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VEHICLE SCAN REPORT

Vehicle 2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE
VIN [REDACTED]

Odometer 11847.1 miles
Publication Date May 11, 2022, 1:32:53 PM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AF	[REDACTED]	[REDACTED]	68499122AF
PLGM	Power Liftgate	CAN-I	68466171AI	[REDACTED]	—	68466171AI
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	[REDACTED]	[REDACTED]	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	[REDACTED]	[REDACTED]	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AM	[REDACTED]	[REDACTED]	68240089AM
ORC	Occupant Restraint	CAN-C	68480710AC	[REDACTED]	[REDACTED]	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	[REDACTED]	[REDACTED]	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	[REDACTED]	[REDACTED]	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	[REDACTED]	[REDACTED]	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	[REDACTED]	[REDACTED]	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	[REDACTED]	[REDACTED]	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	[REDACTED]	[REDACTED]	68517013AB
AMP	Amplifier	CAN-I	68547722AB	[REDACTED]	[REDACTED]	68547722AB
IPC	Instrument Panel Cluster	CAN-C	68434960AE	[REDACTED]	[REDACTED]	68434960AE
PTS	Parktronics	CAN-C	68485862AA	[REDACTED]	[REDACTED]	68485862AA
SCCM	Steering Column Control Module	CAN-C	68360889AD	[REDACTED]	[REDACTED]	68360889AD
BCM	Body Controller	CAN-C	68491085AG	[REDACTED]	[REDACTED]	68491085AG

ACC	Adaptive Cruise Control	CAN-C	68540436AA			68540436AA
RADIO	Radio	CAN-I	68465292AE			68465292AE
OCM	Occupant Classification	CAN-C	68403127AA			68403127AA
HVACR	Heat, Ventilation and A/C Rear	CAN-I	68373079AB			68373079AB
LBSS	Left Blind Spot Sensor	CAN-I	04672786AB			04672786AB
RBSS	Right Blind Spot Sensor	CAN-I	04672786AB			04672786AB
FFCM	Forward Facing Camera Module	CAN-C	68493395AA			68493395AA
EDM	External Disc Module	CAN-I	68499745AA			68499745AA
APM	Accessory Power Module	CAN-C	05185046AB			05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE			05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AJ			05185116AJ
OBCM	On Board Charging Module	CAN-C	05185047AE			05185047AE
MSMP	Memory Seat Module - Passenger	CAN-I	68321862AC			68321862AC
DSM	Display Screen Module	CAN-I	68437339AD			68437339AD
VRM	Video Routing Module	CAN-I	68493702AA			68493702AA
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30PD2AA			6WL30PD2AA
CVPM	Central vision processing module	CAN-I	56029920AB			56029920AB
EAC	Electric A/C Compressor	CAN-C	68237995AG			68237995AG
AHCP	Auxiliary Hybrid Control Processor	CAN-C	05185117AJ			05185117AJ
EBBM	Electronic Brake Booster Module	CAN-C	68461813AB			68461813AB
ABSO	Anti Lock Brakes OBD	CAN-C	68471122AD			68471122AD
SGW	Security Gateway Module	CAN-C	68488429AB			68488429AB
TBM2	Telematic Box Module 2	CAN-C	68546266AB			68546266AB

ECU SUMMARY INFO (CONT...)

ECU	COUNTRY CODE	HARDWARE VERSION	SOFTWARE VERSION	IDENT	CVNS
PCM	USA	1B 47	75 02 00	4422	7DC2E312
PLGM	USA	0	5084	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	

ESM	USA / USA	0F 24 00	12 28 FF	4402	
ORC	USA / USA	12 1A 00	13 2E 00	4301	
EPS	USA / USA	12 2A 00	12 1E 01	4502	
HVAC	USA	0E 09 00	14 2F 01	4401	
DDM	USA	11 07 00	14 07 00	4202	
PDM	USA	11 07 00	14 07 00	4202	
DMRL	USA / USA	10 0B 00	14 08 00	4201	
DMRR	USA / USA	10 0B 00	14 08 00	4201	
PSDML	USA / USA	10 17 00	14 10 12	4001	
PSDMR	USA / USA	10 17 00	14 10 12	4001	
MSM	USA	0F 2B 00	10 27 03	4101	
CSWM	USA	11 2A 00	14 25 00	4302	
AMP	USA	0F 06 01	15 0F 01	4021	
IPC	USA / USA	12 06 00	14 2B 00	4705	
PTS	USA	0E 32 00	14 07 00	4311	
SCCM	USA	13 28 00	13 29 00	4301	
BCM	USA	0D 11 00	14 26 90	4420	
ACC	USA / USA	14 12 01	14 26 01	4400	
RADIO		65	5671	000200000008	
OCM	USA / USA	11 1F 01	0E 2F 02	4030	
HVACR	USA	0E 09 00	10 03 02	4301	
LBSS	USA / USA	11 30 02	12 0D 00	4202	
RBSS	USA / USA	11 30 02	12 0D 00	4202	
FFCM	USA / USA	11 06 00	13 1E 00	4102	
EDM	USA	12 0A 00	11 08 00	4000	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM		0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	5D31A9B9 16AACD23 050DC953
OBCM	USA	0F 0D 00	12 02 00	4002	
MSMP	USA	0F 2B 00	10 27 03	4001	
DSM	USA / USA	14 0C 00	14 28 00	4300	
VRM	USA / USA	0F 1C 00	14 1E 14	4001	
RCCC	USA	0F 1D 00	13 04 00	4000	
CVPM	USA / USA	11 27 01	14 0C 01	4004	
EAC	USA	0E 34 00	12 0F 00	4102	
AHCP	USA	11 1F 04	0F 2D 00	4000	
EBBM	USA	0E 19 02	14 0D 18	4000	E5898FA5
ABSO	USA	0E 15 02	14 1B 26	4201	4F158D1B
SGW		5	969	4103	
TBM2	USA	13 0E 02	14 2A 5C	4104	

DTC SUMMARY

ECU	DTC CODE	DTC DESCRIPTION	STATUS
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PCM	U0111	Lost Communication With Battery Energy Control Module	Stored
APM	P0AFA-00	Hybrid/EV Battery System Voltage Low-	Active
APM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
BPCM	U0151-00	Lost Communication with Occupant Restraint Controller (ORC)-	Stored
BPCM	U0100-00	Lost Communication With ECM/PCM "A"-	Stored
BPCM	P1A21-00	HV Battery Contactor Control Sequence Incorrect-	Stored
BPCM	P167B-00	Controlled System Shutdown-	Stored
BPCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
HCP	P0A0A-00	High Voltage System Interlock Circuit "A"-	Stored
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1AEC-00	MCPA HV Battery Voltage Sensor Circuit Performance-	Active
HCP	P1AED-00	MCPB High Voltage Battery Voltage Sensor Circuit Performance-	Active
HCP	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
HCP	U0293-00	Lost Communication with Hybrid Control Module "A"-	Pending
HCP	U11F8-00		Pending
OBCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
EBBM	U0111-00	Lost Communication With Battery Energy Control Module-	Active
ABSO	U0111-00	Lost Communication With Battery Energy Control Module-	Active

ENVIRONMENTAL DATA SUMMARY

PCM | U0111 | Stored | Lost Communication With Battery Energy Control Module

NAME	VALUE	UNITS
Number of DTC	0	
DTC		
DTC Readiness Flag		
DTC Storage State		
Warning Indicator Request State		
Odometer		miles
Accumulation Timer		minutes
Ignition Key Cycles		
Starts Since Set Counter		
Key Cycles Since DTC Last Set Counter		
Warm Up Cycles		
Good Trip Counter		

APM | P0AFA-00 | Active | Hybrid/EV Battery System Voltage Low-

NAME	VALUE	UNITS
DTC	0A FA 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	

Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.38	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of short circuit at LV / Failure9	
Low voltage battery voltage from HCP	12.8400	Volt

APM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.38	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	

APM Failure Mode Status	No failure		
APM Failure Reason	Failure because of short circuit at LV / Failure9		
Low voltage battery voltage from HCP	14.2800		Volt

BPCM | U0151-00 | Stored | Lost Communication with Occupant Restraint Controller (ORC)-

NAME	VALUE	UNITS
DTC	C1 51 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	37	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	45161672	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11847.04	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.891	Volts
Battery Lifetime AmpHrs of Charge	7205.8	AHr
Battery Lifetime AmpHrs of DisCharge	7165.4	AHr
SOC at time of Fault	89.8	%
Power Up SOC at time of Fault	90.2	%

HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.335	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.305	Volts
HVIL Source Voltage- Battery	1.370	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.90	Amps
HV Battery Current Sensor 2 Hall Low	-0.05	Amps
HV Battery Current HVBatCmt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	70	°F
BPCM temperature max	79	°F
BPCM temperature min	79	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.500	Volts
WC and Circuitry Vcc Voltage	5.019	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	

CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	69213	watts
HV Battery Charge Power 10sec	57351	watts
HV Battery Discharge Power 2sec	106803	watts
HV Battery Discharge Power 10sec	104547	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3302	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4075	mV
Battery Cell Voltage Minimum	4058	mV
Battery Cell Voltage Average	4067	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	62	
HV Battery Voltage (cell sum)	390.50	Volts
HV Battery Voltage (Module Sum)	390.30	Volts
HV Sensor A Pack Voltage	390.50	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.40	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	79	°F
Battery Temperature Minimum Module	79	°F
Battery Temperature Average Module	79	°F

Battery Temperature Highest Sensor number	07	
Battery Temperature Lowest Sensor number	03	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	84	°F
HV Cooling Battery coolant outlet temp	104	°F
HV Cooling OBCM temp inlet Temp	111	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6002	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | U0100-00 | Stored | Lost Communication With ECM/PCM "A"-

NAME	VALUE	UNITS
DTC	C1 00 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	24	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	45161672	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT-WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	

Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11847.04	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.891	Volts
Battery Lifetime AmpHrs of Charge	7205.8	AHr
Battery Lifetime AmpHrs of DisCharge	7165.4	AHr
SOC at time of Fault	89.8	%
Power Up SOC at time of Fault	90.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.335	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.305	Volts
HVIL Source Voltage- Battery	1.370	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.90	Amps
HV Battery Current Sensor 2 Hall Low	-0.05	Amps
HV Battery Current HVBatCmt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	70	°F
BPCM temperature max	79	°F
BPCM temperature min	79	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.500	Volts
WC and Circuitry Vcc Voltage	5.019	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	

CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	69213	watts
HV Battery Charge Power 10sec	57351	watts
HV Battery Discharge Power 2sec	106803	watts
HV Battery Discharge Power 10sec	104547	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3302	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4075	mV
Battery Cell Voltage Minimum	4058	mV
Battery Cell Voltage Average	4067	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	62	

HV Battery Voltage (cell sum)	390.50	Volts
HV Battery Voltage (Module Sum)	390.30	Volts
HV Sensor A Pack Voltage	390.50	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.40	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	79	°F
Battery Temperature Minimum Module	79	°F
Battery Temperature Average Module	79	°F
Battery Temperature Highest Sensor number	07	
Battery Temperature Lowest Sensor number	03	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	84	°F
HV Cooling Battery coolant outlet temp	104	°F
HV Cooling OBCM temp inlet Temp	111	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6002	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | P1A21-00 | Stored | HV Battery Contactor Control Sequence Incorrect-

NAME	VALUE	UNITS
DTC	1A 21 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	22	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	45161544	seconds

Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11847.04	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.440	Volts
Battery Lifetime AmpHrs of Charge	7205.8	AHr
Battery Lifetime AmpHrs of DisCharge	7165.4	AHr
SOC at time of Fault	90.2	%
Power Up SOC at time of Fault	90.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	11.757	Volts
HVIL PWM peak voltage Sensed - Vehicle	11.627	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	3.80	Amps
HV Battery Current Sensor 2 Hall Low	4.80	Amps
HV Battery Current HVBatCrnt	12.75	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	70	°F
BPCM temperature max	79	°F
BPCM temperature min	79	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts

WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and Circuitry ISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-140.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	68928	watts
HV Battery Charge Power 10sec	57066	watts
HV Battery Discharge Power 2sec	106821	watts
HV Battery Discharge Power 10sec	104571	watts
HV Battery Power	007722	watts

Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3302	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4061	mV
Battery Cell Voltage Minimum	4043	mV
Battery Cell Voltage Average	4053	mV
Battery Cell Highest Cell number	83	
Battery Cell Lowest Cell number	62	
HV Battery Voltage (cell sum)	389.10	Volts
HV Battery Voltage (Module Sum)	388.90	Volts
HV Sensor A Pack Voltage	389.70	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	274.50	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	232.40	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	206.30	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-140.2	Volts
Battery Temperature Maximum Module	79	°F
Battery Temperature Minimum Module	79	°F
Battery Temperature Average Module	79	°F
Battery Temperature Highest Sensor number	07	
Battery Temperature Lowest Sensor number	03	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	82	°F
HV Cooling Battery coolant outlet temp	97	°F
HV Cooling OBCM temp inlet Temp	111	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6002	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | P167B-00 | Stored | Controlled System Shutdown-

NAME	VALUE	UNITS
DTC	16 7B 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	

Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	160	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	45161544	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11847.04	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.351	Volts
Battery Lifetime AmpHrs of Charge	7205.8	AHr
Battery Lifetime AmpHrs of DisCharge	7165.4	AHr
SOC at time of Fault	90.2	%
Power Up SOC at time of Fault	90.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	88.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.263	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.157	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	11.95	Amps
HV Battery Current Sensor 2 Hall Low	12.80	Amps
HV Battery Current HVBatCrnt	12.80	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	70	°F

BPCM temperature max	79	°F
BPCM temperature min	79	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	

Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	03	
HV Battery Charge Power 2sec	68928	watts
HV Battery Charge Power 10sec	57066	watts
HV Battery Discharge Power 2sec	106821	watts
HV Battery Discharge Power 10sec	104571	watts
HV Battery Power	007722	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3302	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4061	mV
Battery Cell Voltage Minimum	4043	mV
Battery Cell Voltage Average	4053	mV
Battery Cell Highest Cell number	83	
Battery Cell Lowest Cell number	62	
HV Battery Voltage (cell sum)	389.10	Volts
HV Battery Voltage (Module Sum)	388.80	Volts
HV Sensor A Pack Voltage	389.20	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	389.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	389.20	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	389.20	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	79	°F
Battery Temperature Minimum Module	79	°F
Battery Temperature Average Module	79	°F
Battery Temperature Highest Sensor number	07	
Battery Temperature Lowest Sensor number	03	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	82	°F
HV Cooling Battery coolant outlet temp	97	°F
HV Cooling OBCM temp inlet Temp	111	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6002	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	92	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	45161540	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Restricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11847.04	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.358	Volts
Battery Lifetime AmpHrs of Charge	7205.8	AHr
Battery Lifetime AmpHrs of DisCharge	7165.4	AHr
SOC at time of Fault	90.2	%
Power Up SOC at time of Fault	90.2	%
HVIL Status -Vehicle	PASS	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz

HVIL PWM peak voltage Sourced - Vehicle	13.194	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.131	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	14.50	Amps
HV Battery Current Sensor 2 Hall Low	15.15	Amps
HV Battery Current HVBatCmt	15.15	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	70	°F
BPCM temperature max	79	°F
BPCM temperature min	79	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.500	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	

CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	68865	watts
HV Battery Charge Power 10sec	57000	watts
HV Battery Discharge Power 2sec	106827	watts
HV Battery Discharge Power 10sec	104577	watts
HV Battery Power	00777E	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3302	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4060	mV
Battery Cell Voltage Minimum	4041	mV
Battery Cell Voltage Average	4052	mV
Battery Cell Highest Cell number	85	
Battery Cell Lowest Cell number	60	
HV Battery Voltage (cell sum)	389.00	Volts
HV Battery Voltage (Module Sum)	388.80	Volts
HV Sensor A Pack Voltage	389.10	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	389.20	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	389.10	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	389.10	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	79	°F
Battery Temperature Minimum Module	79	°F
Battery Temperature Average Module	79	°F
Battery Temperature Highest Sensor number	07	
Battery Temperature Lowest Sensor number	03	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	

HV Cooling Battery coolant inlet temp	82	°F
HV Cooling Battery coolant outlet temp	95	°F
HV Cooling OBCM temp inlet Temp	109	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6002	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

HCP | P0A0A-00 | Stored | High Voltage System Interlock Circuit "A"-

NAME	VALUE	UNITS
DTC	0A 0A 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Original Odometer Value	11847.1	miles
Most Recent Odometer Value	11847.1	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	45161536	sec
RAM stamps keyOn	1020	sec
RAM Stamps	73372	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	528	rpm
HV Battery SOC	90	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	133	°F
Motor B Temp Sensor	113	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	190	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	0.000	Ft-Lbs

Motor B Torque	0.000	Ft-Lbs
Actual Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	0	AMP
Motor A - Inverter Current - phase B	0	AMP
Motor A - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	226	Degree
Motor A Resolver Angle	316	Degree
Electric Motor A Speed	2175.0	rpm
Electric Motor B Speed	2.0	rpm
PIM DC Link Voltage - A	80	Volts
PIM DC Link Voltage - B	77	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	180.00	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP__	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Idle	
Impact Event	False	
Outside Air Temperature	82.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	13.176	Volts
Battery Feed Voltage 2 Sense	13.176	Volts
Battery Feed Voltage 3 Sense	13.176	Volts
Hybrid System State	Reserved	
Inverter A IGBT Temperature for phase A	113	°F
Inverter A IGBT Temperature for phase B	111	°F
Inverter A IGBT Temperature for phase C	111	°F
Inverter B IGBT Temperature for phase A	111	°F
Inverter B IGBT Temperature for phase B	111	°F

Inverter B IGBT Temperature for phase C	109	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	4	
GPS Date - Day	28	Days
UTC Time - Hours	7	Hours
UTC Time - Minutes	34	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	857	ms

HCP | P0E15-00 | Active | Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-

NAME	VALUE	UNITS
DTC	0E 15 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11847.1	miles
Most Recent Odometer Value	11847.1	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	45160464	sec
RAM stamps keyOn	45	sec
RAM Stamps	73355	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Engine Speed	0	rpm
HV Battery SOC	91	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	122	°F
HV Coolant Heater - Below 60V	False	
HV Coolant Heater - Measured Coolant Inlet Temp	91	°F
HV Coolant Heater - Measured Coolant Outlet Temp	91	°F

HV Coolant Heater - Actual Current Consumption	0.00	AMP
HV Coolant Heater - Measured High Voltage	393	Volts
HV Coolant Heater - Actual Calculated Power Consumption	0	W
HV Coolant Heater - Desired Power Consumption	0	W
HV Coolant Heater - Response Error	No Error	
HV Coolant Heater - Communication Error (SPI Interface Issue)	False	
HV Coolant Heater - High Voltage Out of Range	False	
HV Coolant Heater - Low Voltage Out of Range	False	
HV Coolant Heater - Coolant Temp Out of Range	False	
HV Coolant Heater - HV Protection	False	
HV Coolant Heater - Overheat Protection	False	
HV Coolant Heater - Coolant Inlet Temp Sensor Defect	False	
HV Coolant Heater - Coolant Outlet Temp Sensor Defect	False	
HV Coolant Heater - Heater Core Temp Sensor Defect	False	
HV Coolant Heater - Short or Open Circuit at IGBTs	False	
HV Coolant Heater - Current Consumption at High Voltage Out of Range	False	
HV Coolant Heater - Memory Error	False	
HV Coolant Heater - DC/DC Voltage Out of Range	False	
Battery Feed Voltage 2 Sense	14.256	Volts
Battery Feed Voltage 3 Sense	14.184	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A - Inverter Current - phase A	0	AMP
Hybrid System State	Inverters Enabled	
Battery Feed Voltage 1 Sense	14.328	Volts
Actual Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor A	87.205	Ft-Lbs
Available Motor Torque - Motor B	232.301	Ft-Lbs
Available Regen Torque - Motor A	-87.205	Ft-Lbs
Available Regen Torque - Motor B	-232.301	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase A	-4	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor A Resolver Angle	16	Degree
Motor B Resolver Angle	316	Degree
Motor A Temp Sensor	93	°F
Motor B Temp Sensor	88	°F
Outside Air Temperature	82.4	°F
HCP ePT Wake-Up Output	On	

CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	390.10	Volts
Electric Motor A Speed	1.5	rpm
Electric Motor B Speed	0.0	rpm
PIM DC Link Voltage - A	391	Volts
PIM DC Link Voltage - B	389	Volts
Inverter A IGBT Temperature for phase A	88	°F
Inverter A IGBT Temperature for phase B	88	°F
Inverter A IGBT Temperature for phase C	88	°F
Inverter B IGBT Temperature for phase A	88	°F
Inverter B IGBT Temperature for phase B	88	°F
Inverter B IGBT Temperature for phase C	88	°F
APM Status	Buck CV	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
OBCM Operating Mode	charge	
J1772 Prox Detected State	Prox Detected	
HV Battery Sleep Time	0	Days
GPS Date - Year	2022	Year
GPS Date - Month	4	
GPS Date - Day	28	Days
UTC Time - Hours	7	Hours
UTC Time - Minutes	16	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	175	ms

HCP | P1AEC-00 | Active | MCPA HV Battery Voltage Sensor Circuit Performance-

NAME	VALUE	UNITS
DTC	1A EC 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag		
Original Odometer Value		miles

Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Real time clock		sec
RAM stamps keyOn		sec
RAM Stamps		Min
Accelerator Pedal Position		%
Brake Switch Status		
PHEV Charging Status		
Engine Speed		rpm
HV Battery SOC		%
Ignition State		
PRND Position Display		
Propulsion System Active		
Vehicle Speed		MPH
Barometric Pressure		PSI
Engine Coolant Temperature		°F
Actual Torque - Motor A		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Inverter A Input DC Current		AMP
Electric Motor A Speed		rpm
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A - Inverter Current - phase C		AMP
Motor A Phase U Short Fault - High-Side		
Motor A Phase U Cross Conduction Fault - High-Side		
Motor A Phase U Over Current Fault - High-Side		
Motor A Phase U Thermal Warning Fault - High-Side		
Motor A Phase U Thermal Shutdown Fault - High-Side		
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side		
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side		
Motor A Phase U SPI Error Fault - High-Side		
Motor A Phase U Hardware Error Fault - High-Side		
Motor A Phase U Short Fault - Low-Side		
Motor A Phase U Cross Conduction Fault - Low-Side		
Motor A Phase U Over Current Fault - Low-Side		
Motor A Phase U Thermal Warning Fault - Low-Side		
Motor A Phase U Thermal Shutdown Fault - Low-Side		
Motor A Phase U SPI Error Fault - Low-Side		
Motor A Phase U Hardware Error Fault - Low-Side		
Motor A Phase V Short Fault - High-Side		
Motor A Phase V Cross Conduction Fault - High-Side		
Motor A Phase V Over Current Fault - High-Side		
Motor A Phase V Thermal Warning Fault - High-Side		

Motor A Phase V Thermal Shutdown Fault - High-Side		
Motor A Phase V Comm Error High Voltage Regulator Fault - High-Side		
Motor A Phase V Comm Error Low Voltage Regulator Fault - High-Side		
Motor A Phase V SPI Error Fault - High-Side		
Motor A Phase V Hardware Error Fault - High-Side		
Motor A Phase V Short Fault - Low-Side		
Motor A Phase V Cross Conduction Fault - Low-Side		
Motor A Phase V Over Current Fault - Low-Side		
Motor A Phase V Thermal Warning Fault - Low-Side		
Motor A Phase V Thermal Shutdown Fault - Low-Side		
Motor A Phase V SPI Error Fault - Low-Side		
Motor A Phase V Hardware Error Fault - Low-Side		
Motor A Phase W Short Fault - High-Side		
Motor A Phase W Over Current Fault - High-Side		
Motor A Phase W Thermal Warning Fault - High-Side		
Motor A Phase W Thermal Shutdown Fault - High-Side		
Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side		
Motor A Phase W SPI Error Fault - High-Side		
Motor A Phase W Hardware Error Fault - High-Side		
Motor A Phase W Short Fault - Low-Side		
Motor A Phase W Cross Conduction Fault - Low-Side		
Motor A Phase W Over Current Fault - Low-Side		
Motor A Phase W Thermal Warning Fault - Low-Side		
Motor A Phase W Thermal Shutdown Fault - Low-Side		
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side		
Motor A Phase W SPI Error Fault - Low-Side		
Motor A Phase W Hardware Error Fault - Low-Side		
Motor A Resolver Supply Voltage Value		Volts
Battery Feed Voltage 2 Sense		Volts
Battery Feed Voltage 3 Sense		Volts
Internal EPS Voltage Sense A		Volts
Internal EPS Voltage Sense B		Volts
Hybrid System State		
PIM DC Link Voltage - A		Volts
PIM DC Link Voltage - B		Volts
Passive Pump Coolant Temp In Sensor		°F
Low Temp Active Pump Speed		rpm
High Temp Aux Pump - Actual Speed		rpm
Outside Air Temperature		°F
HV Contactor Status		
Inverter B Status Feedback		
Battery Feed Voltage 1 Sense		Volts
Actual Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor B		Ft-Lbs

Available Regen Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Commanded Torque - Motor B		Ft-Lbs
Motor B - Inverter Current - phase A		AMP
Motor B - Inverter Current - phase B		AMP
Motor B - Inverter Current - phase C		AMP
Motor B Resolver Angle		Degree
Motor B Temp Sensor		°F
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
EPT LOC Diag Enable		
HV Battery Voltage from BPCM		Volts
Electric Motor B Speed		rpm
Inverter A IGBT Temperature for phase A		°F
Inverter A IGBT Temperature for phase B		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
Inverter B IGBT Temperature for phase B		°F
Inverter B IGBT Temperature for phase C		°F
APM Status		
Impact Event		
HCP System Shutdown Command		
Distance Travelled with Light ON		miles
Motor A Torque		Ft-Lbs
Motor B Torque		Ft-Lbs
OBCM Operating Mode		
J1772 Prox Detected State		
HV Battery Sleep Time		Days
Commanded Inverter A State		
Inverter Status Feedback		
Motor A Phase U Over Voltage Fault VH - High-Side		
Motor A Phase U Under Voltage Fault VH - High-Side		
Motor A Phase U Over Voltage Fault VL - High-Side		
Motor A Phase U Under Voltage Fault VL - High-Side		
Motor A Phase U Over Voltage Fault VDD - High-Side		
Motor A Phase U Under Voltage Fault VDD - High-Side		
Motor A Phase U Over Voltage Fault VH - Low-Side		
Motor A Phase U Under Voltage Fault VH - Low-Side		
Motor A Phase U Over Voltage Fault VL - Low-Side		
Motor A Phase U Under Voltage Fault VL - Low-Side		
Motor A Phase U Over Voltage Fault VDD - Low-Side		
Motor A Phase U Under Voltage Fault VDD - Low-Side		
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side		

Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-Side		
Motor A Phase V Over Voltage Fault VH - High-Side		
Motor A Phase V Under Voltage Fault VH - High-Side		
Motor A Phase V Over Voltage Fault VL - High-Side		
Motor A Phase V Under Voltage Fault VL - High-Side		
Motor A Phase V Over Voltage Fault VDD - High-SideSide		
Motor A Phase V Under Voltage Fault VDD - High-Side		
Motor A Phase V Over Voltage Fault VH - Low-Side		
Motor A Phase V Under Voltage Fault VH - Low-Side		
Motor A Phase V Over Voltage Fault VL - Low-Side		
Motor A Phase V Under Voltage Fault VL - Low-Side		
Motor A Phase V Over Voltage Fault VDD - Low-Side		
Motor A Phase V Under Voltage Fault VDD - Low-Side		
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side		
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side		
Motor A Phase W Cross Conduction Fault - High-Side		
Motor A Phase W Over Voltage Fault VH - High-Side		
Motor A Phase W Under Voltage Fault VH - High-Side		
Motor A Phase W Over Voltage Fault VL - High-Side		
Motor A Phase W Under Voltage Fault VL - High-Side		
Motor A Phase W Over Voltage Fault VDD - High-Side		
Motor A Phase W Under Voltage Fault VDD - High-Side		
Motor A Phase W Comm Error High Voltage Regulator Fault - High-Side		
Motor A Phase W Over Voltage Fault VH - Low-Side		
Motor A Phase W Under Voltage Fault VH - Low-Side		
Motor A Phase W Over Voltage Fault VL - Low-Side		
Motor A Phase W Under Voltage Fault VL - Low-Side		
Motor A Phase W Over Voltage Fault VDD - Low-Side		
Motor A Phase W Under Voltage Fault VDD - Low-Side		
Motor A Phase W Comm Error High Voltage Regulator Fault - Low-Side		
Inverter A Status Feedback		
GPS Date - Year		Year
GPS Date - Month		
GPS Date - Day		Days
UTC Time - Hours		Hours
UTC Time - Minutes		
UTC Time - Seconds		seconds
ECU Time - Milliseconds		ms

HCP | P1AED-00 | Active | MCPB High Voltage Battery Voltage Sensor Circuit Performance-

NAME	VALUE	UNITS
DTC	1A ED 00	
Test Failed	True	
Test Failed This Operation Cycle	True	

Pending DTC	True	
Confirmed DTC	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Real time clock		sec
RAM stamps keyOn		sec
RAM Stamps		Min
Accelerator Pedal Position		%
Brake Switch Status		
PHEV Charging Status		
Engine Speed		rpm
HV Battery SOC		%
Ignition State		
PRND Position Display		
Propulsion System Active		
Vehicle Speed		MPH
Barometric Pressure		PSI
Engine Coolant Temperature		°F
Actual Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor B		Ft-Lbs
Inverter B Input DC Current		AMP
Electric Motor B Speed		rpm
Commanded Inverter B State		
Motor B - Inverter Current - phase A		AMP
Motor B - Inverter Current - phase B		AMP
Motor B - Inverter Current - phase C		AMP
Inverter B Status Feedback		
Motor B Phase U Short Fault - High-Side		
Motor B Phase U Cross Conduction Fault - High-Side		
Motor B Phase U Thermal Warning Fault - High-Side		
Motor B Phase U Thermal Shutdown Fault - High-Side		
Motor B Phase U Comm Error High Voltage Regulator Fault - High-Side		
Motor B Phase U SPI Error Fault - High-Side		
Motor B Phase U Hardware Error Fault - High-Side		
Motor B Phase U Short Fault - Low-Side		
Motor B Phase U Cross Conduction Fault - Low-Side		
Motor B Phase U Over Current Fault - Low-Side		

Motor B Phase U Thermal Warning Fault - Low-Side		
Motor B Phase U Thermal Shutdown Fault - Low-Side		
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase U SPI Error Fault - Low-Side		
Motor B Phase U Hardware Error Fault - Low-Side		
Motor B Phase V Short Fault - High-Side		
Motor B Phase V Cross Conduction Fault - High-Side		
Motor B Phase V Over Current Fault - High-Side		
Motor B Phase V Thermal Warning Fault - High-Side		
Motor B Phase V Thermal Shutdown Fault - High-Side		
Motor B Phase V Comm Error High Voltage Regulator Fault - High-Side		
Motor B Phase V Comm Error Low Voltage Regulator Fault - High-Side		
Motor B Phase V SPI Error Fault - High-Side		
Motor B Phase V Hardware Error Fault - High-Side		
Motor B Phase V Short Fault - Low-Side		
Motor B Phase V Cross Conduction Fault - Low-Side		
Motor B Phase V Over Current Fault - Low-Side		
Motor B Phase V Thermal Warning Fault - Low-Side		
Motor B Phase V Thermal Shutdown Fault - Low-Side		
Motor B Phase V Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase V Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase V SPI Error Fault - Low-Side		
Motor B Phase V Hardware Error Fault - Low-Side		
Motor B Phase W Short Fault - High-Side		
Motor B Phase W Cross Conduction Fault - High-Side		
Motor B Phase W Over Current Fault - High-Side		
Motor B Phase W Thermal Warning Fault - High-Side		
Motor B Phase W Comm Error High Voltage Regulator Fault - High-Side		
Motor B Phase W Comm Error Low Voltage Regulator Fault - High-Side		
Motor B Phase W SPI Error Fault - High-Side		
Motor B Phase W Hardware Error Fault - High-Side		
Motor B Phase W Short Fault - Low-Side		
Motor B Phase W Cross Conduction Fault - Low-Side		
Motor B Phase W Over Current Fault - Low-Side		
Motor B Phase W Thermal Warning Fault - Low-Side		
Motor B Phase W Thermal Shutdown Fault - Low-Side		
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase W SPI Error Fault - Low-Side		
Motor B Phase W Hardware Error Fault - Low-Side		
Motor B Resolver Supply Voltage Value		Volts
Battery Feed Voltage 2 Sense		Volts
Internal EPS Voltage Sense A		Volts

Internal EPS Voltage Sense B		Volts
Battery Feed Voltage 1 Sense		Volts
Battery Feed Voltage 3 Sense		Volts
Hybrid System State		
Actual Torque - Motor A		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Commanded Torque - Motor B		Ft-Lbs
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A - Inverter Current - phase C		AMP
Motor A Resolver Angle		Degree
Motor A Temp Sensor		°F
Outside Air Temperature		°F
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
EPT LOC Diag Enable		
HV Contactor Status		
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
PIM DC Link Voltage - A		Volts
PIM DC Link Voltage - B		Volts
Inverter A IGBT Temperature for phase A		°F
Inverter A IGBT Temperature for phase B		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
Inverter B IGBT Temperature for phase B		°F
Inverter B IGBT Temperature for phase C		°F
APM Status		
Impact Event		
HCP System Shutdown Command		
Distance Travelled with Light ON		miles
Motor A Torque		Ft-Lbs
Motor B Torque		Ft-Lbs
OBCM Operating Mode		
J1772 Prox Detected State		
HV Battery Sleep Time		Days
Motor B Phase U Over Current Fault - High-Side		
Motor B Phase U Over Voltage Fault VH - High-Side		
Motor B Phase U Under Voltage Fault VH - High-Side		
Motor B Phase U Over Voltage Fault VL - High-Side		
Motor B Phase U Under Voltage Fault VL - High-Side		

Motor B Phase U Over Voltage Fault VDD - High-Side		
Motor B Phase U Under Voltage Fault VDD - High-Side		
Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side		
Motor B Phase U Over Voltage Fault VH - Low-Side		
Motor B Phase U Under Voltage Fault VH - Low-Side		
Motor B Phase U Over Voltage Fault VL - Low-Side		
Motor B Phase U Under Voltage Fault VL - Low-Side		
Motor B Phase U Over Voltage Fault VDD - Low-Side		
Motor B Phase U Under Voltage Fault VDD - Low-Side		
Motor B Phase V Over Voltage Fault VH - High-Side		
Motor B Phase V Under Voltage Fault VH - High-Side		
Motor B Phase V Over Voltage Fault VL - High-Side		
Motor B Phase V Under Voltage Fault VL - High-Side		
Motor B Phase V Over Voltage Fault VDD - High-Side		
Motor B Phase V Under Voltage Fault VDD - High-Side		
Motor B Phase V Over Voltage Fault VH - Low-Side		
Motor B Phase V Under Voltage Fault VH - Low-Side		
Motor B Phase V Over Voltage Fault VL - Low-Side		
Motor B Phase V Under Voltage Fault VL - Low-Side		
Motor B Phase V Over Voltage Fault VDD - Low-Side		
Motor B Phase V Under Voltage Fault VDD - Low-Side		
Motor B Phase W Over Voltage Fault VH - High-Side		
Motor B Phase W Under Voltage Fault VH - High-Side		
Motor B Phase W Over Voltage Fault VL - High-Side		
Motor B Phase W Under Voltage Fault VL - High-Side		
Motor B Phase W Over Voltage Fault VDD - High-Side		
Motor B Phase W Under Voltage Fault VDD - High-Side		
Motor B Phase W Thermal Shutdown Fault - High-Side		
Motor B Phase W Over Voltage Fault VH - Low-Side		
Motor B Phase W Under Voltage Fault VH - Low-Side		
Motor B Phase W Over Voltage Fault VL - Low-Side		
Motor B Phase W Under Voltage Fault VL - Low-Side		
Motor B Phase W Over Voltage Fault VDD - Low-Side		
Motor B Phase W Under Voltage Fault VDD - Low-Side		
GPS Date - Year		Year
GPS Date - Month		
GPS Date - Day		Days
UTC Time - Hours		Hours
UTC Time - Minutes		
UTC Time - Seconds		seconds
ECU Time - Milliseconds		ms

HCP | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
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DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11847.1	miles
Most Recent Odometer Value	11847.1	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	45161536	sec
RAM stamps keyOn	1005	sec
RAM Stamps	73372	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	1097	rpm
HV Battery SOC	90	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	True	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	133	°F
Motor B Temp Sensor	113	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	190	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	5.347	Ft-Lbs
Motor B Torque	6.453	Ft-Lbs
Actual Torque - Motor A	5.347	Ft-Lbs
Actual Torque - Motor B	6.453	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	232.485	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-232.485	Ft-Lbs
Commanded Torque - Motor A	5.347	Ft-Lbs
Commanded Torque - Motor B	6.453	Ft-Lbs
Motor A - Inverter Current - phase A	-284	AMP
Motor A - Inverter Current - phase B	-8	AMP
Motor A - Inverter Current - phase C	-4	AMP

Motor B - Inverter Current - phase A	12	AMP
Motor B - Inverter Current - phase B	-16	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	228	Degree
Motor A Resolver Angle	0	Degree
Electric Motor A Speed	4558.5	rpm
Electric Motor B Speed	3.0	rpm
PIM DC Link Voltage - A	389	Volts
PIM DC Link Voltage - B	388	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	388.50	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP__	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Buck CV	
Impact Event	False	
Outside Air Temperature	82.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	14.328	Volts
Battery Feed Voltage 2 Sense	14.256	Volts
Battery Feed Voltage 3 Sense	14.256	Volts
Hybrid System State	Propulsion System Active	
Inverter A IGBT Temperature for phase A	-40	°F
Inverter A IGBT Temperature for phase B	-40	°F
Inverter A IGBT Temperature for phase C	-40	°F
Inverter B IGBT Temperature for phase A	111	°F
Inverter B IGBT Temperature for phase B	113	°F
Inverter B IGBT Temperature for phase C	109	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	4	
GPS Date - Day	28	Days
UTC Time - Hours	7	Hours
UTC Time - Minutes	34	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	962	ms

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number		
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Real time clock		sec
RAM stamps keyOn		sec
RAM Stamps		Min
Accelerator Pedal Position		%
Brake Switch Status		
Engine Speed		rpm
Ignition State		
PRND Position Display		
Propulsion System Active		
Vehicle Speed		MPH
Barometric Pressure		PSI
Engine Coolant Temperature		°F
HVIL Sense Input State		
No Charging Reasons		
Battery Feed Voltage 2 Sense		Volts
Internal EPS Voltage Sense A		Volts
Internal EPS Voltage Sense B		Volts
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
Hybrid System State		
SW Build Release Version		
HCP SW Version		
EPT LOC Diag Enable		
CAN Overrun Counter		Number
Impact Event		
Outside Air Temperature		°F
Maximum Charge Current Allowed		Amps
Charge Current Available		AMP

OBCM Derating Reason		
OBCM Operating Mode		
HCP Commanded OBCM Mode		
J1772 Prox Detected State		
J1772 Pilot Detected State		
OBCM J1772 S2 Status		
HCP J1772 S2 Close Command		
OBCM Ready to Charge		
HCP Command to Enable Charging		
HCP Charging System Status		
HCP Charging Level		
HCP Charging System Fault		
HCP Charging Fault Reason		
HV Battery Contactor State		
DC Voltage Not Detected		
AC Voltage Detected		
HV Battery Actual Current		AMP
AC Voltage for Charging		Volts
AC Current During Charging		Amps
Maximum EVSE Current Available		AMP
HCP Charging Current Command		AMP
HCP Charging Voltage Command		Volts
DC Charging Current		Amps
OBCM Charging Voltage		Volts
OBCM Module A Max Temperature		°F
OBCM Module B Max Temperature		°F
OBCM Module A PCB Temperature		°F
OBCM Module B PCB Temperature		°F
OBCM Accumulated Charging Time		hrs
OBCM Charging Power		KW-Hrs
HV Battery Pump Current		AMP
Radiator Fan Command		%
HV Battery Inlet Temperature		°F
HV Battery Outlet Temperature		°F
HV Battery Min Cell Voltage		Volts
Max Cell Voltage		Volts
Min Cell Temperature		°F
Max Cell Temperature		°F
HV Battery Sleep Time		Days
HV Battery SOC		%
Battery Feed Voltage 1 Sense		Volts
Battery Feed Voltage 3 Sense		Volts
Actual Torque - Motor A		Ft-Lbs
Actual Torque - Motor B		Ft-Lbs

Available Motor Torque - Motor A		Ft-Lbs
Available Motor Torque - Motor B		Ft-Lbs
Available Regen Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Commanded Torque - Motor B		Ft-Lbs
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A - Inverter Current - phase C		AMP
Motor B - Inverter Current - phase A		AMP
Motor B - Inverter Current - phase B		AMP
Motor B - Inverter Current - phase C		AMP
Motor A Resolver Angle		Degree
Motor B Resolver Angle		Degree
Motor A Temp Sensor		°F
Motor B Temp Sensor		°F
HV Contactor Status		
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
Electric Motor B Speed		rpm
PIM DC Link Voltage - A		Volts
PIM DC Link Voltage - B		Volts
Inverter A IGBT Temperature for phase A		°F
Inverter A IGBT Temperature for phase B		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
Inverter B IGBT Temperature for phase B		°F
Inverter B IGBT Temperature for phase C		°F
APM Status		
HCP System Shutdown Command		
PHEV Charging Status		
Distance Travelled with Light ON		miles
Motor A Torque		Ft-Lbs
Motor B Torque		Ft-Lbs
GPS Date - Year		Year
GPS Date - Month		
GPS Date - Day		Days
UTC Time - Hours		Hours
UTC Time - Minutes		
UTC Time - Seconds		seconds
ECU Time - Milliseconds		ms

NAME	VALUE	UNITS
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OBCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
DTC Extended Data Record Number - Record #2	2C	
OBCM Status AC Present	AC Not OK	
AC Line Low	Valid	
AC Line High	Not Valid	
AC Side Current	0.50	Amps
AC Side Volt	2.1	Volts
HCP (EVCU) AC Current Max Cal	-0.50	Amps
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
Battery Side Current	0.20	Amps
Battery Side Voltage	0.0	Volts
HV OC	False	
HV OV	False	
HCP (EVCU) HV Current Max Cal	-12.00	Amps
HCP (EVCU) HV Volt Max Cal	152	Volt
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	118	°F
OBCM Temperature 2	118	°F
OBCM Temperature 3	104	°F
OBCM Temperature 4	100	°F
NTC1 OT	False	
NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	

External OBCM Inlet Temperature (CAN)	-40	°F
J1772 ICA	0	AMP
J1772 S2 Close	Open	
J1772 Stat	Veh Not Connected	
J1772 S2 Status	Open	
Control Pilot Amplitude	7.493	Volts
Control Pilot Duty Cycle	0.00	%
Control Pilot Frequency	1024	Hz
EVSE Pilot Stat	NO EVSE	
Prox Stat	Prox Out	
Prox Voltage	4.416	Volt
OBC Idle Tml	1	hrs
Watt-Hours of AC Power	0	W-Hrs
Watt Hours of Charge the HV Bus	0	W-Hrs
OBCM Mode	UTC	
OBCM Charger Ready	Off	
OBCM WU Status	Off	
Charge Enable Status	Chrg Disable	
HCP (EVCU) Shutdown Command	EVCU Operational	
HCP (EVCU) Enable Charge Command	Charge disable	
HCP (EVCU) OBC Mode Request	Idle	
Generic Fail Sts	No Functional Fail Present	
Chrg Fail Sts	Faulted - Charging Inhibited	
OBCM Wake Up Reason	Master Wake Up	
OBC Control Mth	Current	
OBCM Deraing Reason	AC Voltage Limit Derating	
Close Chrgr Cntctr	Open	
Chrgr Cntctr Stat	Open	
Chrg Mode	Charge Mode	
OBCM Fault Reason	Internal OBCM high voltage Fault	
Module A Primary - PFC Temperature	100	°F
Module A Primary - LLC Temperature	104	°F
Module A Secondary - Buck Temperature	100	°F
Module A Secondary - Ambient Temperature	118	°F
Module A Primary - AC Side Volt	1.9	Volts
Module A Primary - AC Side Current	-24.70	Amps
Module A Secondary - Battery Side Voltage	0.0	Volts
Module A Secondary - Battery Side Current	-24.90	Amps
Module A Secondary - Buck Output Voltage	1.3	Volts
Module B Primary - PFC Temperature	102	°F
Module B Primary - LLC Temperature	106	°F
Module B Secondary - Buck Temperature	104	°F
Module B Secondary - Ambient Temperature	118	°F
Module B Primary - AC Side Volt	2.3	Volts

Module B Primary - AC Side Current	-24.80	Amps
Module B Secondary - Battery Side Voltage	0.0	Volts
Module B Secondary - Battery Side Current	-24.90	Amps
Module B Secondary - Buck Output Voltage	1.1	Volts
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - Battery 12V Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	
OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	
OBCM - HV Over Current Protect	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	True	
OBCM - Loss BPCM Communication Protect	False	
OBCM - CAN Bus Off	False	
OBCM - Pilot Duty Fault	False	
OBCM - Prox Range To Low	False	
OBCM - Prox Range To High	False	
OBCM - HV Voltage Under MinCal Protect	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - ORC Loss of Communication	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	True	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Stuck Shutdown	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	

OBCM - ARC/CRC Fault	False	
OBCM - AC Contact Welded Fault	False	
Control Pilot Open fault	False	
Prox open fault	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - Prox Range Fault	False	
force shutdown fault	False	
pilot signal wake up issue because of EVSE	False	
HCP stuck low fault	False	
HCP stuck High fault	False	
Plant mode flag	False	
Retry fault flag	False	
Loss SBC communication (SPI)	False	
pilot input short to ground fault	False	
pilot input short to battery fault in Driver mode detecting	False	
pilot short to ground fault in driver mode detecting	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Under Voltage Protect	False	
Module A Primary - PFC Power Limit	True	
Module A Primary - PFC Enable States	False	
Module A Primary - LLC Enable States	False	
Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Relay Enable States	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - AC Vin Lost	True	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Standby Mode	True	
Module A Primary - Operate Mode	False	
Module A Primary - Shutdown Mode	False	

Module A Secondary - Aux Enable States	True	
Module A Secondary - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage Protect	False	
Module A Secondary - HV Over Voltage Protect	False	
Module A Secondary - HV Over Current Protect	False	
Module A Secondary - Over Temperature Protect	False	
Module A Secondary - Hot Warning	False	
Module A Secondary - HV Over Temperature Protect	False	
Module A Secondary - Ambient Over Temperature Protect	False	
Module A Secondary - HV Hot Warning	False	
Module A Secondary - Ambient Hot Warning	False	
Module A Secondary - Aux Over Voltage Protect	False	
Module A Secondary - Aux Under Voltage Protect	False	
Module A Secondary - Loss Primary Communication Protect	False	
Module A Secondary - LV Micro Enable Command	False	
Module A Secondary - Loss LV Communication Protect	False	
Module A Secondary - Primary Turn On States	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	True	
Module A Secondary - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	True	
Module A Secondary - PFC High Temperature Derating	False	
Module A Secondary - PFC Low Temperature Derating	False	
Module A Secondary - LLC High Temperature Derating	False	
Module A Secondary - LLC Low Temperature Derating	False	
Module A Secondary - HV High Temperature Derating	False	
Module A Secondary - HV Low Temperature Derating	False	
Module A Secondary - Ambient High Temperature Derating	False	
Module A Secondary - Ambient Low Temperature Derating	False	
Module A Secondary - AC Input Voltage Derating	True	
Module A Secondary - HV Output Voltage Derating	False	
Module B Primary - AC Under Voltage Protect	False	
Module B Primary - PFC Power Limit	True	
Module B Primary - PFC Enable States	False	
Module B Primary - LLC Enable States	False	
Module B Primary - PFC Under Voltage Protect	False	
Module B Primary - PFC Over Voltage Protect	False	
Module B Primary - Over Temperature Protect	False	
Module B Primary - Hot Warning	False	
Module B Primary - AC Present	False	
Module B Primary - PFC Over Temperature Protect	False	

Module B Primary - LLC Over Temperature Protect	False	
Module B Primary - PFC Hot Warning	False	
Module B Primary - LLC Hot Warning	False	
Module B Primary - AC Over Voltage Protect	True	
Module B Primary - Relay Enable States	False	
Module B Primary - Aux Over Voltage Protect	False	
Module B Primary - Aux Under Voltage Protect	False	
Module B Primary - Secondary Micro Enable Command	False	
Module B Primary - AC Vin Lost	True	
Module B Primary - Loss Communication Protect	False	
Module B Primary - Standby Mode	True	
Module B Primary - Operate Mode	False	
Module B Primary - Shutdown Mode	False	
Module B Secondary - Aux Enable States	True	
Module B Secondary - HV Enable States	False	
Module B Secondary - LLC Under Voltage Protect	False	
Module B Secondary - LLC Over Voltage Protect	False	
Module B Secondary - HV Over Voltage Protect	False	
Module B Secondary - HV Over Current Protect	False	
Module B Secondary - Over Temperature Protect	False	
Module B Secondary - Hot Warning	False	
Module B Secondary - HV Over Temperature Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Ambient Hot Warning	False	
Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - LV Micro Enable Command	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - Standby Mode	True	
Module B Secondary - Operate Mode	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - LV Micro Disable Command	True	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
Module B Secondary - Ambient High Temperature Derating	False	

Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - AC Input Voltage Derating	True	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	00	
SBC State_DF80	00	
SBC State_E100	00	
SBC State_E180	88	
SBC State_E300	00	
SBC State_E500	00	
SBC State_E580	00	
OBCM Charge Current Available	0.00	AMP
BPCM HV Battery Contactor Open	True	
SBC Bus Off	False	
CANSIP Bus Off	False	
OBC Charge Time	0	sec
OBC Charge Tml	1	hrs
OBC Idle Time	0	sec
EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP Shutdown Command	No Shutdown	
HV Battey Contactor Open	False	
BPCM Request for HV Contactor	False	
HV Contactor Status	Open	
Ignition on Time for DTC	0	sec

EBBM | U0111-00 | Active | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Booster Supply	14.2	V

ECU Supply	14.2	V
Ignition	14.2	V
Pedal Travel Sensor Supply	5.0	V
iBooster System Mode	Ready Mode - iBooster is ready for actuation	
Brake Pedal Applied	brake pedal not applied	
iBooster ECU Temperature Channel 1	103.6906	°F
iBooster ECU Temperature Channel 2	103.9156	°F
iBooster Brake Pedal State	brake pedal not applied	
ESP Master Cylinder Pressure	0.00	PSI
Pedal Travel Sensor One	-0.1523418	mm_
Pedal Travel Sensor Two	-0.1171860	mm_
iBooster Rotary Position Sensor	0.00	Deg
iBooster Output Rod Stroke	0.00	mm_
iBooster Input Rod Stroke	0.00	mm_
iBooster Boost Body Stroke	-0.03	mm_
Vehicle Speed	0.00	MPH
Supplier Internal Code	173	

ABSO | U0111-00 | Active | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Controller Event	No	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Current System Mode	Engine Running	
Previous System Mode	Engine Running	
System Condition	OK	
Supply Voltage Valves	14.2	V
Brake Pedal Status	Released	
Supply voltage Pump	14.4	V

Brake Pedal Travel Sensor Position	0	%
Ignition Unfiltered	14.2	V
Wheel Speed Left Front	0.000	MPH
Rotation Direction Left Front	Forward	
Wheel Speed Right Front	0.000	MPH
Rotation Direction Right Front	Forward	
Wheel Speed Left Rear	0.000	MPH
Rotation Direction Left Rear	Forward	
Wheel Speed Right Rear	0.000	MPH
Rotation Direction Right Rear	Forward	
Steering Wheel Angle	0.00	°
Longitudinal Acceleration	0.00	m/s^2
Lateral Acceleration	0.00	m/s^2
Yaw Rate	0.000	°/s
Primary Circuit Pressure	0.00	PSI
Engine Speed	1098.0	rpm
Accelerator Pedal Position	0.0	%
ABS control	Not Active	
ASR control	Not Active	
MSR control	Not Active	
EBV control	Not Active	
ESP Control	Not Active	
HSA control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
Plant Mode	No	
EPB Mode Status	Static	
BLS High	No	
BLS Low	Yes	
Park Brake	Not Activated	
ESP-OFF mode	No	
Clutch	Not Activated	
Stop Coordinator Active	No	
Actual Gear	P	
Transmission selector lever setting	P	
Status Parking Brake Left	Brake is Released	
Status Parking Brake Right	Brake is Released	
EPB Switch Status	Idle	
Supplier Internal Code	233	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for U0111

No Snapshot Data available for P0AFA-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0151-00

No Snapshot Data available for U0100-00

No Snapshot Data available for P1A21-00

No Snapshot Data available for P167B-00

No Snapshot Data available for U0293-00

No Snapshot Data available for P0A0A-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1AEC-00

No Snapshot Data available for P1AED-00

No Snapshot Data available for U0111-00

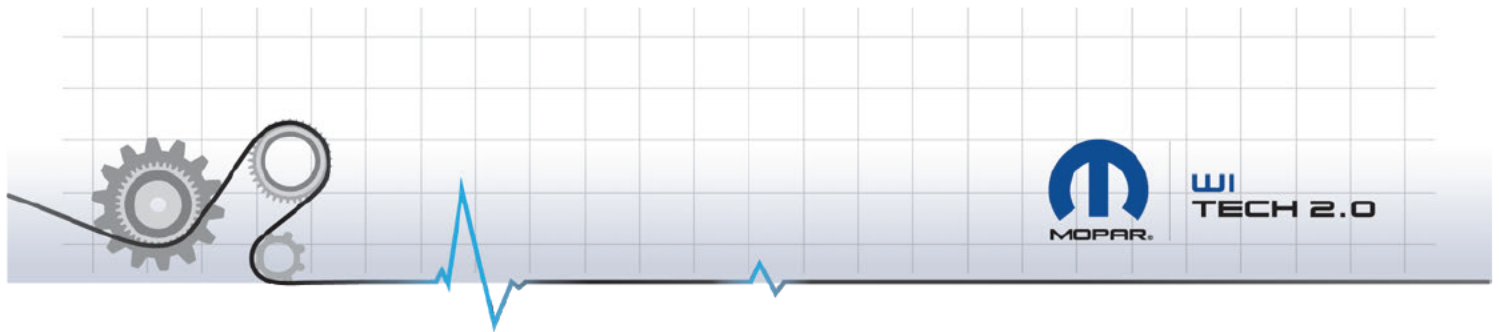
No Snapshot Data available for U0293-00

No Snapshot Data available for U11F8-00

No Snapshot Data available for U0293-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0111-00



VEHICLE SCAN REPORT

Vehicle 2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE
VIN [REDACTED]

Odometer 11846.5 miles
Publication Date May 3, 2022, 4:19:35 PM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AF	[REDACTED]	[REDACTED]	68499122AF
PLGM	Power Liftgate	CAN-I	68466171AI	[REDACTED]	—	68466171AI
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	[REDACTED]	[REDACTED]	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	[REDACTED]	[REDACTED]	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AM	[REDACTED]	[REDACTED]	68240089AM
ORC	Occupant Restraint	CAN-C	68480710AC	[REDACTED]	[REDACTED]	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	[REDACTED]	[REDACTED]	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	[REDACTED]	[REDACTED]	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	[REDACTED]	[REDACTED]	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	[REDACTED]	[REDACTED]	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	[REDACTED]	[REDACTED]	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	[REDACTED]	[REDACTED]	68517013AB
AMP	Amplifier	CAN-I	68547722AB	[REDACTED]	[REDACTED]	68547722AB
IPC	Instrument Panel Cluster	CAN-C	68434960AE	[REDACTED]	[REDACTED]	68434960AE
PTS	Parktronics	CAN-C	68485862AA	[REDACTED]	[REDACTED]	68485862AA
SCCM	Steering Column Control Module	CAN-C	68360889AD	[REDACTED]	[REDACTED]	68360889AD
BCM	Body Controller	CAN-C	68491085AG	[REDACTED]	[REDACTED]	68491085AG

ACC	Adaptive Cruise Control	CAN-C	68540436AA			68540436AA
RADIO	Radio	CAN-I	68465292AE			68465292AE
OCM	Occupant Classification	CAN-C	68403127AA			68403127AA
HVACR	Heat, Ventilation and A/C Rear	CAN-I	68373079AB			68373079AB
LBSS	Left Blind Spot Sensor	CAN-I	04672786AB			04672786AB
RBSS	Right Blind Spot Sensor	CAN-I	04672786AB			04672786AB
FFCM	Forward Facing Camera Module	CAN-C	68493395AA			68493395AA
EDM	External Disc Module	CAN-I	68499745AA			68499745AA
APM	Accessory Power Module	CAN-C	05185046AB			05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE			05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AJ			05185116AJ
OBCM	On Board Charging Module	CAN-C	05185047AE			05185047AE
MSMP	Memory Seat Module - Passenger	CAN-I	68321862AC			68321862AC
DSM	Display Screen Module	CAN-I	68437339AD			68437339AD
VRM	Video Routing Module	CAN-I	68493702AA			68493702AA
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30PD2AA			6WL30PD2AA
CVPM	Central vision processing module	CAN-I	56029920AB			56029920AB
EAC	Electric A/C Compressor	CAN-C	68237995AG			68237995AG
AHCP	Auxiliary Hybrid Control Processor	CAN-C	05185117AJ			05185117AJ
EBBM	Electronic Brake Booster Module	CAN-C	68461813AB			68461813AB
ABSO	Anti Lock Brakes OBD	CAN-C	68471122AD			68471122AD
SGW	Security Gateway Module	CAN-C	68488429AB			68488429AB
TBM2	Telematic Box Module 2	CAN-C	68546266AB			68546266AB

ECU SUMMARY INFO (CONT...)

ECU	COUNTRY CODE	HARDWARE VERSION	SOFTWARE VERSION	IDENT	CVNS
PCM	USA	1B 47	75 02 00	4422	7DC2E312
PLGM	USA	0	5084	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	

ESM	USA / USA	0F 24 00	12 28 FF	4402	
ORC	USA / USA	12 1A 00	13 2E 00	4301	
EPS	USA / USA	12 2A 00	12 1E 01	4502	
HVAC	USA	0E 09 00	14 2F 01	4401	
DDM	USA	11 07 00	14 07 00	4202	
PDM	USA	11 07 00	14 07 00	4202	
DMRL	USA / USA	10 0B 00	14 08 00	4201	
DMRR	USA / USA	10 0B 00	14 08 00	4201	
PSDML	USA / USA	10 17 00	14 10 12	4001	
PSDMR	USA / USA	10 17 00	14 10 12	4001	
MSM	USA	0F 2B 00	10 27 03	4101	
CSWM	USA	11 2A 00	14 25 00	4302	
AMP	USA	0F 06 01	15 0F 01	4021	
IPC	USA / USA	12 06 00	14 2B 00	4705	
PTS	USA	0E 32 00	14 07 00	4311	
SCCM	USA	13 28 00	13 29 00	4301	
BCM	USA	0D 11 00	14 26 90	4420	
ACC	USA / USA	14 12 01	14 26 01	4400	
RADIO		65	5671	000200000008	
OCM	USA / USA	11 1F 01	0E 2F 02	4030	
HVACR	USA	0E 09 00	10 03 02	4301	
LBSS	USA / USA	11 30 02	12 0D 00	4202	
RBSS	USA / USA	11 30 02	12 0D 00	4202	
FFCM	USA / USA	11 06 00	13 1E 00	4102	
EDM	USA	12 0A 00	11 08 00	4000	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM		0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	5D31A9B9 16AACD23 050DC953
OBCM	USA	0F 0D 00	12 02 00	4002	
MSMP	USA	0F 2B 00	10 27 03	4001	
DSM	USA / USA	14 0C 00	14 28 00	4300	
VRM	USA / USA	0F 1C 00	14 1E 14	4001	
RCCC	USA	0F 1D 00	13 04 00	4000	
CVPM	USA / USA	11 27 01	14 0C 01	4004	
EAC	USA	0E 34 00	12 0F 00	4102	
AHCP	USA	11 1F 04	0F 2D 00	4000	
EBBM	USA	0E 19 02	14 0D 18	4000	E5898FA5
ABSO	USA	0E 15 02	14 1B 26	4201	4F158D1B
SGW		5	969	4103	
TBM2	USA	13 0E 02	14 2A 5C	4104	

DTC SUMMARY

ECU	DTC CODE	DTC DESCRIPTION	STATUS
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PCM	U0111	Lost Communication With Battery Energy Control Module	Pending
APM	P0AFA-00	Hybrid/EV Battery System Voltage Low-	Stored
APM	P0AFB-00	Hybrid/EV Battery System Voltage High-	Stored
APM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
BPCM	U0151-00	Lost Communication with Occupant Restraint Controller (ORC)-	Stored
BPCM	U0100-00	Lost Communication With ECM/PCM "A"-	Stored
BPCM	P1A21-00	HV Battery Contactor Control Sequence Incorrect-	Stored
BPCM	P167B-00	Controlled System Shutdown-	Stored
BPCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
HCP	P0A0A-00	High Voltage System Interlock Circuit "A"-	Stored
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Stored
HCP	P1AEF-00	MCPB High Voltage Battery System Voltage High-	Stored
HCP	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
OBCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
VRM	B15AE-00	Lost Low Voltage Differential Signal (LVDS) Connection with Media Port 2-	Stored
EBBM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
ABSO	U0111-00	Lost Communication With Battery Energy Control Module-	Stored

ENVIRONMENTAL DATA SUMMARY

PCM | U0111 | Pending | Lost Communication With Battery Energy Control Module

NAME	VALUE	UNITS
Number of DTC	0	
DTC		
DTC Readiness Flag		
DTC Storage State		
Warning Indicator Request State		
Odometer		miles
Accumulation Timer		minutes
Ignition Key Cycles		
Starts Since Set Counter		
Key Cycles Since DTC Last Set Counter		
Warm Up Cycles		
Good Trip Counter		

APM | P0AFA-00 | Stored | Hybrid/EV Battery System Voltage Low-

NAME	VALUE	UNITS
DTC	0A FA 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	

Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of short circuit at LV / Failure9	
Low voltage battery voltage from HCP	12.4800	Volt

APM | POAFB-00 | Stored | Hybrid/EV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	0A FB 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	

APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Temp 1 too high / Failure5	
Low voltage battery voltage from HCP	13.0800	Volt

APM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Buck_CV	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Buck_CV	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Memory failure/Failure 25	
Low voltage battery voltage from HCP	14.6800	Volt

BPCM | U0151-00 | Stored | Lost Communication with Occupant Restraint Controller (ORC)-

NAME	VALUE	UNITS
DTC	C1 51 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	

Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	33	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407552	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.519	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.385	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.25	Amps
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current HVBatCrnt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F

Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and Circuitry ISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	

Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92688	watts
HV Battery Charge Power 10sec	81291	watts
HV Battery Discharge Power 2sec	99558	watts
HV Battery Discharge Power 10sec	97155	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3918	mV
Battery Cell Voltage Minimum	3902	mV
Battery Cell Voltage Average	3911	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	375.50	Volts
HV Battery Voltage (Module Sum)	375.30	Volts
HV Sensor A Pack Voltage	375.60	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	77	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | U0100-00 | Stored | Lost Communication With ECM/PCM "A"-

NAME	VALUE	UNITS
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DTC	C1 00 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	21	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407552	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.519	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.385	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts

HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.25	Amps
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current HVBatCmt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	

CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92688	watts
HV Battery Charge Power 10sec	81291	watts
HV Battery Discharge Power 2sec	99558	watts
HV Battery Discharge Power 10sec	97155	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3918	mV
Battery Cell Voltage Minimum	3902	mV
Battery Cell Voltage Average	3911	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	375.50	Volts
HV Battery Voltage (Module Sum)	375.30	Volts
HV Sensor A Pack Voltage	375.60	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	77	°F

HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | P1A21-00 | Stored | HV Battery Contactor Control Sequence Incorrect-

NAME	VALUE	UNITS
DTC	1A 21 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	19	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407492	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.872	Volts

Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	12.204	Volts
HVIL PWM peak voltage Sensed - Vehicle	12.074	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-3.60	Amps
HV Battery Current Sensor 2 Hall Low	-1.10	Amps
HV Battery Current HVBatCmt	-15.65	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-107.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	

CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92697	watts
HV Battery Charge Power 10sec	81237	watts
HV Battery Discharge Power 2sec	99555	watts
HV Battery Discharge Power 10sec	97152	watts
HV Battery Power	0072DF	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3949	mV
Battery Cell Voltage Minimum	3931	mV
Battery Cell Voltage Average	3941	mV
Battery Cell Highest Cell number	85	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	378.30	Volts
HV Battery Voltage (Module Sum)	378.20	Volts
HV Sensor A Pack Voltage	378.30	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	377.80	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	353.90	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	329.10	Volts

HV Sensor G Weld Contactor(Pack Negative) Voltage	-107.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

BPCM | P167B-00 | Stored | Controlled System Shutdown-

NAME	VALUE	UNITS
DTC	16 7B 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	155	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407492	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT-WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	

Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.753	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.678	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.596	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-18.75	Amps
HV Battery Current Sensor 2 Hall Low	-15.85	Amps
HV Battery Current HVBatCrnt	-15.75	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	

CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	03	
HV Battery Charge Power 2sec	92697	watts
HV Battery Charge Power 10sec	81237	watts
HV Battery Discharge Power 2sec	99555	watts
HV Battery Discharge Power 10sec	97152	watts
HV Battery Power	0072DB	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3947	mV

Battery Cell Voltage Minimum	3930	mV
Battery Cell Voltage Average	3940	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	378.20	Volts
HV Battery Voltage (Module Sum)	378.20	Volts
HV Sensor A Pack Voltage	378.30	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	378.50	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	378.30	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	378.30	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

BPCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	

FoM - for this DTC (lifetime fails)	89	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407488	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Restricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.783	Volts
Battery Lifetime AmpHrs of Charge	7188.6	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	PASS	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.563	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.487	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-16.65	Amps
HV Battery Current Sensor 2 Hall Low	-14.85	Amps
HV Battery Current HVBatCrnt	-15.15	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	

Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92736	watts

HV Battery Charge Power 10sec	81330	watts
HV Battery Discharge Power 2sec	99546	watts
HV Battery Discharge Power 10sec	97143	watts
HV Battery Power	0072F1	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3947	mV
Battery Cell Voltage Minimum	3929	mV
Battery Cell Voltage Average	3939	mV
Battery Cell Highest Cell number	80	
Battery Cell Lowest Cell number	60	
HV Battery Voltage (cell sum)	378.10	Volts
HV Battery Voltage (Module Sum)	378.00	Volts
HV Sensor A Pack Voltage	378.20	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	378.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	378.20	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	378.20	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

HCP | P0A0A-00 | Stored | High Voltage System Interlock Circuit "A"-

NAME	VALUE	UNITS
DTC	0A 0A 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	

Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	826	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	144	°F
Motor B Temp Sensor	138	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-1.844	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
Actual Torque - Motor A	-1.844	Ft-Lbs
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	36	AMP
Motor A - Inverter Current - phase B	-140	AMP
Motor A - Inverter Current - phase C	96	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	226	Degree

Motor A Resolver Angle	102	Degree
Electric Motor A Speed	3617.5	rpm
Electric Motor B Speed	2.0	rpm
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	464.00	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP__	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Idle	
Impact Event	False	
Outside Air Temperature	55.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	13.176	Volts
Battery Feed Voltage 2 Sense	13.176	Volts
Battery Feed Voltage 3 Sense	13.176	Volts
Hybrid System State	Reserved	
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	122	°F
Inverter B IGBT Temperature for phase C	118	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	175	ms

HCP | P0E15-00 | Active | Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-

NAME	VALUE	UNITS
DTC	0E 15 00	
Test Failed	True	
Test Failed This Operation Cycle	True	

Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.5	miles
Most Recent Odometer Value	11846.5	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44489324	sec
RAM stamps keyOn	30	sec
RAM Stamps	73079	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Applied	
PHEV Charging Status	No Charging	
Engine Speed	1403	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	D	
Propulsion System Active	True	
Vehicle Speed	4.1845	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	63	°F
HV Coolant Heater - Below 60V	False	
HV Coolant Heater - Measured Coolant Inlet Temp	52	°F
HV Coolant Heater - Measured Coolant Outlet Temp	50	°F
HV Coolant Heater - Actual Current Consumption	0.00	AMP
HV Coolant Heater - Measured High Voltage	382	Volts
HV Coolant Heater - Actual Calculated Power Consumption	0	W
HV Coolant Heater - Desired Power Consumption	0	W
HV Coolant Heater - Response Error	No Error	
HV Coolant Heater - Communication Error (SPI Interface Issue)	False	
HV Coolant Heater - High Voltage Out of Range	False	
HV Coolant Heater - Low Voltage Out of Range	False	
HV Coolant Heater - Coolant Temp Out of Range	False	
HV Coolant Heater - HV Protection	False	
HV Coolant Heater - Overheat Protection	False	
HV Coolant Heater - Coolant Inlet Temp Sensor Defect	False	
HV Coolant Heater - Coolant Outet Temp Sensor Defect	False	
HV Coolant Heater - Heater Core Temp Sensor Defect	False	
HV Coolant Heater - Short or Open Circuit at IGBTs	False	
HV Coolant Heater - Current Consumption at High Voltage Out of Range	False	

HV Coolant Heater - Memory Error	False	
HV Coolant Heater - DC/DC Voltage Out of Range	False	
Battery Feed Voltage 2 Sense	14.688	Volts
Battery Feed Voltage 3 Sense	14.544	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A - Inverter Current - phase A	64	AMP
Hybrid System State	Propulsion System Active	
Battery Feed Voltage 1 Sense	14.760	Volts
Actual Torque - Motor A	-12.260	Ft-Lbs
Actual Torque - Motor B	-16.316	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	235.988	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-235.988	Ft-Lbs
Commanded Torque - Motor A	-12.721	Ft-Lbs
Commanded Torque - Motor B	-15.118	Ft-Lbs
Motor A - Inverter Current - phase B	-16	AMP
Motor A - Inverter Current - phase C	-52	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	32	AMP
Motor B - Inverter Current - phase C	-36	AMP
Motor A Resolver Angle	136	Degree
Motor B Resolver Angle	198	Degree
Motor A Temp Sensor	50	°F
Motor B Temp Sensor	48	°F
Outside Air Temperature	44.6	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	379.50	Volts
Electric Motor A Speed	5241.5	rpm
Electric Motor B Speed	479.5	rpm
PIM DC Link Voltage - A	380	Volts
PIM DC Link Voltage - B	379	Volts
Inverter A IGBT Temperature for phase A	55	°F
Inverter A IGBT Temperature for phase B	54	°F
Inverter A IGBT Temperature for phase C	55	°F
Inverter B IGBT Temperature for phase A	52	°F
Inverter B IGBT Temperature for phase B	50	°F
Inverter B IGBT Temperature for phase C	52	°F
APM Status	Buck CV	
Impact Event	False	

HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-12.260	Ft-Lbs
Motor B Torque	-16.316	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	1	Days
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	3	Days
UTC Time - Hours	21	Hours
UTC Time - Minutes	14	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	644	ms

HCP | P1AEE-00 | Stored | MCPA HV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EE 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Engine Speed	1206	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI

Engine Coolant Temperature	192	°F
Actual Torque - Motor A	-1.291	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	5191.0	rpm
Motor A - Inverter Current - phase A	-96	AMP
Motor A - Inverter Current - phase B	-44	AMP
Motor A - Inverter Current - phase C	136	AMP
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Over Current Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Thermal Shutdown Fault - High-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	False	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U Thermal Warning Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - Low-Side	False	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Over Current Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Thermal Shutdown Fault - High-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase V SPI Error Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	
Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	False	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Thermal Warning Fault - High-Side	False	
Motor A Phase W Thermal Shutdown Fault - High-Side	False	

Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W SPI Error Fault - High-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - Low-Side	False	
Motor A Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.608	Volts
Battery Feed Voltage 3 Sense	13.536	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Hybrid System State	Determine Hybrid System State	
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
Passive Pump Coolant Temp In Sensor	117	°F
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	3000	rpm
Outside Air Temperature	55.4	°F
HV Contactor Status	Closed	
Inverter B Status Feedback	Inverter Faulted	
Battery Feed Voltage 1 Sense	13.608	Volts
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	226	Degree
Motor B Temp Sensor	138	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Battery Voltage from BPCM	472.00	Volts
Electric Motor B Speed	1.5	rpm
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F

Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	124	°F
Inverter B IGBT Temperature for phase C	118	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.291	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Commanded Inverter A State	Torque Control	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - Low-Side	False	
Motor A Phase U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VL - High-Side	False	
Motor A Phase V Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - High-Side	False	

Motor A Phase W Over Voltage Fault VH - High-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Under Voltage Fault VL - High-Side	False	
Motor A Phase W Over Voltage Fault VDD - High-Side	False	
Motor A Phase W Under Voltage Fault VDD - High-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - Low-Side	False	
Motor A Phase W Over Voltage Fault VL - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - Low-Side	False	
Motor A Phase W Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VDD - Low-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Inverter A Status Feedback	Inverter Faulted	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	780	ms

HCP | P1AEF-00 | Stored | MCPB High Voltage Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EF 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	

PHEV Charging Status	No Charging	
Engine Speed	1110	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Inverter B Input DC Current	0.0	AMP
Electric Motor B Speed	2.0	rpm
Commanded Inverter B State	Torque Control	
Motor B - Inverter Current - phase A	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	0	AMP
Inverter B Status Feedback	Inverter Faulted	
Motor B Phase U Short Fault - High-Side	False	
Motor B Phase U Cross Conduction Fault - High-Side	False	
Motor B Phase U Thermal Warning Fault - High-Side	False	
Motor B Phase U Thermal Shutdown Fault - High-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase U SPI Error Fault - High-Side	False	
Motor B Phase U Hardware Error Fault - High-Side	False	
Motor B Phase U Short Fault - Low-Side	False	
Motor B Phase U Cross Conduction Fault - Low-Side	False	
Motor B Phase U Over Current Fault - Low-Side	False	
Motor B Phase U Thermal Warning Fault - Low-Side	False	
Motor B Phase U Thermal Shutdown Fault - Low-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase U SPI Error Fault - Low-Side	False	
Motor B Phase U Hardware Error Fault - Low-Side	False	
Motor B Phase V Short Fault - High-Side	False	
Motor B Phase V Cross Conduction Fault - High-Side	False	
Motor B Phase V Over Current Fault - High-Side	False	
Motor B Phase V Thermal Warning Fault - High-Side	False	
Motor B Phase V Thermal Shutdown Fault - High-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase V SPI Error Fault - High-Side	False	
Motor B Phase V Hardware Error Fault - High-Side	False	
Motor B Phase V Short Fault - Low-Side	False	

Motor B Phase V Cross Conduction Fault - Low-Side	False	
Motor B Phase V Over Current Fault - Low-Side	False	
Motor B Phase V Thermal Warning Fault - Low-Side	False	
Motor B Phase V Thermal Shutdown Fault - Low-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase V SPI Error Fault - Low-Side	False	
Motor B Phase V Hardware Error Fault - Low-Side	False	
Motor B Phase W Short Fault - High-Side	False	
Motor B Phase W Cross Conduction Fault - High-Side	False	
Motor B Phase W Over Current Fault - High-Side	False	
Motor B Phase W Thermal Warning Fault - High-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase W SPI Error Fault - High-Side	False	
Motor B Phase W Hardware Error Fault - High-Side	False	
Motor B Phase W Short Fault - Low-Side	False	
Motor B Phase W Cross Conduction Fault - Low-Side	False	
Motor B Phase W Over Current Fault - Low-Side	False	
Motor B Phase W Thermal Warning Fault - Low-Side	False	
Motor B Phase W Thermal Shutdown Fault - Low-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase W SPI Error Fault - Low-Side	False	
Motor B Phase W Hardware Error Fault - Low-Side	False	
Motor B Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.392	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Battery Feed Voltage 1 Sense	13.392	Volts
Battery Feed Voltage 3 Sense	13.320	Volts
Hybrid System State	Determine Hybrid System State	
Actual Torque - Motor A	-1.383	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	80	AMP
Motor A - Inverter Current - phase B	56	AMP
Motor A - Inverter Current - phase C	-140	AMP
Motor A Resolver Angle	234	Degree
Motor A Temp Sensor	144	°F
Outside Air Temperature	55.4	°F

HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	468.80	Volts
Electric Motor A Speed	4586.0	rpm
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	124	°F
Inverter B IGBT Temperature for phase C	118	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.383	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Motor B Phase U Over Current Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - High-Side	False	
Motor B Phase U Under Voltage Fault VH - High-Side	False	
Motor B Phase U Over Voltage Fault VL - High-Side	False	
Motor B Phase U Under Voltage Fault VL - High-Side	False	
Motor B Phase U Over Voltage Fault VDD - High-Side	False	
Motor B Phase U Under Voltage Fault VDD - High-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - Low-Side	False	
Motor B Phase U Under Voltage Fault VH - Low-Side	False	
Motor B Phase U Over Voltage Fault VL - Low-Side	False	
Motor B Phase U Under Voltage Fault VL - Low-Side	False	
Motor B Phase U Over Voltage Fault VDD - Low-Side	False	
Motor B Phase U Under Voltage Fault VDD - Low-Side	False	
Motor B Phase V Over Voltage Fault VH - High-Side	False	
Motor B Phase V Under Voltage Fault VH - High-Side	False	
Motor B Phase V Over Voltage Fault VL - High-Side	False	
Motor B Phase V Under Voltage Fault VL - High-Side	False	
Motor B Phase V Over Voltage Fault VDD - High-Side	False	
Motor B Phase V Under Voltage Fault VDD - High-Side	False	
Motor B Phase V Over Voltage Fault VH - Low-Side	False	

Motor B Phase V Under Voltage Fault VH - Low-Side	False	
Motor B Phase V Over Voltage Fault VL - Low-Side	False	
Motor B Phase V Under Voltage Fault VL - Low-Side	False	
Motor B Phase V Over Voltage Fault VDD - Low-Side	False	
Motor B Phase V Under Voltage Fault VDD - Low-Side	False	
Motor B Phase W Over Voltage Fault VH - High-Side	False	
Motor B Phase W Under Voltage Fault VH - High-Side	False	
Motor B Phase W Over Voltage Fault VL - High-Side	False	
Motor B Phase W Under Voltage Fault VL - High-Side	False	
Motor B Phase W Over Voltage Fault VDD - High-Side	False	
Motor B Phase W Under Voltage Fault VDD - High-Side	False	
Motor B Phase W Thermal Shutdown Fault - High-Side	False	
Motor B Phase W Over Voltage Fault VH - Low-Side	False	
Motor B Phase W Under Voltage Fault VH - Low-Side	False	
Motor B Phase W Over Voltage Fault VL - Low-Side	False	
Motor B Phase W Under Voltage Fault VL - Low-Side	False	
Motor B Phase W Over Voltage Fault VDD - Low-Side	False	
Motor B Phase W Under Voltage Fault VDD - Low-Side	False	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	943	ms

HCP | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec

RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	1102	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	True	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	144	°F
Motor B Temp Sensor	138	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-14.473	Ft-Lbs
Motor B Torque	-17.976	Ft-Lbs
Actual Torque - Motor A	-14.473	Ft-Lbs
Actual Torque - Motor B	-17.976	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	232.393	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-232.393	Ft-Lbs
Commanded Torque - Motor A	-14.565	Ft-Lbs
Commanded Torque - Motor B	-18.160	Ft-Lbs
Motor A - Inverter Current - phase A	-16	AMP
Motor A - Inverter Current - phase B	68	AMP
Motor A - Inverter Current - phase C	-60	AMP
Motor B - Inverter Current - phase A	-24	AMP
Motor B - Inverter Current - phase B	40	AMP
Motor B - Inverter Current - phase C	-28	AMP
Motor B Resolver Angle	226	Degree
Motor A Resolver Angle	222	Degree
Electric Motor A Speed	4583.0	rpm
Electric Motor B Speed	2.5	rpm
PIM DC Link Voltage - A	379	Volts
PIM DC Link Voltage - B	377	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	378.00	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP___	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	

HV Contactor Status	Closed	
APM Status	Buck CV	
Impact Event	False	
Outside Air Temperature	55.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	14.688	Volts
Battery Feed Voltage 2 Sense	14.688	Volts
Battery Feed Voltage 3 Sense	14.688	Volts
Hybrid System State	Propulsion System Active	
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	118	°F
Inverter B IGBT Temperature for phase B	127	°F
Inverter B IGBT Temperature for phase C	118	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	206	ms

OBCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	

DTC Extended Data Record Number - Record #2	2C	
OBCM Status AC Present	AC Not OK	
AC Line Low	Valid	
AC Line High	Not Valid	
AC Side Current	0.80	Amps
AC Side Volt	1.9	Volts
HCP (EVCU) AC Current Max Cal	-0.50	Amps
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
Battery Side Current	0.40	Amps
Battery Side Voltage	262.9	Volts
HV OC	False	
HV OV	False	
HCP (EVCU) HV Current Max Cal	-12.00	Amps
HCP (EVCU) HV Volt Max Cal	152	Volt
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	113	°F
OBCM Temperature 2	113	°F
OBCM Temperature 3	100	°F
OBCM Temperature 4	97	°F
NTC1 OT	False	
NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	
External OBCM Inlet Temperature (CAN)	-40	°F
J1772 ICA	0	AMP
J1772 S2 Close	Open	
J1772 Stat	Veh Not Connected	
J1772 S2 Status	Open	
Control Pilot Amplitude	7.517	Volts
Control Pilot Duty Cycle	0.00	%
Control Pilot Frequency	1024	Hz
EVSE Pilot Stat	NO EVSE	
Prox Stat	Prox Out	
Prox Voltage	4.446	Volt
OBC Idle Tml	37	hrs
Watt-Hours of AC Power	0	W-Hrs
Watt Hours of Charge the HV Bus	0	W-Hrs
OBCM Mode	UTC	
OBCM Charger Ready	Off	
OBCM WU Status	Off	

Charge Enable Status	Chrg Disable	
HCP (EVCU) Shutdown Command	EVCU Operational	
HCP (EVCU) Enable Charge Command	Charge disable	
HCP (EVCU) OBC Mode Request	Idle	
Generic Fail Sts	No Functional Fail Present	
Chrg Fail Sts	Faulted - Charging Inhibited	
OBCM Wake Up Reason	Master Wake Up	
OBC Control Mth	Current	
OBCM Deraing Reason	AC Voltage Limit Derating	
Close Chrgr Cntctr	Open	
Chrgr Cntctr Stat	Open	
Chrg Mode	Charge Mode	
OBCM Fault Reason	Internal OBCM high voltage Fault	
Module A Primary - PFC Temperature	95	°F
Module A Primary - LLC Temperature	102	°F
Module A Secondary - Buck Temperature	97	°F
Module A Secondary - Ambient Temperature	113	°F
Module A Primary - AC Side Volt	1.2	Volts
Module A Primary - AC Side Current	-24.60	Amps
Module A Secondary - Battery Side Voltage	262.8	Volts
Module A Secondary - Battery Side Current	-24.90	Amps
Module A Secondary - Buck Output Voltage	0.1	Volts
Module B Primary - PFC Temperature	97	°F
Module B Primary - LLC Temperature	106	°F
Module B Secondary - Buck Temperature	100	°F
Module B Secondary - Ambient Temperature	113	°F
Module B Primary - AC Side Volt	2.6	Volts
Module B Primary - AC Side Current	-24.60	Amps
Module B Secondary - Battery Side Voltage	263.0	Volts
Module B Secondary - Battery Side Current	-24.70	Amps
Module B Secondary - Buck Output Voltage	0.1	Volts
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - Battery 12V Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	
OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	

OBCM - HV Over Current Protect	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	True	
OBCM - Loss BPCM Communication Protect	False	
OBCM - CAN Bus Off	False	
OBCM - Pilot Duty Fault	False	
OBCM - Prox Range To Low	False	
OBCM - Prox Range To High	False	
OBCM - HV Voltage Under MinCal Protect	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - ORC Loss of Communication	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	True	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Stuck Shutdown	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	
OBCM - ARC/CRC Fault	False	
OBCM - AC Contact Welded Fault	False	
Control Pilot Open fault	False	
Prox open fault	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - Prox Range Fault	False	
force shutdown fault	False	
pilot signal wake up issue because of EVSE	False	
HCP stuck low fault	False	
HCP stuck High fault	False	
Plant mode flag	False	
Retry fault flag	False	
Loss SBC communication (SPI)	False	
pilot input short to ground fault	False	
pilot input short to battery fault in Driver mode detecting	False	

pilot short to ground fault in driver mode detecting	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Under Voltage Protect	False	
Module A Primary - PFC Power Limit	True	
Module A Primary - PFC Enable States	False	
Module A Primary - LLC Enable States	False	
Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Relay Enable States	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - AC Vin Lost	True	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Standby Mode	True	
Module A Primary - Operate Mode	False	
Module A Primary - Shutdown Mode	False	
Module A Secondary - Aux Enable States	True	
Module A Secondary - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage Protect	False	
Module A Secondary - HV Over Voltage Protect	False	
Module A Secondary - HV Over Current Protect	False	
Module A Secondary - Over Temperature Protect	False	
Module A Secondary - Hot Warning	False	
Module A Secondary - HV Over Temperature Protect	False	
Module A Secondary - Ambient Over Temperature Protect	False	
Module A Secondary - HV Hot Warning	False	
Module A Secondary - Ambient Hot Warning	False	
Module A Secondary - Aux Over Voltage Protect	False	
Module A Secondary - Aux Under Voltage Protect	False	
Module A Secondary - Loss Primary Communication Protect	False	
Module A Secondary - LV Micro Enable Command	False	
Module A Secondary - Loss LV Communication Protect	False	

Module A Secondary - Primary Turn On States	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	True	
Module A Secondary - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	True	
Module A Secondary - PFC High Temperature Derating	False	
Module A Secondary - PFC Low Temperature Derating	False	
Module A Secondary - LLC High Temperature Derating	False	
Module A Secondary - LLC Low Temperature Derating	False	
Module A Secondary - HV High Temperature Derating	False	
Module A Secondary - HV Low Temperature Derating	False	
Module A Secondary - Ambient High Temperature Derating	False	
Module A Secondary - Ambient Low Temperature Derating	False	
Module A Secondary - AC Input Voltage Derating	True	
Module A Secondary - HV Output Voltage Derating	False	
Module B Primary - AC Under Voltage Protect	False	
Module B Primary - PFC Power Limit	True	
Module B Primary - PFC Enable States	False	
Module B Primary - LLC Enable States	False	
Module B Primary - PFC Under Voltage Protect	False	
Module B Primary - PFC Over Voltage Protect	False	
Module B Primary - Over Temperature Protect	False	
Module B Primary - Hot Warning	False	
Module B Primary - AC Present	False	
Module B Primary - PFC Over Temperature Protect	False	
Module B Primary - LLC Over Temperature Protect	False	
Module B Primary - PFC Hot Warning	False	
Module B Primary - LLC Hot Warning	False	
Module B Primary - AC Over Voltage Protect	True	
Module B Primary - Relay Enable States	False	
Module B Primary - Aux Over Voltage Protect	False	
Module B Primary - Aux Under Voltage Protect	False	
Module B Primary - Secondary Micro Enable Command	False	
Module B Primary - AC Vin Lost	True	
Module B Primary - Loss Communication Protect	False	
Module B Primary - Standby Mode	True	
Module B Primary - Operate Mode	False	
Module B Primary - Shutdown Mode	False	
Module B Secondary - Aux Enable States	True	
Module B Secondary - HV Enable States	False	
Module B Secondary - LLC Under Voltage Protect	False	
Module B Secondary - LLC Over Voltage Protect	False	

Module B Secondary - HV Over Voltage Protect	False	
Module B Secondary - HV Over Current Protect	False	
Module B Secondary - Over Temperature Protect	False	
Module B Secondary - Hot Warning	False	
Module B Secondary - HV Over Temperature Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Ambient Hot Warning	False	
Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - LV Micro Enable Command	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - Standby Mode	True	
Module B Secondary - Operate Mode	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - LV Micro Disable Command	True	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
Module B Secondary - Ambient High Temperature Derating	False	
Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - AC Input Voltage Derating	True	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	00	
SBC State_DF80	00	
SBC State_E100	00	
SBC State_E180	88	
SBC State_E300	00	
SBC State_E500	00	
SBC State_E580	00	
OBCM Charge Current Available	0.00	AMP
BPCM HV Battery Contactor Open	True	
SBC Bus Off	False	
CANSIP Bus Off	False	
OBC Charge Time	0	sec
OBC Charge Tml	40626	hrs
OBC Idle Time	0	sec

EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP Shutdown Command	No Shutdown	
HV Battey Contactor Open	False	
BPCM Request for HV Contactor	False	
HV Contactor Status	Open	
Ignition on Time for DTC	0	sec

VRM | B15AE-00 | Stored | Lost Low Voltage Differential Signal (LVDS) Connection with Media Port 2-

NAME	VALUE	UNITS
DTC	95 AE 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	7	

EBBM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S

Booster Supply	14.6	V
ECU Supply	14.6	V
Ignition	14.6	V
Pedal Travel Sensor Supply	5.0	V
iBooster System Mode	Ready Mode - iBooster is ready for actuation	
Brake Pedal Applied	brake pedal not applied	
iBooster ECU Temperature Channel 1	99.9781	°F
iBooster ECU Temperature Channel 2	99.9219	°F
iBooster Brake Pedal State	brake pedal not applied	
ESP Master Cylinder Pressure	0.00	PSI
Pedal Travel Sensor One	-0.1093736	mm_
Pedal Travel Sensor Two	-0.0664054	mm_
iBooster Rotary Position Sensor	0.00	Deg
iBooster Output Rod Stroke	0.00	mm_
iBooster Input Rod Stroke	0.00	mm_
iBooster Boost Body Stroke	-0.03	mm_
Vehicle Speed	0.00	MPH
Supplier Internal Code	173	

ABSO | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Controller Event	No	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Current System Mode	Engine Running	
Previous System Mode	Engine Running	
System Condition	OK	
Supply Voltage Valves	14.6	V
Brake Pedal Status	Released	

Supply voltage Pump	14.8	V
Brake Pedal Travel Sensor Position	0	%
Ignition Unfiltered	14.6	V
Wheel Speed Left Front	0.000	MPH
Rotation Direction Left Front	Forward	
Wheel Speed Right Front	0.000	MPH
Rotation Direction Right Front	Forward	
Wheel Speed Left Rear	0.000	MPH
Rotation Direction Left Rear	Forward	
Wheel Speed Right Rear	0.000	MPH
Rotation Direction Right Rear	Forward	
Steering Wheel Angle	0.00	°
Longitudinal Acceleration	0.00	m/s^2
Lateral Acceleration	-0.22	m/s^2
Yaw Rate	0.000	°/s
Primary Circuit Pressure	0.00	PSI
Engine Speed	1102.0	rpm
Accelerator Pedal Position	0.0	%
ABS control	Not Active	
ASR control	Not Active	
MSR control	Not Active	
EBV control	Not Active	
ESP Control	Not Active	
HSA control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
Plant Mode	No	
EPB Mode Status	Static	
BLS High	No	
BLS Low	Yes	
Park Brake	Not Activated	
ESP-OFF mode	No	
Clutch	Not Activated	
Stop Coordinator Active	No	
Actual Gear	P	
Transmission selector lever setting	P	
Status Parking Brake Left	Brake is Released	
Status Parking Brake Right	Brake is Released	
EPB Switch Status	Idle	
Supplier Internal Code	233	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for U0111

No Snapshot Data available for P0AFA-00

No Snapshot Data available for P0AFB-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0151-00

No Snapshot Data available for U0100-00

No Snapshot Data available for P1A21-00

No Snapshot Data available for P167B-00

No Snapshot Data available for U0293-00

No Snapshot Data available for P0A0A-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1AEE-00

No Snapshot Data available for P1AEF-00

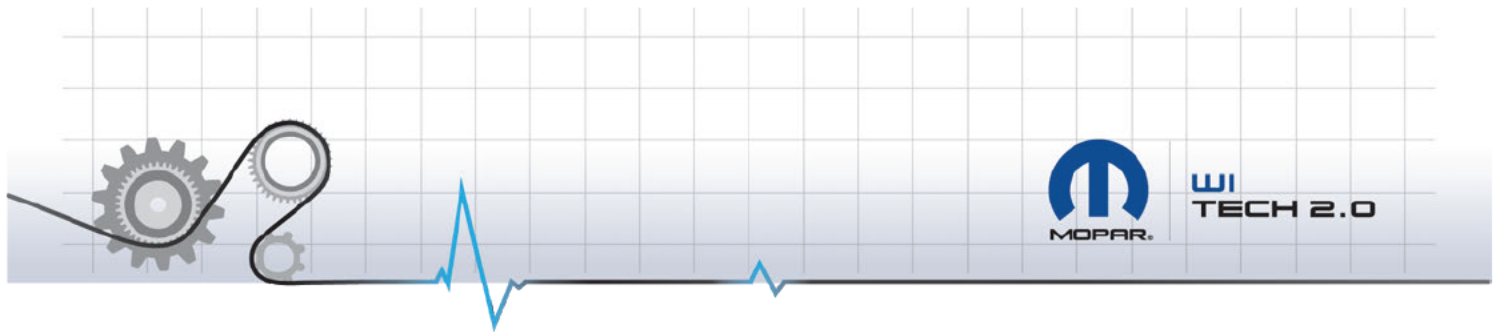
No Snapshot Data available for U0111-00

No Snapshot Data available for U0293-00

No Snapshot Data available for B15AE-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0111-00



VEHICLE SCAN REPORT

Vehicle 2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE
VIN [REDACTED]

Odometer 11846.5 miles
Publication Date May 3, 2022, 4:19:35 PM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AF	[REDACTED]	[REDACTED]	68499122AF
PLGM	Power Liftgate	CAN-I	68466171AI	[REDACTED]	—	68466171AI
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	[REDACTED]	[REDACTED]	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	[REDACTED]	[REDACTED]	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AM	[REDACTED]	[REDACTED]	68240089AM
ORC	Occupant Restraint	CAN-C	68480710AC	[REDACTED]	[REDACTED]	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	[REDACTED]	[REDACTED]	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	[REDACTED]	[REDACTED]	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	[REDACTED]	[REDACTED]	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	[REDACTED]	[REDACTED]	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	[REDACTED]	[REDACTED]	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	[REDACTED]	[REDACTED]	68517013AB
AMP	Amplifier	CAN-I	68547722AB	[REDACTED]	[REDACTED]	68547722AB
IPC	Instrument Panel Cluster	CAN-C	68434960AE	[REDACTED]	[REDACTED]	68434960AE
PTS	Parktronics	CAN-C	68485862AA	[REDACTED]	[REDACTED]	68485862AA
SCCM	Steering Column Control Module	CAN-C	68360889AD	[REDACTED]	[REDACTED]	68360889AD
BCM	Body Controller	CAN-C	68491085AG	[REDACTED]	[REDACTED]	68491085AG

ACC	Adaptive Cruise Control	CAN-C	68540436AA			68540436AA
RADIO	Radio	CAN-I	68465292AE			68465292AE
OCM	Occupant Classification	CAN-C	68403127AA			68403127AA
HVACR	Heat, Ventilation and A/C Rear	CAN-I	68373079AB			68373079AB
LBSS	Left Blind Spot Sensor	CAN-I	04672786AB			04672786AB
RBSS	Right Blind Spot Sensor	CAN-I	04672786AB			04672786AB
FFCM	Forward Facing Camera Module	CAN-C	68493395AA			68493395AA
EDM	External Disc Module	CAN-I	68499745AA			68499745AA
APM	Accessory Power Module	CAN-C	05185046AB			05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE			05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AJ			05185116AJ
OBCM	On Board Charging Module	CAN-C	05185047AE			05185047AE
MSMP	Memory Seat Module - Passenger	CAN-I	68321862AC			68321862AC
DSM	Display Screen Module	CAN-I	68437339AD			68437339AD
VRM	Video Routing Module	CAN-I	68493702AA			68493702AA
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30PD2AA			6WL30PD2AA
CVPM	Central vision processing module	CAN-I	56029920AB			56029920AB
EAC	Electric A/C Compressor	CAN-C	68237995AG			68237995AG
AHCP	Auxiliary Hybrid Control Processor	CAN-C	05185117AJ			05185117AJ
EBBM	Electronic Brake Booster Module	CAN-C	68461813AB			68461813AB
ABSO	Anti Lock Brakes OBD	CAN-C	68471122AD			68471122AD
SGW	Security Gateway Module	CAN-C	68488429AB			68488429AB
TBM2	Telematic Box Module 2	CAN-C	68546266AB			68546266AB

ECU SUMMARY INFO (CONT...)

ECU	COUNTRY CODE	HARDWARE VERSION	SOFTWARE VERSION	IDENT	CVNS
PCM	USA	1B 47	75 02 00	4422	7DC2E312
PLGM	USA	0	5084	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	

ESM	USA / USA	0F 24 00	12 28 FF	4402	
ORC	USA / USA	12 1A 00	13 2E 00	4301	
EPS	USA / USA	12 2A 00	12 1E 01	4502	
HVAC	USA	0E 09 00	14 2F 01	4401	
DDM	USA	11 07 00	14 07 00	4202	
PDM	USA	11 07 00	14 07 00	4202	
DMRL	USA / USA	10 0B 00	14 08 00	4201	
DMRR	USA / USA	10 0B 00	14 08 00	4201	
PSDML	USA / USA	10 17 00	14 10 12	4001	
PSDMR	USA / USA	10 17 00	14 10 12	4001	
MSM	USA	0F 2B 00	10 27 03	4101	
CSWM	USA	11 2A 00	14 25 00	4302	
AMP	USA	0F 06 01	15 0F 01	4021	
IPC	USA / USA	12 06 00	14 2B 00	4705	
PTS	USA	0E 32 00	14 07 00	4311	
SCCM	USA	13 28 00	13 29 00	4301	
BCM	USA	0D 11 00	14 26 90	4420	
ACC	USA / USA	14 12 01	14 26 01	4400	
RADIO		65	5671	000200000008	
OCM	USA / USA	11 1F 01	0E 2F 02	4030	
HVACR	USA	0E 09 00	10 03 02	4301	
LBSS	USA / USA	11 30 02	12 0D 00	4202	
RBSS	USA / USA	11 30 02	12 0D 00	4202	
FFCM	USA / USA	11 06 00	13 1E 00	4102	
EDM	USA	12 0A 00	11 08 00	4000	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM		0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	5D31A9B9 16AACD23 050DC953
OBCM	USA	0F 0D 00	12 02 00	4002	
MSMP	USA	0F 2B 00	10 27 03	4001	
DSM	USA / USA	14 0C 00	14 28 00	4300	
VRM	USA / USA	0F 1C 00	14 1E 14	4001	
RCCC	USA	0F 1D 00	13 04 00	4000	
CVPM	USA / USA	11 27 01	14 0C 01	4004	
EAC	USA	0E 34 00	12 0F 00	4102	
AHCP	USA	11 1F 04	0F 2D 00	4000	
EBBM	USA	0E 19 02	14 0D 18	4000	E5898FA5
ABSO	USA	0E 15 02	14 1B 26	4201	4F158D1B
SGW		5	969	4103	
TBM2	USA	13 0E 02	14 2A 5C	4104	

DTC SUMMARY

ECU	DTC CODE	DTC DESCRIPTION	STATUS
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PCM	U0111	Lost Communication With Battery Energy Control Module	Pending
APM	P0AFA-00	Hybrid/EV Battery System Voltage Low-	Stored
APM	P0AFB-00	Hybrid/EV Battery System Voltage High-	Stored
APM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
BPCM	U0151-00	Lost Communication with Occupant Restraint Controller (ORC)-	Stored
BPCM	U0100-00	Lost Communication With ECM/PCM "A"-	Stored
BPCM	P1A21-00	HV Battery Contactor Control Sequence Incorrect-	Stored
BPCM	P167B-00	Controlled System Shutdown-	Stored
BPCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
HCP	P0A0A-00	High Voltage System Interlock Circuit "A"-	Stored
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Stored
HCP	P1AEF-00	MCPB High Voltage Battery System Voltage High-	Stored
HCP	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
OBCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
VRM	B15AE-00	Lost Low Voltage Differential Signal (LVDS) Connection with Media Port 2-	Stored
EBBM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
ABSO	U0111-00	Lost Communication With Battery Energy Control Module-	Stored

ENVIRONMENTAL DATA SUMMARY

PCM | U0111 | Pending | Lost Communication With Battery Energy Control Module

NAME	VALUE	UNITS
Number of DTC	0	
DTC		
DTC Readiness Flag		
DTC Storage State		
Warning Indicator Request State		
Odometer		miles
Accumulation Timer		minutes
Ignition Key Cycles		
Starts Since Set Counter		
Key Cycles Since DTC Last Set Counter		
Warm Up Cycles		
Good Trip Counter		

APM | P0AFA-00 | Stored | Hybrid/EV Battery System Voltage Low-

NAME	VALUE	UNITS
DTC	0A FA 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	

Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of short circuit at LV / Failure9	
Low voltage battery voltage from HCP	12.4800	Volt

APM | POAFB-00 | Stored | Hybrid/EV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	0A FB 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	

APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Temp 1 too high / Failure5	
Low voltage battery voltage from HCP	13.0800	Volt

APM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Buck_CV	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Buck_CV	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Memory failure/Failure 25	
Low voltage battery voltage from HCP	14.6800	Volt

BPCM | U0151-00 | Stored | Lost Communication with Occupant Restraint Controller (ORC)-

NAME	VALUE	UNITS
DTC	C1 51 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	

Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	33	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407552	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.519	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.385	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.25	Amps
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current HVBatCrnt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F

Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and Circuitry ISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	

Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92688	watts
HV Battery Charge Power 10sec	81291	watts
HV Battery Discharge Power 2sec	99558	watts
HV Battery Discharge Power 10sec	97155	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3918	mV
Battery Cell Voltage Minimum	3902	mV
Battery Cell Voltage Average	3911	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	375.50	Volts
HV Battery Voltage (Module Sum)	375.30	Volts
HV Sensor A Pack Voltage	375.60	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	77	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | U0100-00 | Stored | Lost Communication With ECM/PCM "A"-

NAME	VALUE	UNITS
------	-------	-------

DTC	C1 00 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	21	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407552	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.519	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.385	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts

HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-1.25	Amps
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current HVBatCmnt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	

CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92688	watts
HV Battery Charge Power 10sec	81291	watts
HV Battery Discharge Power 2sec	99558	watts
HV Battery Discharge Power 10sec	97155	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3918	mV
Battery Cell Voltage Minimum	3902	mV
Battery Cell Voltage Average	3911	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	375.50	Volts
HV Battery Voltage (Module Sum)	375.30	Volts
HV Sensor A Pack Voltage	375.60	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	77	°F

HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | P1A21-00 | Stored | HV Battery Contactor Control Sequence Incorrect-

NAME	VALUE	UNITS
DTC	1A 21 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	19	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407492	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.872	Volts

Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	12.204	Volts
HVIL PWM peak voltage Sensed - Vehicle	12.074	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-3.60	Amps
HV Battery Current Sensor 2 Hall Low	-1.10	Amps
HV Battery Current HVBatCmt	-15.65	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-107.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	

CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92697	watts
HV Battery Charge Power 10sec	81237	watts
HV Battery Discharge Power 2sec	99555	watts
HV Battery Discharge Power 10sec	97152	watts
HV Battery Power	0072DF	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3949	mV
Battery Cell Voltage Minimum	3931	mV
Battery Cell Voltage Average	3941	mV
Battery Cell Highest Cell number	85	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	378.30	Volts
HV Battery Voltage (Module Sum)	378.20	Volts
HV Sensor A Pack Voltage	378.30	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	377.80	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	353.90	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	329.10	Volts

HV Sensor G Weld Contactor(Pack Negative) Voltage	-107.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

BPCM | P167B-00 | Stored | Controlled System Shutdown-

NAME	VALUE	UNITS
DTC	16 7B 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	155	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407492	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT-WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	

Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.753	Volts
Battery Lifetime AmpHrs of Charge	7188.7	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.678	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.596	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-18.75	Amps
HV Battery Current Sensor 2 Hall Low	-15.85	Amps
HV Battery Current HVBatCrnt	-15.75	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	

CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	03	
HV Battery Charge Power 2sec	92697	watts
HV Battery Charge Power 10sec	81237	watts
HV Battery Discharge Power 2sec	99555	watts
HV Battery Discharge Power 10sec	97152	watts
HV Battery Power	0072DB	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3947	mV

Battery Cell Voltage Minimum	3930	mV
Battery Cell Voltage Average	3940	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	378.20	Volts
HV Battery Voltage (Module Sum)	378.20	Volts
HV Sensor A Pack Voltage	378.30	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	378.50	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	378.30	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	378.30	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

BPCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	

FoM - for this DTC (lifetime fails)	89	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44407488	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Restricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.26	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.783	Volts
Battery Lifetime AmpHrs of Charge	7188.6	AHr
Battery Lifetime AmpHrs of DisCharge	7156.2	AHr
SOC at time of Fault	73.7	%
Power Up SOC at time of Fault	63.5	%
HVIL Status -Vehicle	PASS	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.563	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.487	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-16.65	Amps
HV Battery Current Sensor 2 Hall Low	-14.85	Amps
HV Battery Current HVBatCrnt	-15.15	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	72	°F
BPCM temperature max	55	°F
BPCM temperature min	54	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	

Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	Latched	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	92736	watts

HV Battery Charge Power 10sec	81330	watts
HV Battery Discharge Power 2sec	99546	watts
HV Battery Discharge Power 10sec	97143	watts
HV Battery Power	0072F1	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3270	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3947	mV
Battery Cell Voltage Minimum	3929	mV
Battery Cell Voltage Average	3939	mV
Battery Cell Highest Cell number	80	
Battery Cell Lowest Cell number	60	
HV Battery Voltage (cell sum)	378.10	Volts
HV Battery Voltage (Module Sum)	378.00	Volts
HV Sensor A Pack Voltage	378.20	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	378.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	378.20	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	378.20	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	55	°F
Battery Temperature Minimum Module	54	°F
Battery Temperature Average Module	55	°F
Battery Temperature Highest Sensor number	06	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6730	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Active	

HCP | P0A0A-00 | Stored | High Voltage System Interlock Circuit "A"-

NAME	VALUE	UNITS
DTC	0A 0A 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	

Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	826	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	144	°F
Motor B Temp Sensor	138	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-1.844	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
Actual Torque - Motor A	-1.844	Ft-Lbs
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	36	AMP
Motor A - Inverter Current - phase B	-140	AMP
Motor A - Inverter Current - phase C	96	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	226	Degree

Motor A Resolver Angle	102	Degree
Electric Motor A Speed	3617.5	rpm
Electric Motor B Speed	2.0	rpm
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	464.00	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP__	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Idle	
Impact Event	False	
Outside Air Temperature	55.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	13.176	Volts
Battery Feed Voltage 2 Sense	13.176	Volts
Battery Feed Voltage 3 Sense	13.176	Volts
Hybrid System State	Reserved	
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	122	°F
Inverter B IGBT Temperature for phase C	118	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	175	ms

HCP | P0E15-00 | Active | Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-

NAME	VALUE	UNITS
DTC	0E 15 00	
Test Failed	True	
Test Failed This Operation Cycle	True	

Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.5	miles
Most Recent Odometer Value	11846.5	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44489324	sec
RAM stamps keyOn	30	sec
RAM Stamps	73079	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Applied	
PHEV Charging Status	No Charging	
Engine Speed	1403	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	D	
Propulsion System Active	True	
Vehicle Speed	4.1845	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	63	°F
HV Coolant Heater - Below 60V	False	
HV Coolant Heater - Measured Coolant Inlet Temp	52	°F
HV Coolant Heater - Measured Coolant Outlet Temp	50	°F
HV Coolant Heater - Actual Current Consumption	0.00	AMP
HV Coolant Heater - Measured High Voltage	382	Volts
HV Coolant Heater - Actual Calculated Power Consumption	0	W
HV Coolant Heater - Desired Power Consumption	0	W
HV Coolant Heater - Response Error	No Error	
HV Coolant Heater - Communication Error (SPI Interface Issue)	False	
HV Coolant Heater - High Voltage Out of Range	False	
HV Coolant Heater - Low Voltage Out of Range	False	
HV Coolant Heater - Coolant Temp Out of Range	False	
HV Coolant Heater - HV Protection	False	
HV Coolant Heater - Overheat Protection	False	
HV Coolant Heater - Coolant Inlet Temp Sensor Defect	False	
HV Coolant Heater - Coolant Outet Temp Sensor Defect	False	
HV Coolant Heater - Heater Core Temp Sensor Defect	False	
HV Coolant Heater - Short or Open Circuit at IGBTs	False	
HV Coolant Heater - Current Consumption at High Voltage Out of Range	False	

HV Coolant Heater - Memory Error	False	
HV Coolant Heater - DC/DC Voltage Out of Range	False	
Battery Feed Voltage 2 Sense	14.688	Volts
Battery Feed Voltage 3 Sense	14.544	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A - Inverter Current - phase A	64	AMP
Hybrid System State	Propulsion System Active	
Battery Feed Voltage 1 Sense	14.760	Volts
Actual Torque - Motor A	-12.260	Ft-Lbs
Actual Torque - Motor B	-16.316	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	235.988	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-235.988	Ft-Lbs
Commanded Torque - Motor A	-12.721	Ft-Lbs
Commanded Torque - Motor B	-15.118	Ft-Lbs
Motor A - Inverter Current - phase B	-16	AMP
Motor A - Inverter Current - phase C	-52	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	32	AMP
Motor B - Inverter Current - phase C	-36	AMP
Motor A Resolver Angle	136	Degree
Motor B Resolver Angle	198	Degree
Motor A Temp Sensor	50	°F
Motor B Temp Sensor	48	°F
Outside Air Temperature	44.6	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	379.50	Volts
Electric Motor A Speed	5241.5	rpm
Electric Motor B Speed	479.5	rpm
PIM DC Link Voltage - A	380	Volts
PIM DC Link Voltage - B	379	Volts
Inverter A IGBT Temperature for phase A	55	°F
Inverter A IGBT Temperature for phase B	54	°F
Inverter A IGBT Temperature for phase C	55	°F
Inverter B IGBT Temperature for phase A	52	°F
Inverter B IGBT Temperature for phase B	50	°F
Inverter B IGBT Temperature for phase C	52	°F
APM Status	Buck CV	
Impact Event	False	

HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-12.260	Ft-Lbs
Motor B Torque	-16.316	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	1	Days
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	3	Days
UTC Time - Hours	21	Hours
UTC Time - Minutes	14	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	644	ms

HCP | P1AEE-00 | Stored | MCPA HV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EE 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Engine Speed	1206	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI

Engine Coolant Temperature	192	°F
Actual Torque - Motor A	-1.291	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	5191.0	rpm
Motor A - Inverter Current - phase A	-96	AMP
Motor A - Inverter Current - phase B	-44	AMP
Motor A - Inverter Current - phase C	136	AMP
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Over Current Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Thermal Shutdown Fault - High-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	False	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U Thermal Warning Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - Low-Side	False	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Over Current Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Thermal Shutdown Fault - High-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase V SPI Error Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	
Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	False	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Thermal Warning Fault - High-Side	False	
Motor A Phase W Thermal Shutdown Fault - High-Side	False	

Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W SPI Error Fault - High-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - Low-Side	False	
Motor A Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.608	Volts
Battery Feed Voltage 3 Sense	13.536	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Hybrid System State	Determine Hybrid System State	
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
Passive Pump Coolant Temp In Sensor	117	°F
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	3000	rpm
Outside Air Temperature	55.4	°F
HV Contactor Status	Closed	
Inverter B Status Feedback	Inverter Faulted	
Battery Feed Voltage 1 Sense	13.608	Volts
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	226	Degree
Motor B Temp Sensor	138	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Battery Voltage from BPCM	472.00	Volts
Electric Motor B Speed	1.5	rpm
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F

Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	124	°F
Inverter B IGBT Temperature for phase C	118	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.291	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Commanded Inverter A State	Torque Control	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - Low-Side	False	
Motor A Phase U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VL - High-Side	False	
Motor A Phase V Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - High-Side	False	

Motor A Phase W Over Voltage Fault VH - High-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Under Voltage Fault VL - High-Side	False	
Motor A Phase W Over Voltage Fault VDD - High-Side	False	
Motor A Phase W Under Voltage Fault VDD - High-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - Low-Side	False	
Motor A Phase W Over Voltage Fault VL - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - Low-Side	False	
Motor A Phase W Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VDD - Low-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Inverter A Status Feedback	Inverter Faulted	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	780	ms

HCP | P1AEF-00 | Stored | MCPB High Voltage Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EF 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec
RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	

PHEV Charging Status	No Charging	
Engine Speed	1110	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Actual Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Inverter B Input DC Current	0.0	AMP
Electric Motor B Speed	2.0	rpm
Commanded Inverter B State	Torque Control	
Motor B - Inverter Current - phase A	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	0	AMP
Inverter B Status Feedback	Inverter Faulted	
Motor B Phase U Short Fault - High-Side	False	
Motor B Phase U Cross Conduction Fault - High-Side	False	
Motor B Phase U Thermal Warning Fault - High-Side	False	
Motor B Phase U Thermal Shutdown Fault - High-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase U SPI Error Fault - High-Side	False	
Motor B Phase U Hardware Error Fault - High-Side	False	
Motor B Phase U Short Fault - Low-Side	False	
Motor B Phase U Cross Conduction Fault - Low-Side	False	
Motor B Phase U Over Current Fault - Low-Side	False	
Motor B Phase U Thermal Warning Fault - Low-Side	False	
Motor B Phase U Thermal Shutdown Fault - Low-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase U SPI Error Fault - Low-Side	False	
Motor B Phase U Hardware Error Fault - Low-Side	False	
Motor B Phase V Short Fault - High-Side	False	
Motor B Phase V Cross Conduction Fault - High-Side	False	
Motor B Phase V Over Current Fault - High-Side	False	
Motor B Phase V Thermal Warning Fault - High-Side	False	
Motor B Phase V Thermal Shutdown Fault - High-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase V SPI Error Fault - High-Side	False	
Motor B Phase V Hardware Error Fault - High-Side	False	
Motor B Phase V Short Fault - Low-Side	False	

Motor B Phase V Cross Conduction Fault - Low-Side	False	
Motor B Phase V Over Current Fault - Low-Side	False	
Motor B Phase V Thermal Warning Fault - Low-Side	False	
Motor B Phase V Thermal Shutdown Fault - Low-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase V SPI Error Fault - Low-Side	False	
Motor B Phase V Hardware Error Fault - Low-Side	False	
Motor B Phase W Short Fault - High-Side	False	
Motor B Phase W Cross Conduction Fault - High-Side	False	
Motor B Phase W Over Current Fault - High-Side	False	
Motor B Phase W Thermal Warning Fault - High-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase W SPI Error Fault - High-Side	False	
Motor B Phase W Hardware Error Fault - High-Side	False	
Motor B Phase W Short Fault - Low-Side	False	
Motor B Phase W Cross Conduction Fault - Low-Side	False	
Motor B Phase W Over Current Fault - Low-Side	False	
Motor B Phase W Thermal Warning Fault - Low-Side	False	
Motor B Phase W Thermal Shutdown Fault - Low-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase W SPI Error Fault - Low-Side	False	
Motor B Phase W Hardware Error Fault - Low-Side	False	
Motor B Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.392	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Battery Feed Voltage 1 Sense	13.392	Volts
Battery Feed Voltage 3 Sense	13.320	Volts
Hybrid System State	Determine Hybrid System State	
Actual Torque - Motor A	-1.383	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	80	AMP
Motor A - Inverter Current - phase B	56	AMP
Motor A - Inverter Current - phase C	-140	AMP
Motor A Resolver Angle	234	Degree
Motor A Temp Sensor	144	°F
Outside Air Temperature	55.4	°F

HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	468.80	Volts
Electric Motor A Speed	4586.0	rpm
PIM DC Link Voltage - A	473	Volts
PIM DC Link Voltage - B	472	Volts
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	117	°F
Inverter B IGBT Temperature for phase B	124	°F
Inverter B IGBT Temperature for phase C	118	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.383	Ft-Lbs
Motor B Torque	0.000	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Motor B Phase U Over Current Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - High-Side	False	
Motor B Phase U Under Voltage Fault VH - High-Side	False	
Motor B Phase U Over Voltage Fault VL - High-Side	False	
Motor B Phase U Under Voltage Fault VL - High-Side	False	
Motor B Phase U Over Voltage Fault VDD - High-Side	False	
Motor B Phase U Under Voltage Fault VDD - High-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - Low-Side	False	
Motor B Phase U Under Voltage Fault VH - Low-Side	False	
Motor B Phase U Over Voltage Fault VL - Low-Side	False	
Motor B Phase U Under Voltage Fault VL - Low-Side	False	
Motor B Phase U Over Voltage Fault VDD - Low-Side	False	
Motor B Phase U Under Voltage Fault VDD - Low-Side	False	
Motor B Phase V Over Voltage Fault VH - High-Side	False	
Motor B Phase V Under Voltage Fault VH - High-Side	False	
Motor B Phase V Over Voltage Fault VL - High-Side	False	
Motor B Phase V Under Voltage Fault VL - High-Side	False	
Motor B Phase V Over Voltage Fault VDD - High-Side	False	
Motor B Phase V Under Voltage Fault VDD - High-Side	False	
Motor B Phase V Over Voltage Fault VH - Low-Side	False	

Motor B Phase V Under Voltage Fault VH - Low-Side	False	
Motor B Phase V Over Voltage Fault VL - Low-Side	False	
Motor B Phase V Under Voltage Fault VL - Low-Side	False	
Motor B Phase V Over Voltage Fault VDD - Low-Side	False	
Motor B Phase V Under Voltage Fault VDD - Low-Side	False	
Motor B Phase W Over Voltage Fault VH - High-Side	False	
Motor B Phase W Under Voltage Fault VH - High-Side	False	
Motor B Phase W Over Voltage Fault VL - High-Side	False	
Motor B Phase W Under Voltage Fault VL - High-Side	False	
Motor B Phase W Over Voltage Fault VDD - High-Side	False	
Motor B Phase W Under Voltage Fault VDD - High-Side	False	
Motor B Phase W Thermal Shutdown Fault - High-Side	False	
Motor B Phase W Over Voltage Fault VH - Low-Side	False	
Motor B Phase W Under Voltage Fault VH - Low-Side	False	
Motor B Phase W Over Voltage Fault VL - Low-Side	False	
Motor B Phase W Under Voltage Fault VL - Low-Side	False	
Motor B Phase W Over Voltage Fault VDD - Low-Side	False	
Motor B Phase W Under Voltage Fault VDD - Low-Side	False	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	943	ms

HCP | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.4	miles
Most Recent Odometer Value	11846.4	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44407488	sec
RAM stamps keyOn	1320	sec

RAM Stamps	73060	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	1102	rpm
HV Battery SOC	74	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	True	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	144	°F
Motor B Temp Sensor	138	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	192	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-14.473	Ft-Lbs
Motor B Torque	-17.976	Ft-Lbs
Actual Torque - Motor A	-14.473	Ft-Lbs
Actual Torque - Motor B	-17.976	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	232.393	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-232.393	Ft-Lbs
Commanded Torque - Motor A	-14.565	Ft-Lbs
Commanded Torque - Motor B	-18.160	Ft-Lbs
Motor A - Inverter Current - phase A	-16	AMP
Motor A - Inverter Current - phase B	68	AMP
Motor A - Inverter Current - phase C	-60	AMP
Motor B - Inverter Current - phase A	-24	AMP
Motor B - Inverter Current - phase B	40	AMP
Motor B - Inverter Current - phase C	-28	AMP
Motor B Resolver Angle	226	Degree
Motor A Resolver Angle	222	Degree
Electric Motor A Speed	4583.0	rpm
Electric Motor B Speed	2.5	rpm
PIM DC Link Voltage - A	379	Volts
PIM DC Link Voltage - B	377	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	378.00	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP___	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	

HV Contactor Status	Closed	
APM Status	Buck CV	
Impact Event	False	
Outside Air Temperature	55.4	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	14.688	Volts
Battery Feed Voltage 2 Sense	14.688	Volts
Battery Feed Voltage 3 Sense	14.688	Volts
Hybrid System State	Propulsion System Active	
Inverter A IGBT Temperature for phase A	122	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	120	°F
Inverter B IGBT Temperature for phase A	118	°F
Inverter B IGBT Temperature for phase B	127	°F
Inverter B IGBT Temperature for phase C	118	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	2	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	30	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	206	ms

OBCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	6	

DTC Extended Data Record Number - Record #2	2C	
OBCM Status AC Present	AC Not OK	
AC Line Low	Valid	
AC Line High	Not Valid	
AC Side Current	0.80	Amps
AC Side Volt	1.9	Volts
HCP (EVCU) AC Current Max Cal	-0.50	Amps
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
Battery Side Current	0.40	Amps
Battery Side Voltage	262.9	Volts
HV OC	False	
HV OV	False	
HCP (EVCU) HV Current Max Cal	-12.00	Amps
HCP (EVCU) HV Volt Max Cal	152	Volt
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	113	°F
OBCM Temperature 2	113	°F
OBCM Temperature 3	100	°F
OBCM Temperature 4	97	°F
NTC1 OT	False	
NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	
External OBCM Inlet Temperature (CAN)	-40	°F
J1772 ICA	0	AMP
J1772 S2 Close	Open	
J1772 Stat	Veh Not Connected	
J1772 S2 Status	Open	
Control Pilot Amplitude	7.517	Volts
Control Pilot Duty Cycle	0.00	%
Control Pilot Frequency	1024	Hz
EVSE Pilot Stat	NO EVSE	
Prox Stat	Prox Out	
Prox Voltage	4.446	Volt
OBC Idle Tml	37	hrs
Watt-Hours of AC Power	0	W-Hrs
Watt Hours of Charge the HV Bus	0	W-Hrs
OBCM Mode	UTC	
OBCM Charger Ready	Off	
OBCM WU Status	Off	

Charge Enable Status	Chrg Disable	
HCP (EVCU) Shutdown Command	EVCU Operational	
HCP (EVCU) Enable Charge Command	Charge disable	
HCP (EVCU) OBC Mode Request	Idle	
Generic Fail Sts	No Functional Fail Present	
Chrg Fail Sts	Faulted - Charging Inhibited	
OBCM Wake Up Reason	Master Wake Up	
OBC Control Mth	Current	
OBCM Deraing Reason	AC Voltage Limit Derating	
Close Chrgr Cntctr	Open	
Chrgr Cntctr Stat	Open	
Chrg Mode	Charge Mode	
OBCM Fault Reason	Internal OBCM high voltage Fault	
Module A Primary - PFC Temperature	95	°F
Module A Primary - LLC Temperature	102	°F
Module A Secondary - Buck Temperature	97	°F
Module A Secondary - Ambient Temperature	113	°F
Module A Primary - AC Side Volt	1.2	Volts
Module A Primary - AC Side Current	-24.60	Amps
Module A Secondary - Battery Side Voltage	262.8	Volts
Module A Secondary - Battery Side Current	-24.90	Amps
Module A Secondary - Buck Output Voltage	0.1	Volts
Module B Primary - PFC Temperature	97	°F
Module B Primary - LLC Temperature	106	°F
Module B Secondary - Buck Temperature	100	°F
Module B Secondary - Ambient Temperature	113	°F
Module B Primary - AC Side Volt	2.6	Volts
Module B Primary - AC Side Current	-24.60	Amps
Module B Secondary - Battery Side Voltage	263.0	Volts
Module B Secondary - Battery Side Current	-24.70	Amps
Module B Secondary - Buck Output Voltage	0.1	Volts
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - Battery 12V Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	
OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	

OBCM - HV Over Current Protect	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	True	
OBCM - Loss BPCM Communication Protect	False	
OBCM - CAN Bus Off	False	
OBCM - Pilot Duty Fault	False	
OBCM - Prox Range To Low	False	
OBCM - Prox Range To High	False	
OBCM - HV Voltage Under MinCal Protect	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - ORC Loss of Communication	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	True	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Stuck Shutdown	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	
OBCM - ARC/CRC Fault	False	
OBCM - AC Contact Welded Fault	False	
Control Pilot Open fault	False	
Prox open fault	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - Prox Range Fault	False	
force shutdown fault	False	
pilot signal wake up issue because of EVSE	False	
HCP stuck low fault	False	
HCP stuck High fault	False	
Plant mode flag	False	
Retry fault flag	False	
Loss SBC communcation (SPI)	False	
pilot input short to ground fault	False	
pilto input short to battery fault in Driver mode detecting	False	

pilot short to ground fault in driver mode detecting	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Under Voltage Protect	False	
Module A Primary - PFC Power Limit	True	
Module A Primary - PFC Enable States	False	
Module A Primary - LLC Enable States	False	
Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Relay Enable States	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - AC Vin Lost	True	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Standby Mode	True	
Module A Primary - Operate Mode	False	
Module A Primary - Shutdown Mode	False	
Module A Secondary - Aux Enable States	True	
Module A Secondary - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage Protect	False	
Module A Secondary - HV Over Voltage Protect	False	
Module A Secondary - HV Over Current Protect	False	
Module A Secondary - Over Temperature Protect	False	
Module A Secondary - Hot Warning	False	
Module A Secondary - HV Over Temperature Protect	False	
Module A Secondary - Ambient Over Temperature Protect	False	
Module A Secondary - HV Hot Warning	False	
Module A Secondary - Ambient Hot Warning	False	
Module A Secondary - Aux Over Voltage Protect	False	
Module A Secondary - Aux Under Voltage Protect	False	
Module A Secondary - Loss Primary Communication Protect	False	
Module A Secondary - LV Micro Enable Command	False	
Module A Secondary - Loss LV Communication Protect	False	

Module A Secondary - Primary Turn On States	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	True	
Module A Secondary - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	True	
Module A Secondary - PFC High Temperature Derating	False	
Module A Secondary - PFC Low Temperature Derating	False	
Module A Secondary - LLC High Temperature Derating	False	
Module A Secondary - LLC Low Temperature Derating	False	
Module A Secondary - HV High Temperature Derating	False	
Module A Secondary - HV Low Temperature Derating	False	
Module A Secondary - Ambient High Temperature Derating	False	
Module A Secondary - Ambient Low Temperature Derating	False	
Module A Secondary - AC Input Voltage Derating	True	
Module A Secondary - HV Output Voltage Derating	False	
Module B Primary - AC Under Voltage Protect	False	
Module B Primary - PFC Power Limit	True	
Module B Primary - PFC Enable States	False	
Module B Primary - LLC Enable States	False	
Module B Primary - PFC Under Voltage Protect	False	
Module B Primary - PFC Over Voltage Protect	False	
Module B Primary - Over Temperature Protect	False	
Module B Primary - Hot Warning	False	
Module B Primary - AC Present	False	
Module B Primary - PFC Over Temperature Protect	False	
Module B Primary - LLC Over Temperature Protect	False	
Module B Primary - PFC Hot Warning	False	
Module B Primary - LLC Hot Warning	False	
Module B Primary - AC Over Voltage Protect	True	
Module B Primary - Relay Enable States	False	
Module B Primary - Aux Over Voltage Protect	False	
Module B Primary - Aux Under Voltage Protect	False	
Module B Primary - Secondary Micro Enable Command	False	
Module B Primary - AC Vin Lost	True	
Module B Primary - Loss Communication Protect	False	
Module B Primary - Standby Mode	True	
Module B Primary - Operate Mode	False	
Module B Primary - Shutdown Mode	False	
Module B Secondary - Aux Enable States	True	
Module B Secondary - HV Enable States	False	
Module B Secondary - LLC Under Voltage Protect	False	
Module B Secondary - LLC Over Voltage Protect	False	

Module B Secondary - HV Over Voltage Protect	False	
Module B Secondary - HV Over Current Protect	False	
Module B Secondary - Over Temperature Protect	False	
Module B Secondary - Hot Warning	False	
Module B Secondary - HV Over Temperature Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Ambient Hot Warning	False	
Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - LV Micro Enable Command	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - Standby Mode	True	
Module B Secondary - Operate Mode	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - LV Micro Disable Command	True	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
Module B Secondary - Ambient High Temperature Derating	False	
Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - AC Input Voltage Derating	True	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	00	
SBC State_DF80	00	
SBC State_E100	00	
SBC State_E180	88	
SBC State_E300	00	
SBC State_E500	00	
SBC State_E580	00	
OBCM Charge Current Available	0.00	AMP
BPCM HV Battery Contactor Open	True	
SBC Bus Off	False	
CANSIP Bus Off	False	
OBC Charge Time	0	sec
OBC Charge Tml	40626	hrs
OBC Idle Time	0	sec

EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP Shutdown Command	No Shutdown	
HV Battey Contactor Open	False	
BPCM Request for HV Contactor	False	
HV Contactor Status	Open	
Ignition on Time for DTC	0	sec

VRM | B15AE-00 | Stored | Lost Low Voltage Differential Signal (LVDS) Connection with Media Port 2-

NAME	VALUE	UNITS
DTC	95 AE 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	7	

EBBM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S

Booster Supply	14.6	V
ECU Supply	14.6	V
Ignition	14.6	V
Pedal Travel Sensor Supply	5.0	V
iBooster System Mode	Ready Mode - iBooster is ready for actuation	
Brake Pedal Applied	brake pedal not applied	
iBooster ECU Temperature Channel 1	99.9781	°F
iBooster ECU Temperature Channel 2	99.9219	°F
iBooster Brake Pedal State	brake pedal not applied	
ESP Master Cylinder Pressure	0.00	PSI
Pedal Travel Sensor One	-0.1093736	mm_
Pedal Travel Sensor Two	-0.0664054	mm_
iBooster Rotary Position Sensor	0.00	Deg
iBooster Output Rod Stroke	0.00	mm_
iBooster Input Rod Stroke	0.00	mm_
iBooster Boost Body Stroke	-0.03	mm_
Vehicle Speed	0.00	MPH
Supplier Internal Code	173	

ABSO | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Controller Event	No	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Current System Mode	Engine Running	
Previous System Mode	Engine Running	
System Condition	OK	
Supply Voltage Valves	14.6	V
Brake Pedal Status	Released	

Supply voltage Pump	14.8	V
Brake Pedal Travel Sensor Position	0	%
Ignition Unfiltered	14.6	V
Wheel Speed Left Front	0.000	MPH
Rotation Direction Left Front	Forward	
Wheel Speed Right Front	0.000	MPH
Rotation Direction Right Front	Forward	
Wheel Speed Left Rear	0.000	MPH
Rotation Direction Left Rear	Forward	
Wheel Speed Right Rear	0.000	MPH
Rotation Direction Right Rear	Forward	
Steering Wheel Angle	0.00	°
Longitudinal Acceleration	0.00	m/s^2
Lateral Acceleration	-0.22	m/s^2
Yaw Rate	0.000	°/s
Primary Circuit Pressure	0.00	PSI
Engine Speed	1102.0	rpm
Accelerator Pedal Position	0.0	%
ABS control	Not Active	
ASR control	Not Active	
MSR control	Not Active	
EBV control	Not Active	
ESP Control	Not Active	
HSA control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
Plant Mode	No	
EPB Mode Status	Static	
BLS High	No	
BLS Low	Yes	
Park Brake	Not Activated	
ESP-OFF mode	No	
Clutch	Not Activated	
Stop Coordinator Active	No	
Actual Gear	P	
Transmission selector lever setting	P	
Status Parking Brake Left	Brake is Released	
Status Parking Brake Right	Brake is Released	
EPB Switch Status	Idle	
Supplier Internal Code	233	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for U0111

No Snapshot Data available for P0AFA-00

No Snapshot Data available for P0AFB-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0151-00

No Snapshot Data available for U0100-00

No Snapshot Data available for P1A21-00

No Snapshot Data available for P167B-00

No Snapshot Data available for U0293-00

No Snapshot Data available for P0A0A-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1AEE-00

No Snapshot Data available for P1AEF-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0293-00

No Snapshot Data available for B15AE-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0111-00



VEHICLE SCAN REPORT

Vehicle 2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE
VIN [REDACTED]

Odometer 11846.8 miles
Publication Date May 5, 2022, 10:41:10 AM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AF	[REDACTED]	[REDACTED]	68499122AF
PLGM	Power Liftgate	CAN-I	68466171AI	[REDACTED]	—	68466171AI
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	[REDACTED]	[REDACTED]	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	[REDACTED]	[REDACTED]	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AM	[REDACTED]	[REDACTED]	68240089AM
ORC	Occupant Restraint	CAN-C	68480710AC	[REDACTED]	[REDACTED]	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	[REDACTED]	[REDACTED]	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	[REDACTED]	[REDACTED]	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	[REDACTED]	[REDACTED]	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	[REDACTED]	[REDACTED]	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	[REDACTED]	[REDACTED]	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	[REDACTED]	[REDACTED]	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	[REDACTED]	[REDACTED]	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	[REDACTED]	[REDACTED]	68517013AB
AMP	Amplifier	CAN-I	68547722AB	[REDACTED]	[REDACTED]	68547722AB
IPC	Instrument Panel Cluster	CAN-C	68434960AE	[REDACTED]	[REDACTED]	68434960AE
PTS	Parktronics	CAN-C	68485862AA	[REDACTED]	[REDACTED]	68485862AA
SCCM	Steering Column Control Module	CAN-C	68360889AD	[REDACTED]	[REDACTED]	68360889AD
BCM	Body Controller	CAN-C	68491085AG	[REDACTED]	[REDACTED]	68491085AG

ACC	Adaptive Cruise Control	CAN-C	68540436AA			68540436AA
RADIO	Radio	CAN-I	68465292AE			68465292AE
OCM	Occupant Classification	CAN-C	68403127AA			68403127AA
HVACR	Heat, Ventilation and A/C Rear	CAN-I	68373079AB			68373079AB
LBSS	Left Blind Spot Sensor	CAN-I	04672786AB			04672786AB
RBSS	Right Blind Spot Sensor	CAN-I	04672786AB			04672786AB
FFCM	Forward Facing Camera Module	CAN-C	68493395AA			68493395AA
EDM	External Disc Module	CAN-I	68499745AA			68499745AA
APM	Accessory Power Module	CAN-C	05185046AB			05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE			05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AJ			05185116AJ
OBCM	On Board Charging Module	CAN-C	05185047AE			05185047AE
MSMP	Memory Seat Module - Passenger	CAN-I	68321862AC			68321862AC
DSM	Display Screen Module	CAN-I	68437339AD			68437339AD
VRM	Video Routing Module	CAN-I	68493702AA			68493702AA
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30PD2AA			6WL30PD2AA
CVPM	Central vision processing module	CAN-I	56029920AB			56029920AB
EAC	Electric A/C Compressor	CAN-C	68237995AG			68237995AG
AHCP	Auxiliary Hybrid Control Processor	CAN-C	05185117AJ			05185117AJ
EBBM	Electronic Brake Booster Module	CAN-C	68461813AB			68461813AB
ABSO	Anti Lock Brakes OBD	CAN-C	68471122AD			68471122AD
SGW	Security Gateway Module	CAN-C	68488429AB			68488429AB
TBM2	Telematic Box Module 2	CAN-C	68546266AB			68546266AB

ECU SUMMARY INFO (CONT...)

ECU	COUNTRY CODE	HARDWARE VERSION	SOFTWARE VERSION	IDENT	CVNS
PCM	USA	1B 47	75 02 00	4422	7DC2E312
PLGM	USA	0	5084	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	

ESM	USA / USA	0F 24 00	12 28 FF	4402	
ORC	USA / USA	12 1A 00	13 2E 00	4301	
EPS	USA / USA	12 2A 00	12 1E 01	4502	
HVAC	USA	0E 09 00	14 2F 01	4401	
DDM	USA	11 07 00	14 07 00	4202	
PDM	USA	11 07 00	14 07 00	4202	
DMRL	USA / USA	10 0B 00	14 08 00	4201	
DMRR	USA / USA	10 0B 00	14 08 00	4201	
PSDML	USA / USA	10 17 00	14 10 12	4001	
PSDMR	USA / USA	10 17 00	14 10 12	4001	
MSM	USA	0F 2B 00	10 27 03	4101	
CSWM	USA	11 2A 00	14 25 00	4302	
AMP	USA	0F 06 01	15 0F 01	4021	
IPC	USA / USA	12 06 00	14 2B 00	4705	
PTS	USA	0E 32 00	14 07 00	4311	
SCCM	USA	13 28 00	13 29 00	4301	
BCM	USA	0D 11 00	14 26 90	4420	
ACC	USA / USA	14 12 01	14 26 01	4400	
RADIO		65	5671	000200000008	
OCM	USA / USA	11 1F 01	0E 2F 02	4030	
HVACR	USA	0E 09 00	10 03 02	4301	
LBSS	USA / USA	11 30 02	12 0D 00	4202	
RBSS	USA / USA	11 30 02	12 0D 00	4202	
FFCM	USA / USA	11 06 00	13 1E 00	4102	
EDM	USA	12 0A 00	11 08 00	4000	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM		0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	5D31A9B9 16AACD23 050DC953
OBCM	USA	0F 0D 00	12 02 00	4002	
MSMP	USA	0F 2B 00	10 27 03	4001	
DSM	USA / USA	14 0C 00	14 28 00	4300	
VRM	USA / USA	0F 1C 00	14 1E 14	4001	
RCCC	USA	0F 1D 00	13 04 00	4000	
CVPM	USA / USA	11 27 01	14 0C 01	4004	
EAC	USA	0E 34 00	12 0F 00	4102	
AHCP	USA	11 1F 04	0F 2D 00	4000	
EBBM	USA	0E 19 02	14 0D 18	4000	E5898FA5
ABSO	USA	0E 15 02	14 1B 26	4201	4F158D1B
SGW		5	969	4103	
TBM2	USA	13 0E 02	14 2A 5C	4104	

DTC SUMMARY

ECU	DTC CODE	DTC DESCRIPTION	STATUS
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PCM	U0111	Lost Communication With Battery Energy Control Module	Pending
APM	P0AFA-00	Hybrid/EV Battery System Voltage Low-	Stored
APM	P0AFB-00	Hybrid/EV Battery System Voltage High-	Stored
APM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
BPCM	U0151-00	Lost Communication with Occupant Restraint Controller (ORC)-	Stored
BPCM	U0100-00	Lost Communication With ECM/PCM "A"-	Stored
BPCM	P1A21-00	HV Battery Contactor Control Sequence Incorrect-	Stored
BPCM	P167B-00	Controlled System Shutdown-	Stored
BPCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
HCP	P0A0A-00	High Voltage System Interlock Circuit "A"-	Stored
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Stored
HCP	P1AEF-00	MCPB High Voltage Battery System Voltage High-	Stored
HCP	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
HCP	U0293-00	Lost Communication with Hybrid Control Module "A"-	Pending
HCP	U11F8-00		Pending
OBCM	U0293-00	Lost Communication with Hybrid Control Module "A"-	Stored
EBBM	U0111-00	Lost Communication With Battery Energy Control Module-	Stored
ABSO	U0111-00	Lost Communication With Battery Energy Control Module-	Stored

ENVIRONMENTAL DATA SUMMARY

PCM | U0111 | Pending | Lost Communication With Battery Energy Control Module

NAME	VALUE	UNITS
Number of DTC	0	
DTC		
DTC Readiness Flag		
DTC Storage State		
Warning Indicator Request State		
Odometer		miles
Accumulation Timer		minutes
Ignition Key Cycles		
Starts Since Set Counter		
Key Cycles Since DTC Last Set Counter		
Warm Up Cycles		
Good Trip Counter		

APM | P0AFA-00 | Stored | Hybrid/EV Battery System Voltage Low-

NAME	VALUE	UNITS
DTC	0A FA 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	

Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	2	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of short circuit at LV / Failure9	
Low voltage battery voltage from HCP	12.4400	Volt

APM | POAFB-00 | Stored | Hybrid/EV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	0A FB 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	2	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Idle	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Failure	
APM Derating Mode Status	No de-rating	

APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Temp 1 too high / Failure5	
Low voltage battery voltage from HCP	13.1200	Volt

APM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	2	
APM High Voltage DC Current Set Point	7.0000	AMP
APM Low Voltage DC Current Set Point	100.0000	AMP
HCP Commanded APM Operating Mode	Buck_CV	
APM High Voltage DC Voltage Set Point	14.0000	Volt
APM Low Voltage DC Voltage Set Point	14.81	Volt
APM Operation Mode Status Reported from APM	Buck_CV	
APM Derating Mode Status	No de-rating	
APM Derating Reason	Default(Normal Operation)	
APM Failure Mode Status	No failure	
APM Failure Reason	Failure because of Memory failure/Failure 25	
Low voltage battery voltage from HCP	14.6800	Volt

BPCM | U0151-00 | Stored | Lost Communication with Occupant Restraint Controller (ORC)-

NAME	VALUE	UNITS
DTC	C1 51 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	

Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	34	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44639864	seconds
Key in Ignition	Key_Def	
Key Position	Ign_ Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.73	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.497	Volts
Battery Lifetime AmpHrs of Charge	7195.4	AHr
Battery Lifetime AmpHrs of DisCharge	7157.7	AHr
SOC at time of Fault	84.7	%
Power Up SOC at time of Fault	72.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.387	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-0.85	Amps
HV Battery Current Sensor 2 Hall Low	-0.05	Amps
HV Battery Current HVBatCrnt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	75	°F
BPCM temperature max	52	°F

BPCM temperature min	50	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	
CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit

Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	55311	watts
HV Battery Charge Power 10sec	45810	watts
HV Battery Discharge Power 2sec	102486	watts
HV Battery Discharge Power 10sec	100086	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3276	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4032	mV
Battery Cell Voltage Minimum	4014	mV
Battery Cell Voltage Average	4024	mV
Battery Cell Highest Cell number	80	
Battery Cell Lowest Cell number	60	
HV Battery Voltage (cell sum)	386.30	Volts
HV Battery Voltage (Module Sum)	386.10	Volts
HV Sensor A Pack Voltage	386.50	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	52	°F
Battery Temperature Minimum Module	50	°F
Battery Temperature Average Module	50	°F
Battery Temperature Highest Sensor number	01	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F
HV Cooling Battery coolant outlet temp	91	°F
HV Cooling OBCM temp inlet Temp	118	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6895	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

NAME	VALUE	UNITS
DTC	C1 00 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	22	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44639864	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Open	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.73	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	12.497	Volts
Battery Lifetime AmpHrs of Charge	7195.4	AHr
Battery Lifetime AmpHrs of DisCharge	7157.7	AHr
SOC at time of Fault	84.7	%
Power Up SOC at time of Fault	72.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sourced - Vehicle	0.387	Volts

HVIL PWM peak voltage Sensed - Vehicle	0.349	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-0.85	Amps
HV Battery Current Sensor 2 Hall Low	-0.05	Amps
HV Battery Current HVBatCrnt	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	75	°F
BPCM temperature max	52	°F
BPCM temperature min	50	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.017	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-1.2	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Normal	

CVTN FACT CKSUM ERR	Normal	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	55311	watts
HV Battery Charge Power 10sec	45810	watts
HV Battery Discharge Power 2sec	102486	watts
HV Battery Discharge Power 10sec	100086	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3276	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4032	mV
Battery Cell Voltage Minimum	4014	mV
Battery Cell Voltage Average	4024	mV
Battery Cell Highest Cell number	80	
Battery Cell Lowest Cell number	60	
HV Battery Voltage (cell sum)	386.30	Volts
HV Battery Voltage (Module Sum)	386.10	Volts
HV Sensor A Pack Voltage	386.50	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-1.2	Volts
Battery Temperature Maximum Module	52	°F
Battery Temperature Minimum Module	50	°F
Battery Temperature Average Module	50	°F
Battery Temperature Highest Sensor number	01	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	61	°F

HV Cooling Battery coolant outlet temp	91	°F
HV Cooling OBCM temp inlet Temp	118	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6895	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Normal	

BPCM | P1A21-00 | Stored | HV Battery Contactor Control Sequence Incorrect-

NAME	VALUE	UNITS
DTC	1A 21 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	20	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44639748	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.73	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH

System (12) Volts at time of fault	14.797	Volts
Battery Lifetime AmpHrs of Charge	7195.4	AHr
Battery Lifetime AmpHrs of DisCharge	7157.7	AHr
SOC at time of Fault	84.7	%
Power Up SOC at time of Fault	72.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	12.692	Volts
HVIL PWM peak voltage Sensed - Vehicle	12.561	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.20	mA
HV Battery Current Sensor 1 Hall High	-5.95	Amps
HV Battery Current Sensor 2 Hall Low	-4.50	Amps
HV Battery Current HVBatCmnt	-14.90	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	75	°F
BPCM temperature max	52	°F
BPCM temperature min	50	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	

CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Latched	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	SNA	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
HV Battery Charge Power 2sec	49425	watts
HV Battery Charge Power 10sec	41988	watts
HV Battery Discharge Power 2sec	102492	watts
HV Battery Discharge Power 10sec	100092	watts
HV Battery Power	0072E9	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3276	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4072	mV
Battery Cell Voltage Minimum	4050	mV
Battery Cell Voltage Average	4062	mV
Battery Cell Highest Cell number	82	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	389.90	Volts
HV Battery Voltage (Module Sum)	389.70	Volts
HV Sensor A Pack Voltage	390.00	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	390.20	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	390.20	Volts

HV Sensor D Heater (HVHTR Fuse) Voltage	390.00	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	52	°F
Battery Temperature Minimum Module	50	°F
Battery Temperature Average Module	50	°F
Battery Temperature Highest Sensor number	01	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	59	°F
HV Cooling Battery coolant outlet temp	86	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6895	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Latched	

BPCM | P167B-00 | Stored | Controlled System Shutdown-

NAME	VALUE	UNITS
DTC	16 7B 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	156	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44639748	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	

Verified Contactor Command - VCC	Closed Unrestricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.73	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.738	Volts
Battery Lifetime AmpHrs of Charge	7195.4	AHr
Battery Lifetime AmpHrs of DisCharge	7157.7	AHr
SOC at time of Fault	84.7	%
Power Up SOC at time of Fault	72.2	%
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.524	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.407	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-18.55	Amps
HV Battery Current Sensor 2 Hall Low	-15.50	Amps
HV Battery Current HVBatCrnt	-15.40	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	75	°F
BPCM temperature max	52	°F
BPCM temperature min	50	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.2	Volts
CVTN COMP ERR H	Normal	

CVTN COMP ERR L	Normal	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	SNA	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	03	
HV Battery Charge Power 2sec	49425	watts
HV Battery Charge Power 10sec	41988	watts
HV Battery Discharge Power 2sec	102492	watts
HV Battery Discharge Power 10sec	100092	watts
HV Battery Power	0072D5	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3276	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms

Battery Cell Voltage Maximum	4071	mV
Battery Cell Voltage Minimum	4052	mV
Battery Cell Voltage Average	4062	mV
Battery Cell Highest Cell number	87	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	389.90	Volts
HV Battery Voltage (Module Sum)	389.70	Volts
HV Sensor A Pack Voltage	390.20	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	390.20	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	390.20	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	390.20	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.2	Volts
Battery Temperature Maximum Module	52	°F
Battery Temperature Minimum Module	50	°F
Battery Temperature Average Module	50	°F
Battery Temperature Highest Sensor number	01	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	59	°F
HV Cooling Battery coolant outlet temp	86	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6895	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Latched	

BPCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	

Ignition Cycle Counter	1	
FoM - for this DTC (lifetime fails)	90	events
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Battery Total Time Awake	44639744	seconds
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	
HCP Contactor Command	Closed	
Qualified Contactor Command - QCC	Closed	
Verified Contactor Command - VCC	Closed Restricted	
Contactor Status	Closed	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Vehicle mileage at time of fault (ODO signal in \$3D2)	11846.73	miles
Battery Lifetime Miles	A5E174	miles
Vehicle Speed	FE	MPH
System (12) Volts at time of fault	14.745	Volts
Battery Lifetime AmpHrs of Charge	7195.3	AHr
Battery Lifetime AmpHrs of DisCharge	7157.7	AHr
SOC at time of Fault	84.7	%
Power Up SOC at time of Fault	72.2	%
HVIL Status -Vehicle	PASS	
HVIL Status - Battery pack	PASS	
HVIL PWM Duty Cycle - Vehicle	50.2	%
HVIL PWM Frequency - Vehicle	87.9	Hz
HVIL PWM peak voltage Sourced - Vehicle	13.574	Volts
HVIL PWM peak voltage Sensed - Vehicle	13.468	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.40	mA
HV Battery Current Sensor 1 Hall High	-16.00	Amps
HV Battery Current Sensor 2 Hall Low	-14.90	Amps
HV Battery Current HVBatCrnt	-14.55	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	75	°F
BPCM temperature max	52	°F
BPCM temperature min	50	°F
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	

Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Isolation Circuitry Va	2.498	Volts
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.498	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.971	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	1.0	Volts
CVTN COMP ERR H	Normal	
CVTN COMP ERR L	Active	
CVTN COMP FLT H	Normal	
CVTN COMP FLT L	Normal	
CVTN EDGE ERR H	Normal	
CVTN EDGE ERR L	Normal	
CVTN ABORT H	Normal	
CVTN ABORT L	Normal	
CVTN CRC FAULT H	Normal	
CVTN CRC FAULT L	Normal	
CVTN FRAM ERR	Normal	
CVTN STOP ERR	Normal	
CVTN STK FAULT ERR	Active	
CVTN SYS RESET	Normal	
CVTN COMM TIMEOUT	Active	
CVTN VDIG WAKE FAULT	Normal	
CVTN INT TEMP FAULT	Normal	
CVTN VDIG FAULT	Normal	
CVTN VM FAULT	Normal	
CVTN VP FAULT	Normal	
CVTN VP CLAMP	Latched	
CVTN FACT CKSUM ERR	SNA	
CVTN ANALOG FAULT ERR	Normal	
CVTN HREF FAULT	SNA	
CVTN HREF GND FAULT	Normal	
CVTN ADC CAL ERR	Active	
CVTN CUST ECC COR	Normal	
CVTN CUST ECC ERR	SNA	
CVTN FACT ECC COR	SNA	
CVTN ACT ECC ERR	SNA	
Cycles left to self heal	40	No Unit
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	

HV Battery Charge Power 2sec	49515	watts
HV Battery Charge Power 10sec	42051	watts
HV Battery Discharge Power 2sec	102477	watts
HV Battery Discharge Power 10sec	100077	watts
HV Battery Power	0072F6	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	3276	
Battery Full AmpHr Capacity	48	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	4071	mV
Battery Cell Voltage Minimum	4050	mV
Battery Cell Voltage Average	4061	mV
Battery Cell Highest Cell number	85	
Battery Cell Lowest Cell number	63	
HV Battery Voltage (cell sum)	389.80	Volts
HV Battery Voltage (Module Sum)	389.70	Volts
HV Sensor A Pack Voltage	390.00	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	390.20	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	390.00	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	390.00	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	1.0	Volts
Battery Temperature Maximum Module	52	°F
Battery Temperature Minimum Module	50	°F
Battery Temperature Average Module	50	°F
Battery Temperature Highest Sensor number	01	
Battery Temperature Lowest Sensor number	10	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	57	°F
HV Cooling Battery coolant outlet temp	86	°F
HV Cooling OBCM temp inlet Temp	117	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.6895	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
CVTN CUST CKSUM ERR	Latched	

HCP | P0A0A-00 | Stored | High Voltage System Interlock Circuit "A"-

NAME	VALUE	UNITS
DTC	0A 0A 00	
Test Failed	False	
Test Failed This Operation Cycle	True	

Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Original Odometer Value	11846.8	miles
Most Recent Odometer Value	11846.8	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44639744	sec
RAM stamps keyOn	1905	sec
RAM Stamps	73140	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	904	rpm
HV Battery SOC	85	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	147	°F
Motor B Temp Sensor	131	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	194	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-1.751	Ft-Lbs
Motor B Torque	-0.184	Ft-Lbs
Actual Torque - Motor A	-1.751	Ft-Lbs
Actual Torque - Motor B	-0.184	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	136	AMP
Motor A - Inverter Current - phase B	-96	AMP
Motor A - Inverter Current - phase C	-44	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP

Motor B Resolver Angle	46	Degree
Motor A Resolver Angle	166	Degree
Electric Motor A Speed	3819.0	rpm
Electric Motor B Speed	3.0	rpm
PIM DC Link Voltage - A	472	Volts
PIM DC Link Voltage - B	471	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	463.90	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP___	
HCP SW Version	21B	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Idle	
Impact Event	False	
Outside Air Temperature	59.0	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	13.248	Volts
Battery Feed Voltage 2 Sense	13.176	Volts
Battery Feed Voltage 3 Sense	13.176	Volts
Hybrid System State	Reserved	
Inverter A IGBT Temperature for phase A	124	°F
Inverter A IGBT Temperature for phase B	120	°F
Inverter A IGBT Temperature for phase C	122	°F
Inverter B IGBT Temperature for phase A	120	°F
Inverter B IGBT Temperature for phase B	120	°F
Inverter B IGBT Temperature for phase C	122	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	5	Days
UTC Time - Hours	15	Hours
UTC Time - Minutes	1	
UTC Time - Seconds	1	seconds
ECU Time - Milliseconds	175	ms

HCP | POE15-00 | Active | Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-

NAME	VALUE	UNITS
DTC	0E 15 00	
Test Failed	True	

Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Real time clock		sec
RAM stamps keyOn		sec
RAM Stamps		Min
Accelerator Pedal Position		%
Brake Switch Status		
PHEV Charging Status		
Engine Speed		rpm
HV Battery SOC		%
Ignition State		
PRND Position Display		
Propulsion System Active		
Vehicle Speed		MPH
Barometric Pressure		PSI
Engine Coolant Temperature		°F
HV Coolant Heater - Below 60V		
HV Coolant Heater - Measured Coolant Inlet Temp		°F
HV Coolant Heater - Measured Coolant Outlet Temp		°F
HV Coolant Heater - Actual Current Consumption		AMP
HV Coolant Heater - Measured High Voltage		Volts
HV Coolant Heater - Actual Calculated Power Consumption		W
HV Coolant Heater - Desired Power Consumption		W
HV Coolant Heater - Response Error		
HV Coolant Heater - Communication Error (SPI Interface Issue)		
HV Coolant Heater - High Voltage Out of Range		
HV Coolant Heater - Low Voltage Out of Range		
HV Coolant Heater - Coolant Temp Out of Range		
HV Coolant Heater - HV Protection		
HV Coolant Heater - Overheat Protection		
HV Coolant Heater - Coolant Inlet Temp Sensor Defect		
HV Coolant Heater - Coolant Outet Temp Sensor Defect		
HV Coolant Heater - Heater Core Temp Sensor Defect		
HV Coolant Heater - Short or Open Circuit at IGBTs		

HV Coolant Heater - Current Consumption at High Voltage Out of Range		
HV Coolant Heater - Memory Error		
HV Coolant Heater - DC/DC Voltage Out of Range		
Battery Feed Voltage 2 Sense		Volts
Battery Feed Voltage 3 Sense		Volts
Internal EPS Voltage Sense A		Volts
Internal EPS Voltage Sense B		Volts
Motor A - Inverter Current - phase A		AMP
Hybrid System State		
Battery Feed Voltage 1 Sense		Volts
Actual Torque - Motor A		Ft-Lbs
Actual Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Available Motor Torque - Motor B		Ft-Lbs
Available Regen Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Commanded Torque - Motor B		Ft-Lbs
Motor A - Inverter Current - phase B		AMP
Motor A - Inverter Current - phase C		AMP
Motor B - Inverter Current - phase A		AMP
Motor B - Inverter Current - phase B		AMP
Motor B - Inverter Current - phase C		AMP
Motor A Resolver Angle		Degree
Motor B Resolver Angle		Degree
Motor A Temp Sensor		°F
Motor B Temp Sensor		°F
Outside Air Temperature		°F
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
EPT LOC Diag Enable		
HV Contactor Status		
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
Electric Motor B Speed		rpm
PIM DC Link Voltage - A		Volts
PIM DC Link Voltage - B		Volts
Inverter A IGBT Temperature for phase A		°F
Inverter A IGBT Temperature for phase B		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
Inverter B IGBT Temperature for phase B		°F
Inverter B IGBT Temperature for phase C		°F
APM Status		

Impact Event		
HCP System Shutdown Command		
Distance Travelled with Light ON		miles
Motor A Torque		Ft-Lbs
Motor B Torque		Ft-Lbs
OBCM Operating Mode		
J1772 Prox Detected State		
HV Battery Sleep Time		Days
GPS Date - Year		Year
GPS Date - Month		
GPS Date - Day		Days
UTC Time - Hours		Hours
UTC Time - Minutes		
UTC Time - Seconds		seconds
ECU Time - Milliseconds		ms

HCP | P1AEE-00 | Stored | MCPA HV Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EE 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.8	miles
Most Recent Odometer Value	11846.8	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44639744	sec
RAM stamps keyOn	1905	sec
RAM Stamps	73140	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Engine Speed	1197	rpm
HV Battery SOC	85	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH

Barometric Pressure	14	PSI
Engine Coolant Temperature	194	°F
Actual Torque - Motor A	-1.383	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	5014.5	rpm
Motor A - Inverter Current - phase A	-136	AMP
Motor A - Inverter Current - phase B	32	AMP
Motor A - Inverter Current - phase C	100	AMP
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Over Current Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Thermal Shutdown Fault - High-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	False	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U Thermal Warning Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - Low-Side	False	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Over Current Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Thermal Shutdown Fault - High-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase V SPI Error Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	
Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	False	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Thermal Warning Fault - High-Side	False	

Motor A Phase W Thermal Shutdown Fault - High-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W SPI Error Fault - High-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - Low-Side	False	
Motor A Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.464	Volts
Battery Feed Voltage 3 Sense	13.392	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Hybrid System State	Determine Hybrid System State	
PIM DC Link Voltage - A	472	Volts
PIM DC Link Voltage - B	471	Volts
Passive Pump Coolant Temp In Sensor	117	°F
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	3000	rpm
Outside Air Temperature	59.0	°F
HV Contactor Status	Closed	
Inverter B Status Feedback	Inverter Faulted	
Battery Feed Voltage 1 Sense	13.464	Volts
Actual Torque - Motor B	-0.184	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	46	Degree
Motor B Temp Sensor	131	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Battery Voltage from BPCM	469.60	Volts
Electric Motor B Speed	3.5	rpm
Inverter A IGBT Temperature for phase A	124	°F

Inverter A IGBT Temperature for phase B	122	°F
Inverter A IGBT Temperature for phase C	122	°F
Inverter B IGBT Temperature for phase A	120	°F
Inverter B IGBT Temperature for phase B	120	°F
Inverter B IGBT Temperature for phase C	122	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.383	Ft-Lbs
Motor B Torque	-0.184	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Commanded Inverter A State	Torque Control	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - Low-Side	False	
Motor A Phase U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VL - High-Side	False	
Motor A Phase V Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	

Motor A Phase W Cross Conduction Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - High-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Under Voltage Fault VL - High-Side	False	
Motor A Phase W Over Voltage Fault VDD - High-Side	False	
Motor A Phase W Under Voltage Fault VDD - High-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - Low-Side	False	
Motor A Phase W Over Voltage Fault VL - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - Low-Side	False	
Motor A Phase W Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VDD - Low-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Inverter A Status Feedback	Inverter Faulted	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	5	Days
UTC Time - Hours	15	Hours
UTC Time - Minutes	1	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	875	ms

HCP | P1AEF-00 | Stored | MCPB High Voltage Battery System Voltage High-

NAME	VALUE	UNITS
DTC	1A EF 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.8	miles
Most Recent Odometer Value	11846.8	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44639744	sec
RAM stamps keyOn	1905	sec
RAM Stamps	73140	Min
Accelerator Pedal Position	0	%

Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Engine Speed	1197	rpm
HV Battery SOC	85	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Vehicle Speed	0.0000	MPH
Barometric Pressure	14	PSI
Engine Coolant Temperature	194	°F
Actual Torque - Motor B	-0.092	Ft-Lbs
Available Motor Torque - Motor B	0.000	Ft-Lbs
Inverter B Input DC Current	0.0	AMP
Electric Motor B Speed	3.5	rpm
Commanded Inverter B State	Torque Control	
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B - Inverter Current - phase C	-4	AMP
Inverter B Status Feedback	Inverter Faulted	
Motor B Phase U Short Fault - High-Side	False	
Motor B Phase U Cross Conduction Fault - High-Side	False	
Motor B Phase U Thermal Warning Fault - High-Side	False	
Motor B Phase U Thermal Shutdown Fault - High-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase U SPI Error Fault - High-Side	False	
Motor B Phase U Hardware Error Fault - High-Side	False	
Motor B Phase U Short Fault - Low-Side	False	
Motor B Phase U Cross Conduction Fault - Low-Side	False	
Motor B Phase U Over Current Fault - Low-Side	False	
Motor B Phase U Thermal Warning Fault - Low-Side	False	
Motor B Phase U Thermal Shutdown Fault - Low-Side	False	
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase U SPI Error Fault - Low-Side	False	
Motor B Phase U Hardware Error Fault - Low-Side	False	
Motor B Phase V Short Fault - High-Side	False	
Motor B Phase V Cross Conduction Fault - High-Side	False	
Motor B Phase V Over Current Fault - High-Side	False	
Motor B Phase V Thermal Warning Fault - High-Side	False	
Motor B Phase V Thermal Shutdown Fault - High-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase V SPI Error Fault - High-Side	False	
Motor B Phase V Hardware Error Fault - High-Side	False	

Motor B Phase V Short Fault - Low-Side	False	
Motor B Phase V Cross Conduction Fault - Low-Side	False	
Motor B Phase V Over Current Fault - Low-Side	False	
Motor B Phase V Thermal Warning Fault - Low-Side	False	
Motor B Phase V Thermal Shutdown Fault - Low-Side	False	
Motor B Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase V SPI Error Fault - Low-Side	False	
Motor B Phase V Hardware Error Fault - Low-Side	False	
Motor B Phase W Short Fault - High-Side	False	
Motor B Phase W Cross Conduction Fault - High-Side	False	
Motor B Phase W Over Current Fault - High-Side	False	
Motor B Phase W Thermal Warning Fault - High-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase W SPI Error Fault - High-Side	False	
Motor B Phase W Hardware Error Fault - High-Side	False	
Motor B Phase W Short Fault - Low-Side	False	
Motor B Phase W Cross Conduction Fault - Low-Side	False	
Motor B Phase W Over Current Fault - Low-Side	False	
Motor B Phase W Thermal Warning Fault - Low-Side	False	
Motor B Phase W Thermal Shutdown Fault - Low-Side	False	
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor B Phase W SPI Error Fault - Low-Side	False	
Motor B Phase W Hardware Error Fault - Low-Side	False	
Motor B Resolver Supply Voltage Value	15.75	Volts
Battery Feed Voltage 2 Sense	13.392	Volts
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Battery Feed Voltage 1 Sense	13.464	Volts
Battery Feed Voltage 3 Sense	13.392	Volts
Hybrid System State	Determine Hybrid System State	
Actual Torque - Motor A	-1.383	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	-140	AMP
Motor A - Inverter Current - phase B	56	AMP
Motor A - Inverter Current - phase C	80	AMP
Motor A Resolver Angle	6	Degree
Motor A Temp Sensor	147	°F

Outside Air Temperature	59.0	°F
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
HV Battery Voltage from BPCM	469.60	Volts
Electric Motor A Speed	4991.0	rpm
PIM DC Link Voltage - A	472	Volts
PIM DC Link Voltage - B	471	Volts
Inverter A IGBT Temperature for phase A	124	°F
Inverter A IGBT Temperature for phase B	122	°F
Inverter A IGBT Temperature for phase C	122	°F
Inverter B IGBT Temperature for phase A	120	°F
Inverter B IGBT Temperature for phase B	120	°F
Inverter B IGBT Temperature for phase C	122	°F
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
Distance Travelled with Light ON	0	miles
Motor A Torque	-1.383	Ft-Lbs
Motor B Torque	-0.092	Ft-Lbs
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Motor B Phase U Over Current Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - High-Side	False	
Motor B Phase U Under Voltage Fault VH - High-Side	False	
Motor B Phase U Over Voltage Fault VL - High-Side	False	
Motor B Phase U Under Voltage Fault VL - High-Side	False	
Motor B Phase U Over Voltage Fault VDD - High-Side	False	
Motor B Phase U Under Voltage Fault VDD - High-Side	False	
Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor B Phase U Over Voltage Fault VH - Low-Side	False	
Motor B Phase U Under Voltage Fault VH - Low-Side	False	
Motor B Phase U Over Voltage Fault VL - Low-Side	False	
Motor B Phase U Under Voltage Fault VL - Low-Side	False	
Motor B Phase U Over Voltage Fault VDD - Low-Side	False	
Motor B Phase U Under Voltage Fault VDD - Low-Side	False	
Motor B Phase V Over Voltage Fault VH - High-Side	False	
Motor B Phase V Under Voltage Fault VH - High-Side	False	
Motor B Phase V Over Voltage Fault VL - High-Side	False	
Motor B Phase V Under Voltage Fault VL - High-Side	False	
Motor B Phase V Over Voltage Fault VDD - High-Side	False	
Motor B Phase V Under Voltage Fault VDD - High-Side	False	

Motor B Phase V Over Voltage Fault VH - Low-Side	False	
Motor B Phase V Under Voltage Fault VH - Low-Side	False	
Motor B Phase V Over Voltage Fault VL - Low-Side	False	
Motor B Phase V Under Voltage Fault VL - Low-Side	False	
Motor B Phase V Over Voltage Fault VDD - Low-Side	False	
Motor B Phase V Under Voltage Fault VDD - Low-Side	False	
Motor B Phase W Over Voltage Fault VH - High-Side	False	
Motor B Phase W Under Voltage Fault VH - High-Side	False	
Motor B Phase W Over Voltage Fault VL - High-Side	False	
Motor B Phase W Under Voltage Fault VL - High-Side	False	
Motor B Phase W Over Voltage Fault VDD - High-Side	False	
Motor B Phase W Under Voltage Fault VDD - High-Side	False	
Motor B Phase W Thermal Shutdown Fault - High-Side	False	
Motor B Phase W Over Voltage Fault VH - Low-Side	False	
Motor B Phase W Under Voltage Fault VH - Low-Side	False	
Motor B Phase W Over Voltage Fault VL - Low-Side	False	
Motor B Phase W Under Voltage Fault VL - Low-Side	False	
Motor B Phase W Over Voltage Fault VDD - Low-Side	False	
Motor B Phase W Under Voltage Fault VDD - Low-Side	False	
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	5	Days
UTC Time - Hours	15	Hours
UTC Time - Minutes	1	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	881	ms

HCP | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Original Odometer Value	11846.8	miles
Most Recent Odometer Value	11846.8	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Real time clock	44639744	sec

RAM stamps keyOn	1905	sec
RAM Stamps	73140	Min
Accelerator Pedal Position	0	%
Brake Switch Status	Not Applied	
Engine Speed	1100	rpm
HV Battery SOC	85	%
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	True	
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	147	°F
Motor B Temp Sensor	131	°F
Barometric Pressure	14	PSI
Engine Coolant Temperature	194	°F
Internal EPS Voltage Sense A	8.208	Volts
Internal EPS Voltage Sense B	8.064	Volts
Motor A Torque	-17.146	Ft-Lbs
Motor B Torque	-21.479	Ft-Lbs
Actual Torque - Motor A	-17.146	Ft-Lbs
Actual Torque - Motor B	-21.479	Ft-Lbs
Available Motor Torque - Motor A	85.730	Ft-Lbs
Available Motor Torque - Motor B	232.577	Ft-Lbs
Available Regen Torque - Motor A	-85.730	Ft-Lbs
Available Regen Torque - Motor B	-232.577	Ft-Lbs
Commanded Torque - Motor A	-17.238	Ft-Lbs
Commanded Torque - Motor B	-21.479	Ft-Lbs
Motor A - Inverter Current - phase A	-84	AMP
Motor A - Inverter Current - phase B	36	AMP
Motor A - Inverter Current - phase C	44	AMP
Motor B - Inverter Current - phase A	24	AMP
Motor B - Inverter Current - phase B	-52	AMP
Motor B - Inverter Current - phase C	24	AMP
Motor B Resolver Angle	46	Degree
Motor A Resolver Angle	304	Degree
Electric Motor A Speed	4581.0	rpm
Electric Motor B Speed	2.5	rpm
PIM DC Link Voltage - A	390	Volts
PIM DC Link Voltage - B	389	Volts
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
HCP System Shutdown Command	Default	
HV Battery Voltage from BPCM	389.70	Volts
SW Build Release Version	PIM_21B_2109A0_RU_HCP__	
HCP SW Version	21B	

EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Closed	
APM Status	Buck CV	
Impact Event	False	
Outside Air Temperature	59.0	°F
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
HV Battery Sleep Time	0	Days
Battery Feed Voltage 1 Sense	14.688	Volts
Battery Feed Voltage 2 Sense	14.688	Volts
Battery Feed Voltage 3 Sense	14.616	Volts
Hybrid System State	Propulsion System Active	
Inverter A IGBT Temperature for phase A	124	°F
Inverter A IGBT Temperature for phase B	122	°F
Inverter A IGBT Temperature for phase C	122	°F
Inverter B IGBT Temperature for phase A	122	°F
Inverter B IGBT Temperature for phase B	122	°F
Inverter B IGBT Temperature for phase C	126	°F
PHEV Charging Status	No Charging	
Distance Travelled with Light ON	0	miles
GPS Date - Year	2022	Year
GPS Date - Month	5	
GPS Date - Day	5	Days
UTC Time - Hours	15	Hours
UTC Time - Minutes	1	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	181	ms

HCP | U0293-00 | Pending | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number		
Occurrence flag		
Original Odometer Value		miles
Most Recent Odometer Value		miles
Frequency Counter		

Ignition Cycle Counter		
Real time clock		sec
RAM stamps keyOn		sec
RAM Stamps		Min
Accelerator Pedal Position		%
Brake Switch Status		
Engine Speed		rpm
Ignition State		
PRND Position Display		
Propulsion System Active		
Vehicle Speed		MPH
Barometric Pressure		PSI
Engine Coolant Temperature		°F
HVIL Sense Input State		
No Charging Reasons		
Battery Feed Voltage 2 Sense		Volts
Internal EPS Voltage Sense A		Volts
Internal EPS Voltage Sense B		Volts
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
Hybrid System State		
SW Build Release Version		
HCP SW Version		
EPT LOC Diag Enable		
CAN Overrun Counter		Number
Impact Event		
Outside Air Temperature		°F
Maximum Charge Current Allowed		Amps
Charge Current Available		AMP
OBCM Derating Reason		
OBCM Operating Mode		
HCP Commanded OBCM Mode		
J1772 Prox Detected State		
J1772 Pilot Detected State		
OBCM J1772 S2 Status		
HCP J1772 S2 Close Command		
OBCM Ready to Charge		
HCP Command to Enable Charging		
HCP Charging System Status		
HCP Charging Level		
HCP Charging System Fault		
HCP Charging Fault Reason		
HV Battery Contactor State		
DC Voltage Not Detected		

AC Voltage Detected		
HV Battery Actual Current		AMP
AC Voltage for Charging		Volts
AC Current During Charging		Amps
Maximum EVSE Current Available		AMP
HCP Charging Current Command		AMP
HCP Charging Voltage Command		Volts
DC Charging Current		Amps
OBCM Charging Voltage		Volts
OBCM Module A Max Temperature		°F
OBCM Module B Max Temperature		°F
OBCM Module A PCB Temperature		°F
OBCM Module B PCB Temperature		°F
OBCM Accumulated Charging Time		hrs
OBCM Charging Power		KW-Hrs
HV Battery Pump Current		AMP
Radiator Fan Command		%
HV Battery Inlet Temperature		°F
HV Battery Outlet Temperature		°F
HV Battery Min Cell Voltage		Volts
Max Cell Voltage		Volts
Min Cell Temperature		°F
Max Cell Temperature		°F
HV Battery Sleep Time		Days
HV Battery SOC		%
Battery Feed Voltage 1 Sense		Volts
Battery Feed Voltage 3 Sense		Volts
Actual Torque - Motor A		Ft-Lbs
Actual Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Available Motor Torque - Motor B		Ft-Lbs
Available Regen Torque - Motor A		Ft-Lbs
Available Regen Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Commanded Torque - Motor B		Ft-Lbs
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A - Inverter Current - phase C		AMP
Motor B - Inverter Current - phase A		AMP
Motor B - Inverter Current - phase B		AMP
Motor B - Inverter Current - phase C		AMP
Motor A Resolver Angle		Degree
Motor B Resolver Angle		Degree
Motor A Temp Sensor		°F

Motor B Temp Sensor		°F
HV Contactor Status		
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
Electric Motor B Speed		rpm
PIM DC Link Voltage - A		Volts
PIM DC Link Voltage - B		Volts
Inverter A IGBT Temperature for phase A		°F
Inverter A IGBT Temperature for phase B		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
Inverter B IGBT Temperature for phase B		°F
Inverter B IGBT Temperature for phase C		°F
APM Status		
HCP System Shutdown Command		
PHEV Charging Status		
Distance Travelled with Light ON		miles
Motor A Torque		Ft-Lbs
Motor B Torque		Ft-Lbs
GPS Date - Year		Year
GPS Date - Month		
GPS Date - Day		Days
UTC Time - Hours		Hours
UTC Time - Minutes		
UTC Time - Seconds		seconds
ECU Time - Milliseconds		ms

HCP | U11F8-00 | Pending |

NAME	VALUE	UNITS
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OBCM | U0293-00 | Stored | Lost Communication with Hybrid Control Module "A"-

NAME	VALUE	UNITS
DTC	C2 93 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Original Odometer Value	11841	miles

Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	2	
DTC Extended Data Record Number - Record #2	2C	
OBCM Status AC Present	AC Not OK	
AC Line Low	Valid	
AC Line High	Not Valid	
AC Side Current	0.80	Amps
AC Side Volt	1.9	Volts
HCP (EVCU) AC Current Max Cal	-0.50	Amps
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
Battery Side Current	0.40	Amps
Battery Side Voltage	262.4	Volts
HV OC	False	
HV OV	False	
HCP (EVCU) HV Current Max Cal	-12.00	Amps
HCP (EVCU) HV Volt Max Cal	152	Volt
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	113	°F
OBCM Temperature 2	115	°F
OBCM Temperature 3	100	°F
OBCM Temperature 4	97	°F
NTC1 OT	False	
NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	
External OBCM Inlet Temperature (CAN)	-40	°F
J1772 ICA	0	AMP
J1772 S2 Close	Open	
J1772 Stat	Veh Not Connected	
J1772 S2 Status	Open	
Control Pilot Amplitude	7.517	Volts
Control Pilot Duty Cycle	0.00	%
Control Pilot Frequency	1024	Hz
EVSE Pilot Stat	NO EVSE	
Prox Stat	Prox Out	
Prox Voltage	4.446	Volt
OBC Idle Tml	37	hrs
Watt-Hours of AC Power	0	W-Hrs
Watt Hours of Charge the HV Bus	0	W-Hrs

OBCM Mode	UTC	
OBCM Charger Ready	Off	
OBCM WU Status	Off	
Charge Enable Status	Chrg Disable	
HCP (EVCU) Shutdown Command	EVCU Operational	
HCP (EVCU) Enable Charge Command	Charge disable	
HCP (EVCU) OBC Mode Request	Idle	
Generic Fail Sts	No Functional Fail Present	
Chrg Fail Sts	Faulted - Charging Inhibited	
OBCM Wake Up Reason	Master Wake Up	
OBC Control Mth	Current	
OBCM Deraing Reason	AC Voltage Limit Derating	
Close Chrgr Cntctr	Open	
Chrgr Cntctr Stat	Open	
Chrg Mode	Charge Mode	
OBCM Fault Reason	Internal OBCM high voltage Fault	
Module A Primary - PFC Temperature	95	°F
Module A Primary - LLC Temperature	104	°F
Module A Secondary - Buck Temperature	97	°F
Module A Secondary - Ambient Temperature	115	°F
Module A Primary - AC Side Volt	1.2	Volts
Module A Primary - AC Side Current	-24.60	Amps
Module A Secondary - Battery Side Voltage	262.3	Volts
Module A Secondary - Battery Side Current	-24.90	Amps
Module A Secondary - Buck Output Voltage	0.1	Volts
Module B Primary - PFC Temperature	95	°F
Module B Primary - LLC Temperature	106	°F
Module B Secondary - Buck Temperature	100	°F
Module B Secondary - Ambient Temperature	113	°F
Module B Primary - AC Side Volt	2.6	Volts
Module B Primary - AC Side Current	-24.60	Amps
Module B Secondary - Battery Side Voltage	262.5	Volts
Module B Secondary - Battery Side Current	-24.70	Amps
Module B Secondary - Buck Output Voltage	0.1	Volts
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - Battery 12V Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	

OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	
OBCM - HV Over Current Protect	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	True	
OBCM - Loss BPCM Communication Protect	False	
OBCM - CAN Bus Off	False	
OBCM - Pilot Duty Fault	False	
OBCM - Prox Range To Low	False	
OBCM - Prox Range To High	False	
OBCM - HV Voltage Under MinCal Protect	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - ORC Loss of Communication	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	True	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Stuck Shutdown	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	
OBCM - ARC/CRC Fault	False	
OBCM - AC Contact Welded Fault	False	
Control Pilot Open fault	False	
Prox open fault	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - Prox Range Fault	False	
force shutdown fault	False	
pilot signal wake up issue because of EVSE	False	
HCP stuck low fault	False	
HCP stuck High fault	False	
Plant mode flag	False	
Retry fault flag	False	

Loss SBC communication (SPI)	False	
pilot input short to ground fault	False	
pilot input short to battery fault in Driver mode detecting	False	
pilot short to ground fault in driver mode detecting	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Under Voltage Protect	False	
Module A Primary - PFC Power Limit	True	
Module A Primary - PFC Enable States	False	
Module A Primary - LLC Enable States	False	
Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Relay Enable States	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - AC Vin Lost	True	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Standby Mode	True	
Module A Primary - Operate Mode	False	
Module A Primary - Shutdown Mode	False	
Module A Secondary - Aux Enable States	True	
Module A Secondary - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage Protect	False	
Module A Secondary - HV Over Voltage Protect	False	
Module A Secondary - HV Over Current Protect	False	
Module A Secondary - Over Temperature Protect	False	
Module A Secondary - Hot Warning	False	
Module A Secondary - HV Over Temperature Protect	False	
Module A Secondary - Ambient Over Temperature Protect	False	
Module A Secondary - HV Hot Warning	False	
Module A Secondary - Ambient Hot Warning	False	
Module A Secondary - Aux Over Voltage Protect	False	
Module A Secondary - Aux Under Voltage Protect	False	

Module A Secondary - Loss Primary Communication Protect	False	
Module A Secondary - LV Micro Enable Command	False	
Module A Secondary - Loss LV Communication Protect	False	
Module A Secondary - Primary Turn On States	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	True	
Module A Secondary - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	True	
Module A Secondary - PFC High Temperature Derating	False	
Module A Secondary - PFC Low Temperature Derating	False	
Module A Secondary - LLC High Temperature Derating	False	
Module A Secondary - LLC Low Temperature Derating	False	
Module A Secondary - HV High Temperature Derating	False	
Module A Secondary - HV Low Temperature Derating	False	
Module A Secondary - Ambient High Temperature Derating	False	
Module A Secondary - Ambient Low Temperature Derating	False	
Module A Secondary - AC Input Voltage Derating	True	
Module A Secondary - HV Output Voltage Derating	False	
Module B Primary - AC Under Voltage Protect	False	
Module B Primary - PFC Power Limit	True	
Module B Primary - PFC Enable States	False	
Module B Primary - LLC Enable States	False	
Module B Primary - PFC Under Voltage Protect	False	
Module B Primary - PFC Over Voltage Protect	False	
Module B Primary - Over Temperature Protect	False	
Module B Primary - Hot Warning	False	
Module B Primary - AC Present	False	
Module B Primary - PFC Over Temperature Protect	False	
Module B Primary - LLC Over Temperature Protect	False	
Module B Primary - PFC Hot Warning	False	
Module B Primary - LLC Hot Warning	False	
Module B Primary - AC Over Voltage Protect	True	
Module B Primary - Relay Enable States	False	
Module B Primary - Aux Over Voltage Protect	False	
Module B Primary - Aux Under Voltage Protect	False	
Module B Primary - Secondary Micro Enable Command	False	
Module B Primary - AC Vin Lost	True	
Module B Primary - Loss Communication Protect	False	
Module B Primary - Standby Mode	True	
Module B Primary - Operate Mode	False	
Module B Primary - Shutdown Mode	False	
Module B Secondary - Aux Enable States	True	

Module B Secondary - HV Enable States	False	
Module B Secondary - LLC Under Voltage Protect	False	
Module B Secondary - LLC Over Voltage Protect	False	
Module B Secondary - HV Over Voltage Protect	False	
Module B Secondary - HV Over Current Protect	False	
Module B Secondary - Over Temperature Protect	False	
Module B Secondary - Hot Warning	False	
Module B Secondary - HV Over Temperature Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Ambient Hot Warning	False	
Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - LV Micro Enable Command	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - Standby Mode	True	
Module B Secondary - Operate Mode	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - LV Micro Disable Command	True	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
Module B Secondary - Ambient High Temperature Derating	False	
Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - AC Input Voltage Derating	True	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	00	
SBC State_DF80	00	
SBC State_E100	00	
SBC State_E180	88	
SBC State_E300	00	
SBC State_E500	00	
SBC State_E580	00	
OBCM Charge Current Available	0.00	AMP
BPCM HV Battery Contactor Open	True	
SBC Bus Off	False	
CANSIP Bus Off	False	

OBC Charge Time	0	sec
OBC Charge Tml	40626	hrs
OBC Idle Time	0	sec
EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP Shutdown Command	No Shutdown	
HV Battey Contactor Open	False	
BPCM Request for HV Contactor	False	
HV Contactor Status	Open	
Ignition on Time for DTC	0	sec

EBBM | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Booster Supply	14.6	V
ECU Supply	14.6	V
Ignition	14.6	V
Pedal Travel Sensor Supply	5.0	V
iBooster System Mode	Ready Mode - iBooster is ready for actuation	
Brake Pedal Applied	brake pedal not applied	
iBooster ECU Temperature Channel 1	97.3063	°F
iBooster ECU Temperature Channel 2	97.2500	°F
iBooster Brake Pedal State	brake pedal not applied	
ESP Master Cylinder Pressure	0.00	PSI
Pedal Travel Sensor One	-0.1269515	mm_
Pedal Travel Sensor Two	-0.0742178	mm_
iBooster Rotary Position Sensor	0.00	Deg
iBooster Output Rod Stroke	0.00	mm_
iBooster Input Rod Stroke	0.01	mm_

iBooster Boost Body Stroke	-0.02	mm_
Vehicle Speed	0.00	MPH
Supplier Internal Code	173	

ABSO | U0111-00 | Stored | Lost Communication With Battery Energy Control Module-

NAME	VALUE	UNITS
DTC	C1 11 00	
Test Failed	False	
Test Failed This Operation Cycle	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	False	
Test Not Completed This Operation Cycle	True	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Controller Event	No	
Mirror Memory	No	
Undervoltage Suspected	No	
Original Odometer Value	11841	miles
Most Recent Odometer Value	11841	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Fault Time	13107.00	S
Current System Mode	Engine Running	
Previous System Mode	Engine Running	
System Condition	OK	
Supply Voltage Valves	14.6	V
Brake Pedal Status	Released	
Supply voltage Pump	14.7	V
Brake Pedal Travel Sensor Position	0	%
Ignition Unfiltered	14.6	V
Wheel Speed Left Front	0.000	MPH
Rotation Direction Left Front	Forward	
Wheel Speed Right Front	0.000	MPH
Rotation Direction Right Front	Forward	
Wheel Speed Left Rear	0.000	MPH
Rotation Direction Left Rear	Forward	
Wheel Speed Right Rear	0.000	MPH
Rotation Direction Right Rear	Forward	
Steering Wheel Angle	-32.00	°
Longitudinal Acceleration	0.00	m/s^2
Lateral Acceleration	0.00	m/s^2
Yaw Rate	0.000	°/s

Primary Circuit Pressure	0.00	PSI
Engine Speed	1096.0	rpm
Accelerator Pedal Position	0.0	%
ABS control	Not Active	
ASR control	Not Active	
MSR control	Not Active	
EBV control	Not Active	
ESP Control	Not Active	
HSA control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
Plant Mode	No	
EPB Mode Status	Static	
BLS High	No	
BLS Low	Yes	
Park Brake	activated	
ESP-OFF mode	No	
Clutch	Not Activated	
Stop Coordinator Active	No	
Actual Gear	P	
Transmission selector lever setting	P	
Status Parking Brake Left	Brake is Fully Applied	
Status Parking Brake Right	Brake is Fully Applied	
EPB Switch Status	Idle	
Supplier Internal Code	233	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for U0111

No Snapshot Data available for P0AFA-00

No Snapshot Data available for P0AFB-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0151-00

No Snapshot Data available for U0100-00

No Snapshot Data available for P1A21-00

No Snapshot Data available for P167B-00

No Snapshot Data available for U0293-00

No Snapshot Data available for P0A0A-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1AEE-00

No Snapshot Data available for P1AEF-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0293-00

No Snapshot Data available for U11F8-00

No Snapshot Data available for U0293-00

No Snapshot Data available for U0111-00

No Snapshot Data available for U0111-00

2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE

2C4RC1S75MR518101

1 Alerts

Sample Period

This is the amount of time between the Data Element values.

To get more sample data, select a small number of Data Elements, add them to the Vehicle Data, and Graph them.

CP

Control Processor

sh

DTCs

Data

Misc Functions

System Tests

Actuators

Details

Configuration

Type: All

Record

Units: Imperial

Filter Selections

Graph Selections

Add To Vehicle Data

Clear Selections

Grouped Data

NAME	VALUE	UNIT	TYPE
Battery Back HVIL Status	PASS		Sensors
HVIL Sense Input State	Detected		Sensors
HVIL Sense Input Frequency	88.0	Hz	Sensors
HVIL Sense Input Duty Cycle	53.0	%	Sensors
HVIL Sense Output State	Detected		Sensors
HVIL Sense Output Frequency	88.0	Hz	Sensors
HVIL Sense Output Duty Cycle	53.0	%	Sensors

app.n.fcaawitech.com			
Service Library			
app.n.fcaawitech.com/wt2/privatereport/data_setaawtech_data...			
S83636N			
Hybrid Control Processor			
Flash DTCs Data Misc Functions System Tests Actuators Details Configuration			
Type: All Record Units: Imperial Filter Selections Graph Selections Add To Vehicle Data Clear Selections 0.75 s Cool			
Ungrouped Data			
NAME	VALUE	UNIT	TYPE
Passive Pump Coolant Temp In Sensor	102	*F	Sensors
Electric Coolant Heater Temp Sensor	104	*F	Sensors
Heater Core Coolant Temp Sensor	109	*F	Sensors
HV Coolant Heater Status	Locked Permanent		Sensors
HV Coolant Heater - Below 60V	False		Sensors
HV Coolant Heater - Measured Coolant Inlet Temp	111	*F	Sensors
HV Coolant Heater - Measured Coolant Outlet Temp	109	*F	Sensors
HV Coolant Heater - Actual Current Consumption	0.00	AMP	Sensors
HV Coolant Heater - Measured High Voltage	394	Volts	Sensors
HV Coolant Heater - Actual Calculated Power Consumption	0	W	Sensors
HV Coolant Heater - Desired Power Consumption	0	W	Sensors
HV Coolant Heater - Response Error	No Error		Sensors
HV Coolant Heater - Communication Error (SPI Interface Issue)	False		Sensors
HV Coolant Heater - High Voltage Out of Range			Sensors