE
TB311 CLOGGED RAW WATER COOLANT LOOP STRAINER
TB312 LOW ENGINE TEMPERATURE SWITCH

TO OVERLAY

U2(PIN63) +3.3V
U2(PIN63) AUTO/MANUAL BUTTON
U2(PIN63) MANUAL MODE LED
U2(PIN63) ECM A LED
U2(PIN63) ECM SELECTOR BUTTON
U2(PIN63) GROUND
U2(PIN63) CRANK BATT A
U2(PIN63) CRANK BATT B
U2(PIN63) RESET / STOP BUTTON
U2(PIN63) ECM B LED
U2(PIN63) GROUND

TO LCD TOUCHSCREEN USB

U4(PIN25) X LEFT
U4(PIN25) Y BOTTOM
U4(PIN25) X RIGHT
U4(PIN25) Y TOP
U4(PIN25) VBUS
U4(PIN25) D+
U4(PIN25) D-
U4(PIN25) GROUND

TO LCD

40 PIN FLEX CABLE

POWER LED 1

HEARTBEAT LED 2

P/N A042G195
DISPLAY BOARD

P/N A042G207
ECM SWITCH BOARD

J1 50 PIN - ENGINE I/O

J2 50 PIN - ECM A

J3 50 PIN - ECM B

J4 50 PIN - ECM C

J5 50 PIN - ECM D

J6 50 PIN - ECM E

J7 50 PIN - ECM F

J8 50 PIN - ECM G

J9 50 PIN - ECM H

J10 50 PIN - ECM I

J11 50 PIN - ECM J

J12 50 PIN - ECM K

J13 50 PIN - ECM L

J14 50 PIN - ECM M

J15 50 PIN - ECM N

J16 50 PIN - ECM O

J17 50 PIN - ECM P

J18 50 PIN - ECM Q

J19 50 PIN - ECM R

J20 50 PIN - ECM S

J21 50 PIN - ECM T

J22 50 PIN - ECM U

J23 50 PIN - ECM V

J24 50 PIN - ECM W

J25 50 PIN - ECM X

J26 50 PIN - ECM Y

J27 50 PIN - ECM Z

J28 50 PIN - ECM AA

J29 50 PIN - ECM AB

J30 50 PIN - ECM AC

J31 50 PIN - ECM AD

J32 50 PIN - ECM AE

J33 50 PIN - ECM AF

J34 50 PIN - ECM AG

J35 50 PIN - ECM AH

J36 50 PIN - ECM AI

J37 50 PIN - ECM AJ

J38 50 PIN - ECM AK

J39 50 PIN - ECM AL

J40 50 PIN - ECM AM

J41 50 PIN - ECM AN

J42 50 PIN - ECM AO

J43 50 PIN - ECM AP

J44 50 PIN - ECM AQ

J45 50 PIN - ECM AR

J46 50 PIN - ECM AS

J47 50 PIN - ECM AT

J48 50 PIN - ECM AU

J49 50 PIN - ECM AV

J50 50 PIN - ECM AW

J51 50 PIN - ECM AX

J52 50 PIN - ECM AY

J53 50 PIN - ECM AZ

J54 50 PIN - ECM BA

J55 50 PIN - ECM BB

J56 50 PIN - ECM BC

J57 50 PIN - ECM BD

J58 50 PIN - ECM BE

J59 50 PIN - ECM BF

J60 50 PIN - ECM BG

J61 50 PIN - ECM BH

J62 50 PIN - ECM BI

J63 50 PIN - ECM BJ

J64 50 PIN - ECM BK

J65 50 PIN - ECM BL

J66 50 PIN - ECM BM

J67 50 PIN - ECM BN

J68 50 PIN - ECM BO

J69 50 PIN - ECM BP

J70 50 PIN - ECM BQ

J71 50 PIN - ECM BR

J72 50 PIN - ECM BS

J73 50 PIN - ECM BT

J74 50 PIN - ECM BU

J75 50 PIN - ECM BV

J76 50 PIN - ECM BW

J77 50 PIN - ECM BX

J78 50 PIN - ECM BY

J79 50 PIN - ECM BZ

J80 50 PIN - ECM CA

J81 50 PIN - ECM CB

J82 50 PIN - ECM CC

J83 50 PIN - ECM CD

J84 50 PIN - ECM CE

J85 50 PIN - ECM CF

J86 50 PIN - ECM CG

J87 50 PIN - ECM CH

J88 50 PIN - ECM CI

J89 50 PIN - ECM CJ

J90 50 PIN - ECM CK

J91 50 PIN - ECM CL

J92 50 PIN - ECM CM

J93 50 PIN - ECM CN

J94 50 PIN - ECM CO

J95 50 PIN - ECM CP

J96 50 PIN - ECM CQ

J97 50 PIN - ECM CR

J98 50 PIN - ECM CS

J99 50 PIN - ECM CT

J100 50 PIN - ECM CU

J101 50 PIN - ECM CV

J102 50 PIN - ECM CW

J103 50 PIN - ECM CX

J104 50 PIN - ECM CY

J105 50 PIN - ECM CZ

J106 50 PIN - ECM DA

J107 50 PIN - ECM DB

J108 50 PIN - ECM DC

J109 50 PIN - ECM DD

J110 50 PIN - ECM DE

J111 50 PIN - ECM DF

J112 50 PIN - ECM DG

J113 50 PIN - ECM DH

J114 50 PIN - ECM DI

J115 50 PIN - ECM DJ

J116 50 PIN - ECM DK

J117 50 PIN - ECM DL

J118 50 PIN - ECM DM

J119 50 PIN - ECM DN

J120 50 PIN - ECM DO

J121 50 PIN - ECM DP

J122 50 PIN - ECM DQ

J123 50 PIN - ECM DR

J124 50 PIN - ECM DS

J125 50 PIN - ECM DT

J126 50 PIN - ECM DU

J127 50 PIN - ECM DV

J128 50 PIN - ECM DW

J129 50 PIN - ECM DX

J130 50 PIN - ECM DY

J131 50 PIN - ECM DZ

J132 50 PIN - ECM EA

J133 50 PIN - ECM EB

J134 50 PIN - ECM EC

J135 50 PIN - ECM ED

J136 50 PIN - ECM EE

J137 50 PIN - ECM EF

J138 50 PIN - ECM EG

J139 50 PIN - ECM EH

J140 50 PIN - ECM EI

J141 50 PIN - ECM EJ

J142 50 PIN - ECM EK

J143 50 PIN - ECM EL

J144 50 PIN - ECM EM

J145 50 PIN - ECM EN

J146 50 PIN - ECM EO

J147 50 PIN - ECM EP

J148 50 PIN - ECM EQ

J149 50 PIN - ECM ER

J150 50 PIN - ECM ES

J151 50 PIN - ECM ET

J152 50 PIN - ECM EU

J153 50 PIN - ECM EV

J154 50 PIN - ECM EW

J155 50 PIN - ECM EX

J156 50 PIN - ECM EY

J157 50 PIN - ECM EZ

J158 50 PIN - ECM FA

J159 50 PIN - ECM FB

J160 50 PIN - ECM FC

J161 50 PIN - ECM FD

J162 50 PIN - ECM FE

J163 50 PIN - ECM FF

J164 50 PIN - ECM FG

J165 50 PIN - ECM FH

J166 50 PIN - ECM FI

J167 50 PIN - ECM FJ

J168 50 PIN - ECM FK

J169 50 PIN - ECM FL

J170 50 PIN - ECM FM

J171 50 PIN - ECM FN

J172 50 PIN - ECM FO

J173 50 PIN - ECM FP

J174 50 PIN - ECM FQ

J175 50 PIN - ECM FR

J176 50 PIN - ECM FS

J177 50 PIN - ECM FT

J178 50 PIN - ECM FU

J179 50 PIN - ECM FV

J180 50 PIN - ECM FW

J181 50 PIN - ECM FX

J182 50 PIN - ECM FY

J183 50 PIN - ECM FZ

J184 50 PIN - ECM GA

J185 50 PIN - ECM GB

J186 50 PIN - ECM GC

J187 50 PIN - ECM GD

J188 50 PIN - ECM GE

J189 50 PIN - ECM GF

J190 50 PIN - ECM GG

J191 50 PIN - ECM GH

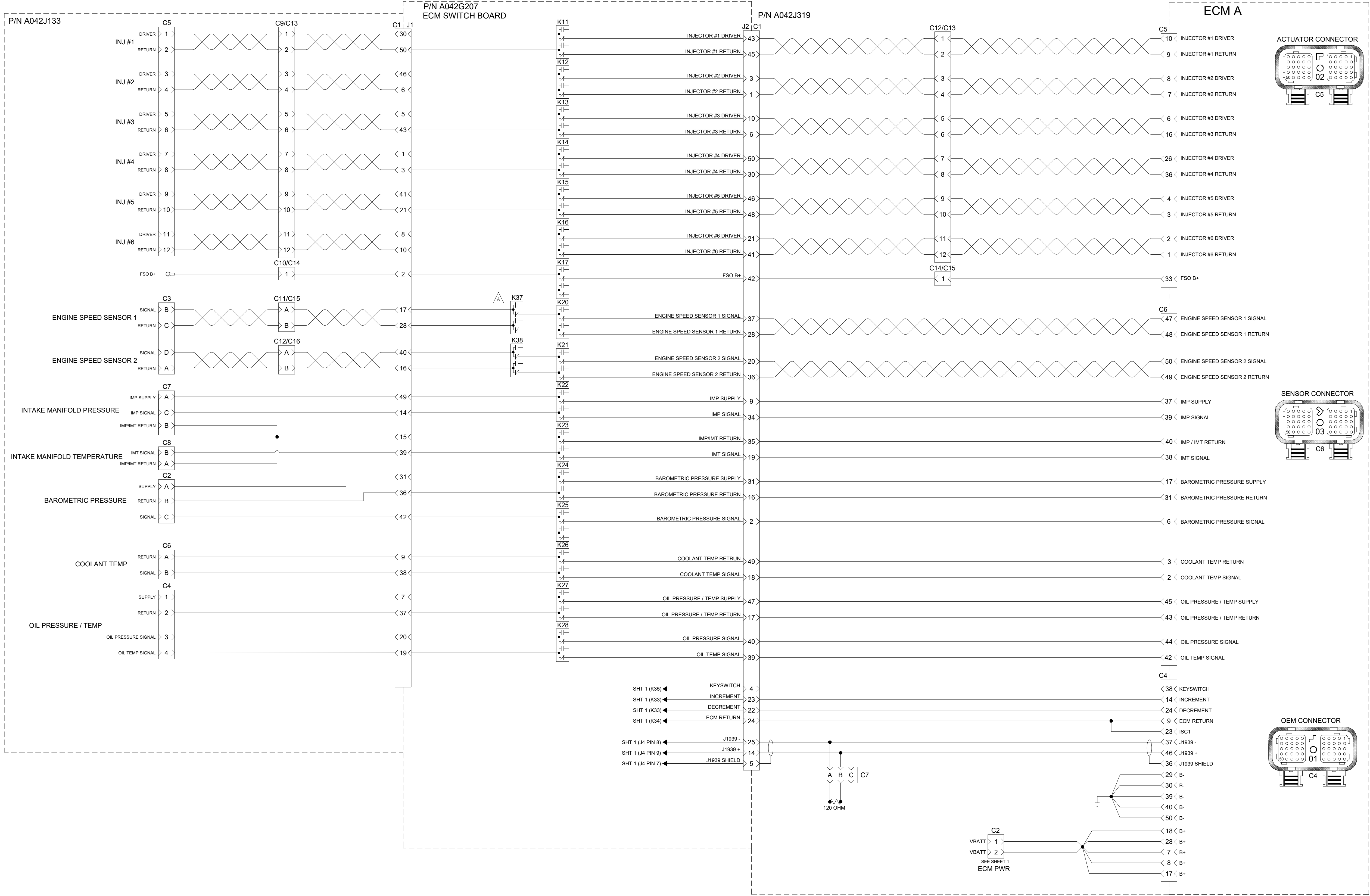
J192 50 PIN - ECM GI

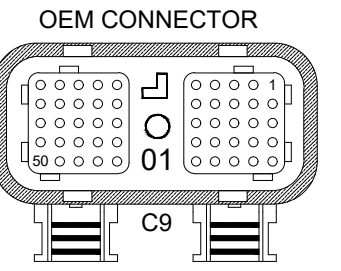
J193 50 PIN - ECM GJ

J194 50 PIN - ECM GK

J195 50 PIN - ECM GL

J196 50 PIN - ECM GM





EST WEIGHT:	SHEET 5 OF 6	DRAWING NO: A0420124
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A	2019-037	ADDED TB LEGEND, CORRECT SENSOR DISCONNECT CIRCUITRY CORRECTED OSS SWITCH TO B+	JF	24JAN2019
REV	ECO	DESCRIPTION OF REVISION	BY	DATE

NO ASO OPTION WITH UP TO 3 SWITCHED INPUTS

The diagram illustrates the wiring for a circuit with up to 3 switched inputs. The connections are as follows:

- BATTERY A** (Pin 8) and **BATTERY B** (Pin 9) are connected to the positive terminal of the circuit.
- GROUND** (Pin 10) is connected to the negative terminal of the circuit.
- CONFIGURABLE SWITCH INPUT 1** (Pin 7) is connected to the positive terminal of the circuit.
- CONFIGURABLE SWITCH INPUT 2** (Pin 1) is connected to the positive terminal of the circuit.
- CONFIGURABLE SWITCH INPUT 3** (Pin 2) is connected to the positive terminal of the circuit.

CONNECTS TO DPEM CONNECTOR ON SHEET 1



SCHEMATICS, OVERALL, CFP11E
FPDP GEN II

UNIT ECO: 2016-694

0: A042.1124

ASO OPTION WITH UP TO 2 SWITCHED INPUTS

Wiring diagram for the ASO option with up to 2 switched inputs. The diagram shows a terminal block C1 with pins 8 through 12. Pin 8 is BATTERY A, pin 9 is BATTERY B, pin 10 is GROUND, pin 11 is VBATT, and pin 12 is VBATT. Pins 7, 1, 2, 3, 6, 4, and 5 are also labeled. The diagram includes an ASO LIMIT SWITCH with pins 1 (GROUND) and 2 (SIGNAL). An ASO RELAY is shown with pins 85, 86, 87, and 87a. The relay is connected to VBATT and GROUND. The diagram also shows CONFIG SWITCH INPUT 2 and CONFIG SWITCH INPUT 3, each with pins 1 (GROUND) and 2 (SIGNAL). A note indicates that the connection to pin 5 connects to the DPMS connector on sheet 1.

IF AIR SHUT-OFF (ASO) IS SELECTED, THE UL/FM LISTING IS REMOVED AS THIS OPTION IS NOT ALLOWED PER THE STANDARDS.

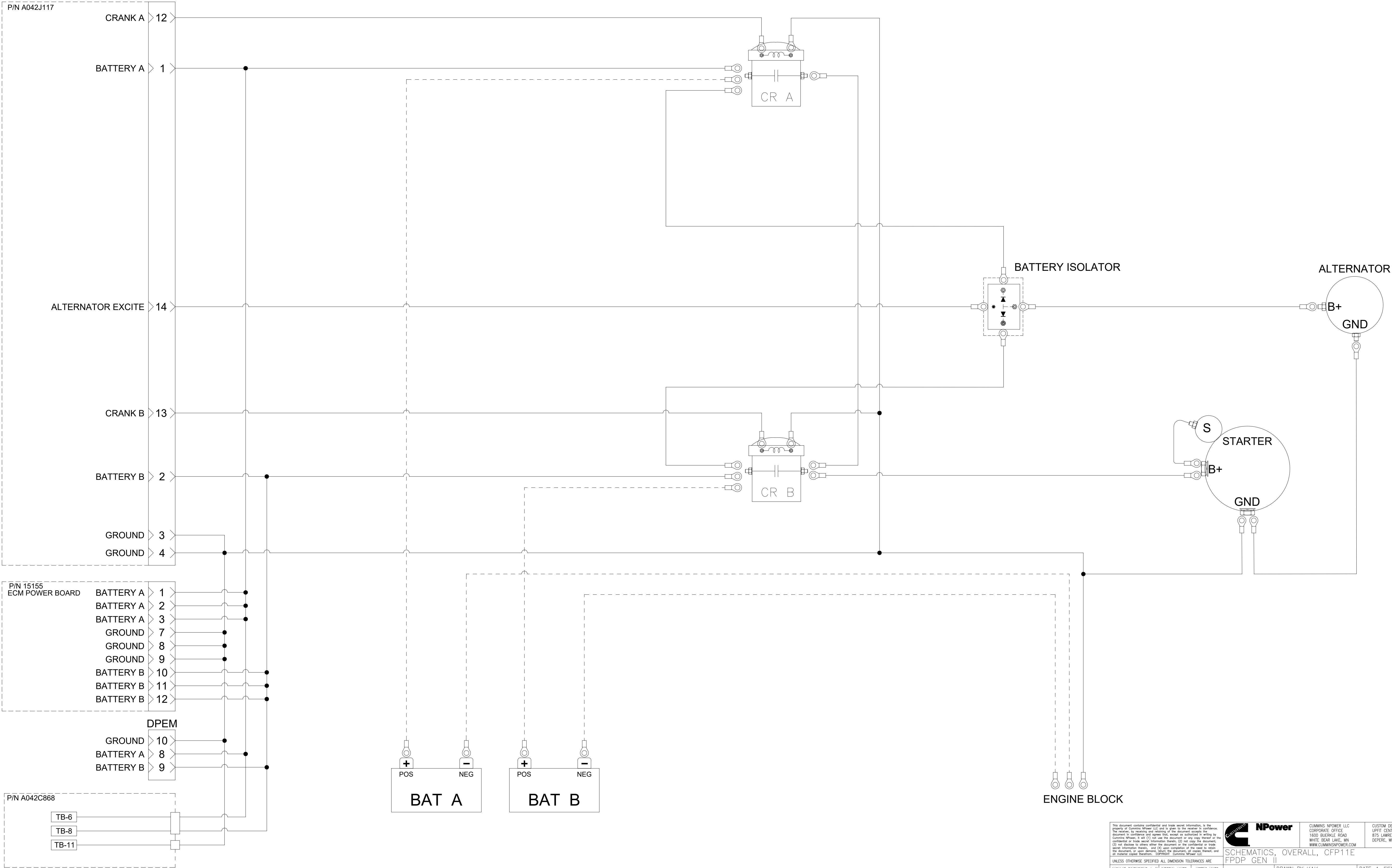
The diagram illustrates the electrical connections for the DPPEM Option with ASO. It is divided into four main sections:

- WIRE HARNESS:** Contains terminals for BATTERY A, BATTERY B, GROUND, VBATT, and various inputs (CONFIGURABLE SWITCH INPUT 1-3, ASO RELAY GROUND, RS485 SHIELD, RS485+).
- P/N 18488:** Features terminals for BATTERY A, BATTERY B, GROUND, and various inputs (ASO LIMIT SWITCH, CONFIG SWITCH INPUT 2, CONFIG SWITCH INPUT 3, TEMPERATURE A-F, PRESSURE A-F, SWITCH 1-4).
- P/N 18487 POWER BOARD:** Includes terminals for BATTERY A, BATTERY B, GROUND, and various outputs (POWER LED 17, HEARTBEAT LED 8, U19(A), U19(B), DROP A2, DROP A1, DROP A0, SW1).
- CUSTOMER CONNECTIONS:** Shows terminal blocks TB-12 through TB-32, including ENERGIZE TO STOP INPUT, SWITCH 1-4, COMMON, TEMPERATURE A-F, EXHAUST TEMPERATURE, PRESSURE A-F, and COMMON.

The diagram also includes a section for the TYPE K THERMOCOUPLE EXHAUST TEMPERATURE sensor, which is connected to the U1(PIN5) terminal.

CUSTOMER CONNECTIONS

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SCHEMATICS, OVERALL, CPF11E FPDP GEN II			
UNLESS OTHERWISE SPECIFIED ALL DIMENSION TOLERANCES ARE			
ANGULAR DIMENSIONS ±	IMPERIAL UNITS FRACTIONS DECIMALS	METRIC UNITS FRACTIONS DECIMALS	DWG UNITS: FRACTIONS BY: KAK AUTO CAD: 1/16" INCH/LS SCALE: 1" = 1" (AS SHOWN) EIGHT WEIGHT: SHEET 5 OF 6
THIRD ANGLE PROJECTION	DATE: 1 FEB 2017 INIT: ECO: 2016-694	DRAWING NO: A042J124	



A	2019-037	ADDED TB LEGEND, CORRECT SENSOR DISCONNECT CIRCUITRY	JF	24JAN2019
REV	ECO	DESCRIPTION OF REVISION	BY	DATE

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SCALE:	AUTO CAD	INIT ECO: 2016-694
EST WEIGHT:	SHEET 6 OF 6	DRAWING NO: A042J124