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VEHICLE SCAN REPORT

Vehicle 2021 CHRYSLER PACIFICA (PHEV) 3.6L V6 HYBRID ENGINE
VIN 2C4RC1S73MR563215

Odometer 1163.4 miles
Publication Date Sep 1, 2021, 3:27:02 PM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	PART #
PCM	Powertrain Control Module	CAN-C	68499122AE	68499122AE
PLGM	Power Liftgate	CAN-I	68466171AG	68466171AG
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AN	68240089AN
ORC	Occupant Restraint	CAN-C	68480710AC	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	68517013AB
AMP	Amplifier	CAN-I	68448067AA	68448067AA
IPC	Instrument Panel Cluster	CAN-C	68434960AE	68434960AE
PTS	Parktronics	CAN-C	68485862AA	68485862AA
SCCM	Steering Column Control Module	CAN-C	68531525AA	68531525AA
BCM	Body Controller	CAN-C	68491085AG	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
APM	Accessory Power Module	CAN-C	05185046AB		05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE		05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AH		05185116AH
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
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30DX9AA		6WL30DX9AA
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	05185117AH		05185117AH
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 01 01	4422	F2DB13B9
PLGM	USA	0	5270	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	
ESM	USA / USA	13 02 00	14 23 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	12 2E 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 2A 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	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM	Not programmed / COUNTRY_SNA	0E 03 00	14 2C 00	4005	
HCP	USA	11 1F 04	0F 2D 00	4006	
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	
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
DMRL	B224F-54	Door Module Internal-Missing Calibration	Active
DMRR	B224F-54	Door Module Internal-Missing Calibration	Active
BPCM	P0AA4-00	Hybrid/EV Battery Negative Contactor "A" Stuck Closed-	Active

ENVIRONMENTAL DATA SUMMARY

[DMRL](#) | [B224F-54](#) | [Active](#) | [Door Module Internal-Missing Calibration](#)

NAME	VALUE	UNITS
Test Failed	True	
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	1163	miles
Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Ignition Cycle Counter	0	

DMRR | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed	True	
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	1163	miles
Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Ignition Cycle Counter	0	

BPCM | P0AA4-00 | Active | Hybrid/EV Battery Negative Contactor "A" Stuck Closed-

NAME	VALUE	UNITS
Frequency Counter	1	
Ignition Cycle Counter	0	
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	11769576	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)	1163.36	miles
Battery Lifetime Miles	3489.15	miles
Vehicle Speed	0.0	MPH
System (12) Volts at time of fault	12.087	Volts
Battery Lifetime AmpHrs of Charge	504.8	AHr
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
SOC at time of Fault	23.9	%
Power Up SOC at time of Fault	23.9	%
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	0.327	Volts
HVIL PWM peak voltage Sensed - Vehicle	0.312	Volts
HVIL Source Voltage- Battery	1.377	Volts
HVIL Returned current - Battery	30.60	mA
HV Battery Current Sensor 1 Hall High	-0.40	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	77	°F
BPCM temperature max	77	°F
BPCM temperature min	75	°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	2.501	Volts
WC and Circuitry Vcc Voltage	5.029	Volts
WC and CircuitryISO 8V Reference Voltage	7.976	Volts

WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-4.4	Volts
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	94584	watts
HV Battery Charge Power 10sec	89814	watts
HV Battery Discharge Power 2sec	90573	watts
HV Battery Discharge Power 10sec	87360	watts
HV Battery Power	007530	watts
Key - DriveRdy (CAN)	True	
Battery Lifetime Number Of Closes	190	
Battery Full AmpHr Capacity	50	AmpHrs
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3558	mV
Battery Cell Voltage Minimum	3550	mV
Battery Cell Voltage Average	3553	mV
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	19	
HV Battery Voltage (cell sum)	341.10	Volts
HV Battery Voltage (Module Sum)	340.70	Volts
HV Sensor A Pack Voltage	341.30	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	-4.4	Volts
Battery Temperature Maximum Module	77	°F
Battery Temperature Minimum Module	75	°F
Battery Temperature Average Module	77	°F
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
HV Cooling Battery coolant inlet temp	77	°F
HV Cooling Battery coolant outlet temp	77	°F
HV Cooling OBCM temp inlet Temp	77	°F
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Vehicle Impedance	7.2560	Mega Ohms
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Battery Impedance	0.8480	Mega Ohms
HV Bat SOH-R	19.2	%

HV Bat SOH-C	96.9	%
BPCM Sec Asic Reset Req	Not active	
BPCM Sec QA Error Counter	0	cnts
BPCM Sec MM Hw Reset Error Counter	0	cnts
BPCM Sec Asic Fault Input	Not active	
BPCM Sec CC Path Test Active	Not active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec HW Timer Status	Not active	
BPCM Sec Contactor State	Open	
BPCM Main HW Timer Status	Not active	
BPCM Sec Asic Fault State	Undefined	
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Engine Speed	0	rpm
Accelerator position	7.5	%
Real time clock	429496.7295	seconds
Real time clock-OS Task Delay Timer	0	
Real Time Clock Validity	True	
DTC	0A A4 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	
DTC Extended Data Record Number - All	01	
Occurrence flag	ERROR	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
DTC Extended Data Record Number - 2	0E	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for B224F-54

No Snapshot Data available for B224F-54

No Snapshot Data available for P0AA4-00



VEHICLE SCAN REPORT

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

Odometer 1163.4 miles
Publication Date Aug 10, 2021, 3:20:22 PM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	PART #
PCM	Powertrain Control Module	CAN-C	68499122AE	68499122AE
PLGM	Power Liftgate	CAN-I	68466171AG	68466171AG
ICS	Integrated Center Stack	CAN-I	7AS341X8AA	7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA	68500152AA
ESM	Electronic Shifter	CAN-C	68240089AN	68240089AN
ORC	Occupant Restraint	CAN-C	68480710AC	68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA	68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE	68493454AE
DDM	Driver Door Module	CAN-I	68496461AB	68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB	68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB	68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB	68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD	68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD	68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC	68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB	68517013AB
AMP	Amplifier	CAN-I	68448067AA	68448067AA
IPC	Instrument Panel Cluster	CAN-C	68434960AE	68434960AE
PTS	Parktronics	CAN-C	68485862AA	68485862AA
SCCM	Steering Column Control Module	CAN-C	68531525AA	68531525AA
BCM	Body Controller	CAN-C	68491085AG	68491085AG

Pa					
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
APM	Accessory Power Module	CAN-C	05185046AB		05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE		05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AH		05185116AH
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
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30DX9AA		6WL30DX9AA
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	05185117AH		05185117AH
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 01 01	4422	F2DB13B9
PLGM	USA	0	5270	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	
ESM	USA / USA	13 02 00	14 23 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	12 2E 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 2A 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	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM	Not programmed / COUNTRY_SNA	0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	879F1587 D754327D 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	
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
DMRL	B224F-54	Door Module Internal-Missing Calibration	Active
DMRR	B224F-54	Door Module Internal-Missing Calibration	Active
BPCM	P0A95-00	High Voltage Fuse "A"-	Active
BPCM	P0AA4-00	Hybrid/EV Battery Negative Contactor "A" Stuck Closed-	Active
HCP	P0642-00	Sensor Reference Voltage 1 Circuit Low-	Active

HCP	P06B1-00	Sensor Power Supply 1 Circuit Low-	Active
HCP	P0A78-00	Drive Motor A Inverter Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Active

ENVIRONMENTAL DATA SUMMARY

DMRL | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed	True	
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	
Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Original Odometer Value	1163	miles

DMRR | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed	True	
DTC Extended Data Record Number - All	01	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Pending DTC	False	
Test Failed This Operation Cycle	False	
Test Failed Since Last Clear	True	
Confirmed DTC	True	
Occurrence flag	ERROR	
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163	miles
Original Odometer Value	1163	miles
Frequency Counter	1	

BPCM | P0A95-00 | Active | High Voltage Fuse "A"-

NAME	VALUE	UNITS
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	
Balance Mode	False	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
ChargingLevel	Plug in, but no charge	
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overtemperature	PASS	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Overcurrent	PASS	
Pump - Switch Power Shorted	PASS	
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	26	
Battery Temperature Highest Sensor number	12	
Battery Temperature Number of Failing Sensors	00	
Battery Temperature Lowest Sensor number	01	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not active	
BPCM Sec CC Path Test Active	Not active	
BPCM Sec Asic Fault Input	Not active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec Contactor State	Open	
BPCM Sec HW Timer Status	Not active	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM Main HW Timer Status	Not active	
BPCM Sec Asic Fault State	NOTASSERTED	
Real Time Clock Validity	True	
DTC	0A 95 00	

Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Test Not Completed Since Last Clear	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	ERROR	
DTC Extended Data Record Number - 2	08	
Frequency Counter	1	
Ignition Cycle Counter	0	
FoM - for this DTC (lifetime fails)	28	events
FoM - for this DTC (lifetime fails counts on pass)	16.2400	seconds
FoM - for this DTC (lifetime longest fail on pass)	4.640	seconds
Battery Total Time Awake	11702661	seconds
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Battery Lifetime Miles	3489.15	miles
System (12) Volts at time of fault	12.348	Volts
Battery Lifetime AmpHrs of Charge	504.8	AHr
Vehicle Speed	0.0	MPH
Power Up SOC at time of Fault	23.9	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM Duty Cycle - Vehicle	0.0	%
SOC at time of Fault	23.9	%
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
HVIL PWM peak voltage Sourced - Vehicle	0.335	Volts
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Cooling Speed Pump 1 Target	0	rpm
HVIL Returned current - Battery	30.60	mA
HV Cooling Speed pump 1 Speed	0	rpm
HV Battery Current Sensor 1 Hall High	-0.40	Amps
Charge indicator Temp	86	°F
BPCM temperature min	81	°F
Isolation Circuitry Va	2.497	Volts
BPCM temperature max	82	°F
Isolation Circuitry Vb	2.501	Volts
WC and Circuitry Vcc Voltage	5.031	Volts
HVIL Source Voltage- Battery	1.377	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
HV Battery Current HVBatCmnt	0.00	Amps
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts

Cycles left to self heal	40	No Unit
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.0	Volts
HV Battery Discharge Power 10sec	88236	watts
HV Battery Discharge Power 2sec	91176	watts
HV Battery Charge Power 10sec	90282	watts
HV Battery Charge Power 2sec	94254	watts
Battery Lifetime Number Of Closes	190	
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Maximum	3561	mV
WC and Circuitry ISO 8V Reference Voltage	7.976	Volts
Battery Full AmpHr Capacity	50	AmpHrs
Cell Impedance Max Discharge	0	mOhms
HV Battery Power	007530	watts
Battery Cell Voltage Average	3555	mV
Battery Cell Voltage Minimum	3552	mV
HV Sensor A Pack Voltage	77.70	Volts
HV Battery Voltage (Module Sum)	340.90	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	0.80	Volts
HV Battery Voltage (cell sum)	341.30	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.0	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.60	Volts
Battery Temperature Maximum Module	82	°F
Battery Temperature Minimum Module	81	°F
Battery Temperature Average Module	81	°F
HV Cooling Battery coolant inlet temp	82	°F
HV Cooling Battery coolant outlet temp	82	°F
HV Cooling OBCM temp inlet Temp	84	°F
HV Bat SOH-R	19.2	%
HV Bat SOH-C	96.9	%
Isolation Vehicle Impedance	7.2560	Mega Ohms
Isolation Battery Impedance	0.8480	Mega Ohms
BPCM Sec QA Error Counter	0	cnts
BPCM L2 SM Hw Reset Error Counter	0	No Unit
BPCM Sec MM Hw Reset Error Counter	0	cnts
Real time clock	429496.7295	seconds
Engine Speed	0	rpm
Accelerator position	7.8	%
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
Real time clock-OS Task Delay Timer	0	

BPCM | P0AA4-00 | Active | Hybrid/EV Battery Negative Contactor "A" Stuck Closed-

NAME	VALUE	UNITS
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Key Position	Ign_ Run	
Qualified Contactor Command - QCC	Open	
EPT -WakeUp	Sourced	
Verified Contactor Command - VCC	Open	
Key in Ignition	Key_Def	
Contactor Status	Open	
Plug in Status	Not plugged in	
ChargingLevel	Plug in, but no charge	
Balance Mode	False	
HCP Contactor Command	Open	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
Battery in Periodic wake up (Just battery) at time of Fault	False	
HVIL Status - Battery pack	PASS	
HVIL Status -Vehicle	Not Sourced	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Fault trigger level 1	False	
Fault trigger level 3	False	
Fault Path	01	
Fault trigger level 2	False	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	19	
Battery Temperature Highest Sensor number	12	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Isolation Vehicle Diagnostic Status	Run and Passed	
Pump - Battery Coolant Level Low	False	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not active	
BPCM Sec Asic Fault Input	Not active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 CC Path Test Req	Undetermined	
BPCM Sec CC Path Test Active	Not active	
BPCM Sec HW Timer Status	Not active	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Main HW Timer Status	Not active	
BPCM Sec Asic Fault State	NOTASSERTED	
BPCM Sec Contactor State	Open	

Real Time Clock Validity	True	
DTC	0A A4 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Test Failed Since Last Clear	True	
Confirmed DTC	True	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	ERROR	
DTC Extended Data Record Number - 2	0E	
Frequency Counter	1	
Ignition Cycle Counter	0	
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime fails)	79	events
Battery Lifetime Miles	3489.15	miles
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Vehicle Speed	0.0	MPH
System (12) Volts at time of fault	12.348	Volts
Power Up SOC at time of Fault	23.9	%
Battery Lifetime AmpHrs of Charge	504.8	AHr
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
HVIL PWM Frequency - Vehicle	0.0	Hz
Battery Total Time Awake	11702656	seconds
HVIL Source Voltage- Battery	1.377	Volts
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM peak voltage Sourced - Vehicle	0.335	Volts
HVIL Returned current - Battery	30.60	mA
SOC at time of Fault	23.9	%
HV Cooling Speed Pump 1 Target	0	rpm
HVIL PWM peak voltage Sensd - Vehicle	0.320	Volts
BPCM temperature max	82	°F
HV Battery Current Sensor 2 Hall Low	0.00	Amps
BPCM temperature min	81	°F
HV Battery Current Sensor 1 Hall High	-0.60	Amps
Charge indicator Temp	86	°F
HV Cooling Speed pump 1 Speed	0	rpm
HV Battery Current HVBatCrnt	0.00	Amps
Isolation Circuitry Vb	2.501	Volts
Isolation Circuitry Va	2.497	Volts
WC and Circuitry Vcc Voltage	5.031	Volts

WC and Circuitry 2.5V Reference Voltage	2.501	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
HV Battery Charge Power 2sec	94254	watts
Cycles left to self heal	40	No Unit
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
HV Battery Discharge Power 10sec	88239	watts
HV Battery Discharge Power 2sec	91179	watts
HV Battery Power	007530	watts
Battery Lifetime Number Of Closes	190	
Cell Impedance Mim Discharge	0	mOhms
Cell Impedance Max Discharge	0	mOhms
Battery Cell Voltage Minimum	3552	mV
HV Battery Charge Power 10sec	90285	watts
HV Battery Voltage (Module Sum)	340.90	Volts
Battery Cell Voltage Average	3555	mV
Battery Cell Voltage Maximum	3561	mV
HV Battery Voltage (cell sum)	341.30	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	0.80	Volts
HV Sensor A Pack Voltage	80.70	Volts
Battery Full AmpHr Capacity	50	AmpHrs
Battery Temperature Maximum Module	82	°F
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.60	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.60	Volts
Battery Temperature Average Module	81	°F
Battery Temperature Minimum Module	81	°F
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
HV Cooling Battery coolant inlet temp	82	°F
HV Cooling OBCM temp inlet Temp	84	°F
HV Cooling Battery coolant outlet temp	82	°F
HV Bat SOH-R	19.2	%
Isolation Battery Impedance	0.8480	Mega Ohms
BPCM Sec MM Hw Reset Error Counter	0	cnts
HV Bat SOH-C	96.9	%
Accelerator position	7.5	%
Real time clock	429496.7295	seconds
BPCM Sec QA Error Counter	0	cnts
Isolation Vehicle Impedance	7.2560	Mega Ohms
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Engine Speed	0	rpm
Most Recent Odometer Value	1163	miles
Original Odometer Value	1163	miles
Real time clock-OS Task Delay Timer	0	

HCP | P0642-00 | Active | Sensor Reference Voltage 1 Circuit Low-

NAME	VALUE	UNITS
DTC	06 42 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Confirmed DTC	True	
Pending 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	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Motor A Phase U Short 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 Cross Conduction 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 Thermal Shutdown Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Hardware Error Fault - High-Side	True	
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 Hardware Error Fault - Low-Side	True	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Over Current Fault - High-Side	False	
Motor A Phase V Cross Conduction 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	True	
Motor A Phase V Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	

Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	True	
Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	True	
Motor A Phase W Thermal Shutdown 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 SPI Error Fault - High-Side	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator 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	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
Inverter B Status Feedback	Normal OFF	
HV Contactor Status	Open	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
Impact Event	False	
APM Status	Idle	
HCP System Shutdown Command	Default	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Commanded Inverter A State	Inverter Disabled	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VL - 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 Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - Low-Side	False	

Motor A Phase U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VH - 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 VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - 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 Over Voltage Fault VL - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - Low-Side	False	
Motor A Phase W Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - 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	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163.4	miles
Frequency Counter	1	
Accelerator Pedal Position	0	%
RAM Stamps	157	Min
Engine Speed	0	rpm
RAM stamps keyOn	180	sec
HV Battery SOC	24	%
Real time clock	11702656	sec
Vehicle Speed	0.0000	MPH

Barometric Pressure	15	PSI
Engine Coolant Temperature	84	°F
Actual Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase B	0	AMP
Available Motor Torque - Motor A	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	-4	AMP
Battery Feed Voltage 2 Sense	12.168	Volts
Motor A - Inverter Current - phase C	-4	AMP
Internal EPS Voltage Sense A	0.072	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 3 Sense	12.024	Volts
PIM DC Link Voltage - B	4	Volts
Low Temp Active Pump Speed	0	rpm
Passive Pump Coolant Temp In Sensor	82	°F
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	86.0	°F
Internal EPS Voltage Sense B	0.000	Volts
PIM DC Link Voltage - A	45	Volts
Battery Feed Voltage 1 Sense	12.384	Volts
Available Motor Torque - Motor B	128.687	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-128.687	Ft-Lbs
Motor B - Inverter Current - phase A	0	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase C	-4	AMP
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor B Temp Sensor	84	°F
Motor B Resolver Angle	336	Degree
Inverter A IGBT Temperature for phase A	95	°F
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase B	84	°F
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase C	84	°F
Inverter B IGBT Temperature for phase A	84	°F
Inverter B IGBT Temperature for phase B	84	°F
Motor B Torque	0.092	Ft-Lbs
Motor A Torque	0.000	Ft-Lbs
Inverter B IGBT Temperature for phase C	84	°F
HV Battery Sleep Time	0	Days
Distance Travelled with Light ON	0	miles

GPS Date - Year	2021	Year
GPS Date - Month	5	
GPS Date - Day	1	Days
UTC Time - Hours	22	Hours
UTC Time - Minutes	58	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	594	ms

HCP | P06B1-00 | Active | Sensor Power Supply 1 Circuit Low-

NAME	VALUE	UNITS
DTC	06 B1 00	
Test Failed	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	
Test Failed This Operation Cycle	True	
Occurrence flag	Occurrence	
Warning Indicator Requested	True	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Motor A Resolver Offset Learn Erase	not requested	
Motor A Resolver Offset Learning Status Flag	Applied	
Motor B Resolver Offset Learning Status Flag	Applied	
Motor B Resolver to Digital Low Level Driver Faults	No fault	
Motor A Resolver to Digital Low Level Driver Faults	No fault	
Hybrid System State	SNA	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Open	
HCP ePT Wake-Up Output	On	
HCP System Shutdown Command	Default	
APM Status	Idle	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Motor B Resolver Offset Learn Erase	not requested	
Impact Event	False	
Ignition Cycle Counter	0	
Real time clock	11702656	sec
RAM stamps keyOn	180	sec

RAM Stamps	157	Min
Frequency Counter	1	
Most Recent Odometer Value	1163.4	miles
Original Odometer Value	1163.4	miles
Engine Speed	0	rpm
HV Battery SOC	24	%
Accelerator Pedal Position	0	%
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	84	°F
Motor B Temp Sensor	84	°F
Motor A Resolver Angle Offset	1.60	Degree
Barometric Pressure	15	PSI
Motor A Resolver Supply Voltage Value	03FD	Volts
Motor B Resolver Supply Voltage Value	15.75	Volts
Internal EPS Voltage Sense B	0.000	Volts
Motor B Resolver Angle Offset	2.00	Degree
Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Internal EPS Voltage Sense A	0.072	Volts
Engine Coolant Temperature	82	°F
Commanded Torque - Motor A	0.000	Ft-Lbs
Battery Feed Voltage 2 Sense	12.168	Volts
Available Motor Torque - Motor B	150.811	Ft-Lbs
Electric Motor A Speed	0.0	rpm
Available Motor Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Electric Motor B Speed	0.5	rpm
Actual Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-150.811	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase C	-4	AMP
Battery Feed Voltage 1 Sense	12.384	Volts
Battery Feed Voltage 3 Sense	12.024	Volts
Outside Air Temperature	86.0	°F
Motor A - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
PIM DC Link Voltage - A	45	Volts
PIM DC Link Voltage - B	4	Volts
Motor B - Inverter Current - phase A	0	AMP
Inverter B IGBT Temperature for phase B	84	°F
Inverter A IGBT Temperature for phase B	84	°F
Motor A - Inverter Current - phase A	0	AMP
Inverter B IGBT Temperature for phase C	84	°F
Inverter A IGBT Temperature for phase C	84	°F

Inverter B IGBT Temperature for phase A	84	°F
Motor B Torque	0.092	Ft-Lbs
HV Battery Voltage from BPCM	180.00	Volts
Distance Travelled with Light ON	0	miles
Inverter A IGBT Temperature for phase A	95	°F
HV Battery Sleep Time	0	Days
GPS Date - Month	5	
Motor A Torque	0.000	Ft-Lbs
GPS Date - Day	1	Days
GPS Date - Year	2021	Year
UTC Time - Minutes	58	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	781	ms
UTC Time - Hours	22	Hours

HCP | P0A78-00 | Active | Drive Motor A Inverter Performance-

NAME	VALUE	UNITS
DTC	0A 78 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Pending DTC	True	
Test Failed Since Last Clear	True	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Test Not Completed This Operation Cycle	False	
PHEV Charging Status	No Charging	
Brake Switch Status	Not Applied	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
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 SPI Error Fault - High-Side	True	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Thermal Warning Fault - Low-Side	False	

Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Over Current 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 Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
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	True	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	True	
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	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
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	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	

OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Commanded Inverter A State	Inverter Disabled	
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 Over Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VH - 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 V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase U Comm Error Low Voltage Regulator Fault - Low-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 Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Over 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 Over Voltage Fault VH - High-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Cross Conduction Fault - High-Side	False	
Motor A Phase W Under Voltage Fault VL - High-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VDD - High-Side	False	
Motor A Phase W Over Voltage Fault VH - Low-Side	False	
Motor A Phase W Under Voltage Fault VDD - High-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	
Most Recent Odometer Value	1163.4	miles
Real time clock	11702656	sec
Frequency Counter	1	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Accelerator Pedal Position	0	%
Engine Speed	0	rpm
RAM Stamps	157	Min
HV Battery SOC	24	%
RAM stamps keyOn	180	sec
Engine Coolant Temperature	84	°F
Vehicle Speed	0.0000	MPH
Barometric Pressure	15	PSI
Actual Torque - Motor A	0.000	Ft-Lbs
Motor A - Inverter Current - phase A	0	AMP
Electric Motor A Speed	0.0	rpm
Inverter A Input DC Current	0.0	AMP
Available Motor Torque - Motor A	0.000	Ft-Lbs
Motor A - Inverter Current - phase C	-4	AMP
Motor A - Inverter Current - phase B	0	AMP
Battery Feed Voltage 2 Sense	12.168	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
Internal EPS Voltage Sense A	0.072	Volts
Battery Feed Voltage 3 Sense	12.024	Volts
Internal EPS Voltage Sense B	0.000	Volts
PIM DC Link Voltage - A	45	Volts
Passive Pump Coolant Temp In Sensor	82	°F
Low Temp Active Pump Speed	0	rpm
PIM DC Link Voltage - B	4	Volts
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	86.0	°F
Battery Feed Voltage 1 Sense	12.384	Volts
Available Motor Torque - Motor B	141.501	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-141.501	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 Resolver Angle	336	Degree
Motor B - Inverter Current - phase C	-4	AMP
Motor B Temp Sensor	84	°F
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase B	84	°F
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase C	84	°F
Inverter B IGBT Temperature for phase A	84	°F
Inverter B IGBT Temperature for phase C	84	°F
Inverter B IGBT Temperature for phase B	84	°F
Inverter A IGBT Temperature for phase A	95	°F
Motor B Torque	0.092	Ft-Lbs
Distance Travelled with Light ON	0	miles
HV Battery Sleep Time	0	Days
Motor A Torque	0.000	Ft-Lbs
GPS Date - Year	2021	Year
UTC Time - Hours	22	Hours
GPS Date - Month	5	
UTC Time - Minutes	58	
ECU Time - Milliseconds	713	ms
UTC Time - Seconds	0	seconds
GPS Date - Day	1	Days

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

NAME	VALUE	UNITS
DTC	1A EE 00	
Test Failed	True	
Confirmed DTC	True	
Pending DTC	True	
Test Failed This Operation Cycle	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	
PHEV Charging Status	No Charging	
Brake Switch Status	Not Applied	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Over Current Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	

Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Thermal Shutdown Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Short 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 Cross Conduction Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
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 Low Voltage Regulator Fault - High-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	
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	True	
Motor A Phase V Hardware Error Fault - Low-Side	True	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Short 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 SPI Error Fault - High-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	True	
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	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	

Inverter B Status Feedback	Normal OFF	
HV Contactor Status	Open	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
CBC Wake-Up Input	Off	
APM Status	Idle	
HCP System Shutdown Command	Default	
Impact Event	False	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Commanded Inverter A State	Inverter Disabled	
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 Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - Low-Side	False	
Motor A Phase U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Over Voltage Fault VDD - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Over Voltage Fault VL - 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 Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VH - 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 Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-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 Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Over Voltage Fault VH - 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 Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Under Voltage Fault VDD - Low-Side	False	
Inverter A Status Feedback	Inverter Faulted	
Original Odometer Value	1163.4	miles
Most Recent Odometer Value	1163.4	miles
Frequency Counter	1	
Real time clock	11702656	sec
Ignition Cycle Counter	0	
RAM stamps keyOn	180	sec
Accelerator Pedal Position	0	%
RAM Stamps	157	Min
Engine Speed	0	rpm
Barometric Pressure	15	PSI
Vehicle Speed	0.0000	MPH
HV Battery SOC	24	%
Engine Coolant Temperature	84	°F
Actual Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase C	0	AMP
Motor A - Inverter Current - phase A	0	AMP
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 2 Sense	12.168	Volts
Motor A - Inverter Current - phase B	0	AMP
Internal EPS Voltage Sense B	0.000	Volts
Battery Feed Voltage 3 Sense	12.024	Volts
Internal EPS Voltage Sense A	0.072	Volts
PIM DC Link Voltage - A	45	Volts
Passive Pump Coolant Temp In Sensor	82	°F
High Temp Aux Pump - Actual Speed	0	rpm
Low Temp Active Pump Speed	0	rpm
Battery Feed Voltage 1 Sense	12.384	Volts
Outside Air Temperature	86.0	°F
PIM DC Link Voltage - B	4	Volts

Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor B	-145.004	Ft-Lbs
Available Motor Torque - Motor B	145.004	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B Resolver Angle	336	Degree
Motor B - Inverter Current - phase C	-4	AMP
Motor B Temp Sensor	84	°F
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase A	95	°F
Electric Motor B Speed	0.5	rpm
Inverter B IGBT Temperature for phase B	84	°F
Inverter A IGBT Temperature for phase B	84	°F
Inverter B IGBT Temperature for phase C	84	°F
Inverter B IGBT Temperature for phase A	84	°F
Inverter A IGBT Temperature for phase C	84	°F
Motor B Torque	0.092	Ft-Lbs
Motor A Torque	0.000	Ft-Lbs
Distance Travelled with Light ON	0	miles
HV Battery Sleep Time	0	Days
GPS Date - Year	2021	Year
GPS Date - Month	5	
UTC Time - Hours	22	Hours
GPS Date - Day	1	Days
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	731	ms
UTC Time - Minutes	58	

SNAPSHOT DATA SUMMARY

No Snapshot Data available for B224F-54

No Snapshot Data available for B224F-54

No Snapshot Data available for P0A95-00

No Snapshot Data available for P0AA4-00

No Snapshot Data available for P0642-00

No Snapshot Data available for P06B1-00

No Snapshot Data available for P0A78-00

No Snapshot Data available for P1AEE-00



E.T.N. BUSSMANN
170M3418
SERIES
350A 690V ~ IEC
700V ~ RU
IR700-200kA
HRC
SP
1*BN/50
0.2901
201306 / PF3780
Made in India
CE

ASSEMBLY IS NOT SERVICEABLE
DISCARD ENTIRE ASSEMBLY WHEN FUSE

E.T.N.
 170M34
 350A
 1.2900
 Made in India

E.T.N.
 170M34
 350A
 1.2900
 Made in India



ASSEMBLY IS NOT SERVICEABLE
CHECK ENTIRE ASSEMBLY WHEN
REPAIR



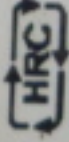
EATON® BUSSMANN
SERIES

170M3418

350A 690V ~ IEC

700V ~ JIS

IR700-200kA



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1*BN/50

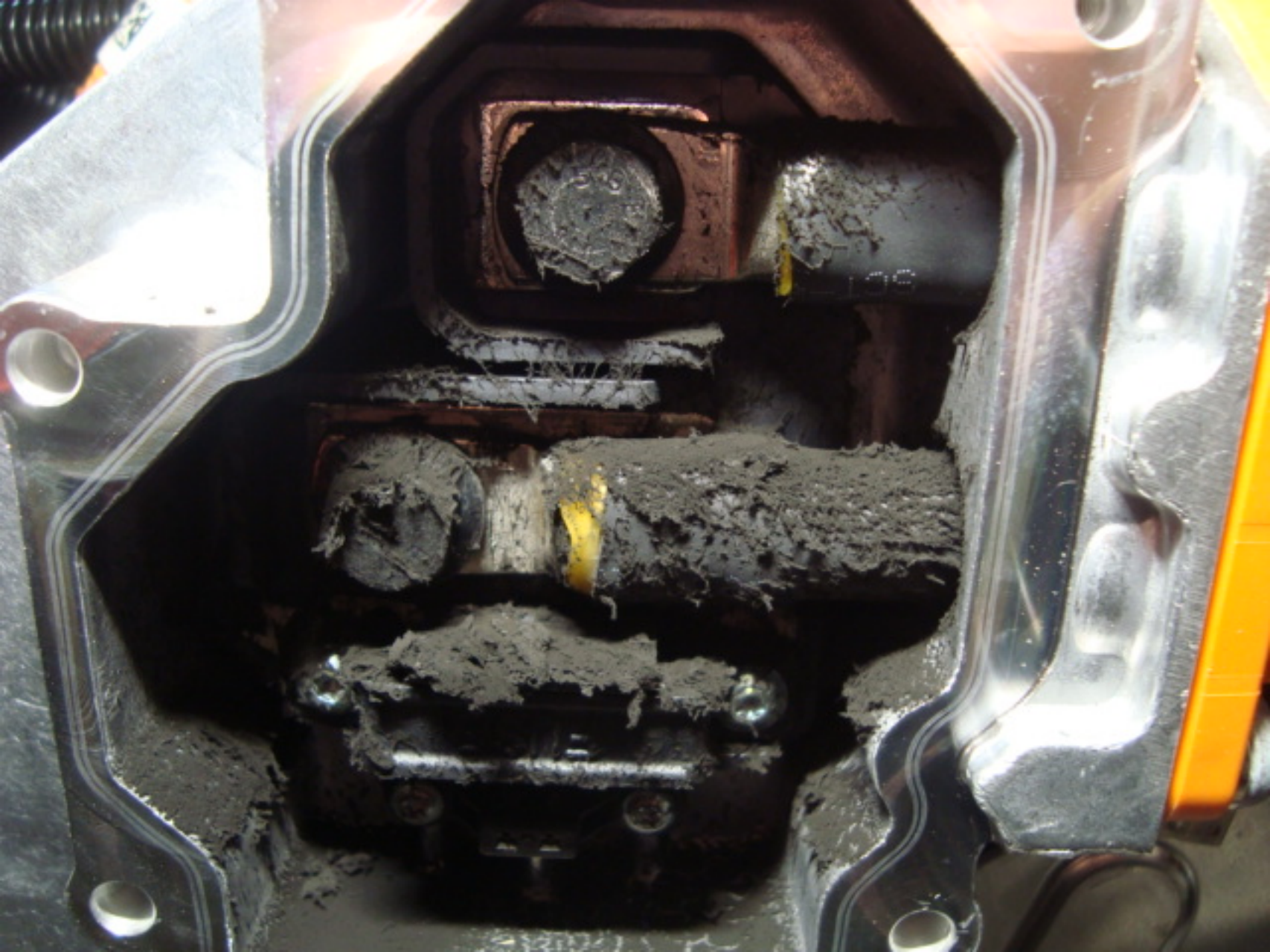


0.2900 mΩ(21°C)

201103 / PF3512

Made in India







VEHICLE SCAN REPORT

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

Odometer 1163.4 miles
Publication Date Jul 15, 2021, 9:40:50 AM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AE	[REDACTED]	[REDACTED]	68499122AE
PLGM	Power Liftgate	CAN-I	68466171AG			68466171AG
ICS	Integrated Center Stack	CAN-I	7AS341X8AA			7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA			68500152AA
ESM	Electronic Shifter	CAN-C	68240089AN			68240089AN
ORC	Occupant Restraint	CAN-C	68480710AC			68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA			68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE			68493454AE
DDM	Driver Door Module	CAN-I	68496461AB			68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB			68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB			68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB			68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD			68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD			68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC			68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB			68517013AB
AMP	Amplifier	CAN-I	68448067AA			68448067AA
IPC	Instrument Panel Cluster	CAN-C	68434960AE			68434960AE
PTS	Parktronics	CAN-C	68485862AA			68485862AA
SCCM	Steering Column Control Module	CAN-C	68531525AA			68531525AA
BCM	Body Controller	CAN-C	68491085AG			68491085AG

Pa					
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
APM	Accessory Power Module	CAN-C	05185046AB		05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE		05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AH		05185116AH
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
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30DX9AA		6WL30DX9AA
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	05185117AH		05185117AH
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 01 01	4422	F2DB13B9
PLGM	USA	0	5270	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	
ESM	USA / USA	13 02 00	14 23 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	12 2E 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 2A 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	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM	Not programmed / COUNTRY_SNA	0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	879F1587 D754327D 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	
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
DMRL	B224F-54	Door Module Internal-Missing Calibration	Active
DMRR	B224F-54	Door Module Internal-Missing Calibration	Active
PSDML	B2199-16	Battery Voltage-Circuit Voltage Below Threshold	Stored
PSDMR	B2199-16	Battery Voltage-Circuit Voltage Below Threshold	Stored
BPCM	P0ABB-00	Hybrid Battery Pack Voltage Sense 1 Circuit Performance-	Stored

BPCM	P1AE2-00	Battery Energy Control Module High Voltage System Interlock Circuit-	Active
BPCM	P0AA4-00	Hybrid/EV Battery Negative Contactor "A" Stuck Closed-	Active
HCP	P0642-00	Sensor Reference Voltage 1 Circuit Low-	Active
HCP	P06B1-00	Sensor Power Supply 1 Circuit Low-	Active
HCP	P084F-00	Park/Neutral Switch Output-	Stored
HCP	P0A78-00	Drive Motor A Inverter Performance-	Active
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1A27-00	On Board Charging Module System Voltage Low-	Stored
HCP	P1AED-00	MCPB High Voltage Battery Voltage Sensor Circuit Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Active
OBCM	P0562-00	System Voltage Low-	Stored
ABSO	C2222-00	Improper Powerdown-	Stored

ENVIRONMENTAL DATA SUMMARY

DMRL | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed	True	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Frequency Counter	1	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	0	

DMRR | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
Pending DTC	False	
Test Failed	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Confirmed DTC	True	
Occurrence flag	Error	

Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Original Odometer Value	1163	miles

PSDML | B2199-16 | Stored | Battery Voltage-Circuit Voltage Below Threshold

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	FF	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	2	
Frequency Counter	5	

PSDMR | B2199-16 | Stored | Battery Voltage-Circuit Voltage Below Threshold

NAME	VALUE	UNITS
Test Failed	False	
Pending DTC	False	
Test Not Completed Since Last Clear	False	
Confirmed DTC	True	
Test Not Completed This Operation Cycle	False	
Test Failed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	FF	
Original Odometer Value	1163	miles
Frequency Counter	4	
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	2	

BPCM | P0ABB-00 | Stored | Hybrid Battery Pack Voltage Sense 1 Circuit Performance-

NAME	VALUE	UNITS
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	

Qualified Contactor Command - QCC	Open	
HCP Contactor Command	Impact Open	
Contactor Status	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Balance Mode	False	
ChargingLevel	Plug in, but no charge	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	Fail	
Pump - Overcurrent	PASS	
Pump - Dry Run Detection	PASS	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Fault trigger level 2	False	
Fault Path	01	
Fault trigger level 3	False	
Fault trigger level 1	False	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	30	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Fault Input	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 CC Path Test Req	Undetermined	
BPCM Sec HW Timer Status	Not Active	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec Contactor State	Open	
BPCM Main HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
Real Time Clock Validity	True	
Test Failed This Operation Cycle	False	
Pending DTC	True	

DTC	0A BB 00	
Confirmed DTC	True	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	13	
FoM - for this DTC (lifetime fails)	37	events
FoM - for this DTC (lifetime fails counts on pass)	32.1600	seconds
Ignition Cycle Counter	1	
Battery Total Time Awake	9670593	seconds
FoM - for this DTC (lifetime longest fail on pass)	3.520	seconds
Battery Lifetime Miles	66A0EC	miles
Frequency Counter	2	
Battery Lifetime AmpHrs of Charge	504.8	AHr
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
SOC at time of Fault	24.3	%
Power Up SOC at time of Fault	24.3	%
System (12) Volts at time of fault	11.573	Volts
Vehicle Speed	0.0	MPH
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
HV Battery Current HVBatCmt	0.00	Amps
HVIL Returned current - Battery	0.10	mA
HV Battery Current Sensor 1 Hall High	-1.90	Amps
HVIL PWM Frequency - Vehicle	0.0	Hz
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	77	°F
BPCM temperature max	75	°F
HVIL Source Voltage- Battery	7.267	Volts
BPCM temperature min	73	°F
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vd	0.000	Volts
Isolation Circuitry Vb	2.501	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts

WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
HV Battery Charge Power 10sec	43800	watts
HV Battery Charge Power 2sec	47742	watts
HV Battery Discharge Power 2sec	5385	watts
Cycles left to self heal	40	No Unit
HV Battery Discharge Power 10sec	4317	watts
HV Battery Power	007530	watts
Battery Full AmpHr Capacity	50	AmpHrs
Battery Cell Voltage Maximum	3565	mV
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Average	3559	mV
Battery Lifetime Number Of Closes	190	
Battery Cell Voltage Minimum	3556	mV
Cell Impedance Max Discharge	0	mOhms
HV Battery Voltage (cell sum)	341.70	Volts
HV Battery Voltage (Module Sum)	341.30	Volts
HV Sensor A Pack Voltage	231.70	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.60	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Maximum Module	75	°F
Battery Temperature Average Module	75	°F
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
HV Cooling Battery coolant inlet temp	75	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
Isolation Battery Impedance	0.8480	Mega Ohms
HV Bat SOH-R	19.2	%
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Bat SOH-C	96.9	%
BPCM Sec QA Error Counter	0	cnts
BPCM Sec MM Hw Reset Error Counter	0	cnts
Engine Speed	0	rpm
Real time clock	429496.7295	seconds
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Real time clock-OS Task Delay Timer	0	
Accelerator position	7.5	%
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles

BPCM | P1AE2-00 | Active | Battery Energy Control Module High Voltage System Interlock Circuit-

NAME	VALUE	UNITS
Key Position	Ign_ Run	

Key in Ignition	Key_Def	
EPT -WakeUp	Sourced	
HCP Contactor Command	Impact Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Contactor Status	Open	
Balance Mode	False	
ChargingLevel	Plug in, but no charge	
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	
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	Fail	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Switch Power Shorted	PASS	
Pump - Overtemperature	PASS	
Fault trigger level 3	False	
Fault trigger level 2	False	
Fault Path	01	
Fault trigger level 1	False	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	26	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Vehicle Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
BPCM Sec Asic Fault Input	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec Contactor State	Open	
BPCM Sec HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
BPCM Main HW Timer Status	Not Active	
DTC	1A E2 00	

Test Failed	True	
Real Time Clock Validity	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Failed Since Last Clear	True	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	6C	
Ignition Cycle Counter	0	
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime fails)	38	events
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Battery Total Time Awake	9670583	seconds
Frequency Counter	1	
Battery Lifetime Miles	66A0EC	miles
Battery Lifetime AmpHrs of Charge	504.8	AHr
Vehicle Speed	0.0	MPH
Power Up SOC at time of Fault	24.3	%
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
SOC at time of Fault	24.3	%
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
System (12) Volts at time of fault	11.581	Volts
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HV Battery Current Sensor 1 Hall High	-1.05	Amps
HVIL Returned current - Battery	0.10	mA
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
BPCM temperature min	73	°F
Charge indicator Temp	77	°F
BPCM temperature max	75	°F
HV Cooling Speed pump 1 Speed	0	rpm
HVIL Source Voltage- Battery	7.260	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
Isolation Circuitry Vb	2.501	Volts

WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
Cycles left to self heal	40	No Unit
Isolation Circuitry Va	2.497	Volts
HV Battery Charge Power 2sec	93747	watts
HV Battery Charge Power 10sec	89799	watts
HV Battery Discharge Power 2sec	42558	watts
HV Battery Discharge Power 10sec	41706	watts
HV Battery Power	007530	watts
Battery Full AmpHr Capacity	50	AmpHrs
Battery Cell Voltage Maximum	3566	mV
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Minimum	3556	mV
Battery Lifetime Number Of Closes	190	
HV Battery Voltage (Module Sum)	341.30	Volts
Battery Cell Voltage Average	3559	mV
HV Sensor A Pack Voltage	241.20	Volts
HV Battery Voltage (cell sum)	341.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Maximum Module	75	°F
HV Cooling Battery coolant inlet temp	75	°F
Battery Temperature Average Module	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Cooling Battery coolant outlet temp	75	°F
Isolation Battery Impedance	0.8480	Mega Ohms
HV Bat SOH-C	96.9	%
HV Bat SOH-R	19.2	%
BPCM Sec MM Hw Reset Error Counter	0	cnts
BPCM Sec QA Error Counter	0	cnts
Engine Speed	0	rpm
Accelerator position	7.5	%
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Real time clock	429496.7295	seconds
Real time clock-OS Task Delay Timer	0	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles

NAME	VALUE	UNITS
Key in Ignition	Key_Def	
EPT -WakeUp	Sourced	
Key Position	Ign_ Run	
HCP Contactor Command	Impact Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Contactor Status	Open	
ChargingLevel	Plug in, but no charge	
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	
Balance Mode	False	
HVIL Status - Battery pack	Fail	
HVIL Status -Vehicle	Not Sourced	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Pump - Overcurrent	PASS	
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	19	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
BPCM Sec Asic Fault Input	Not Active	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
BPCM Sec Contactor State	Open	

BPCM Main HW Timer Status	Not Active	
Real Time Clock Validity	True	
DTC	0A A4 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Confirmed DTC	True	
Pending DTC	True	
Test Failed Since Last Clear	True	
Test Not Completed Since Last Clear	False	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	0E	
Warning Indicator Requested	False	
FoM - for this DTC (lifetime fails)	43	events
Frequency Counter	1	
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Ignition Cycle Counter	0	
Battery Total Time Awake	9670583	seconds
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Battery Lifetime Miles	66A0EC	miles
System (12) Volts at time of fault	11.573	Volts
Vehicle Speed	0.0	MPH
Battery Lifetime AmpHrs of Charge	504.8	AHr
SOC at time of Fault	24.3	%
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
Power Up SOC at time of Fault	24.3	%
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HVIL Returned current - Battery	0.30	mA
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current Sensor 1 Hall High	-1.70	Amps
HV Cooling Speed Pump 1 Target	0	rpm
Charge indicator Temp	77	°F
BPCM temperature min	73	°F
BPCM temperature max	75	°F
HVIL Source Voltage- Battery	7.260	Volts
HV Battery Current HVBatCmt	0.00	Amps
Isolation Circuitry Va	2.497	Volts
HV Cooling Speed pump 1 Speed	0	rpm
Isolation Circuitry Vb	2.500	Volts

WC and Circuitry Vcc Voltage	5.026	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts
HV Battery Charge Power 2sec	93747	watts
Cycles left to self heal	40	No Unit
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
HV Battery Charge Power 10sec	89799	watts
HV Battery Discharge Power 10sec	41706	watts
HV Battery Discharge Power 2sec	42558	watts
HV Battery Power	007530	watts
Cell Impedance Max Discharge	0	mOhms
Battery Full AmpHr Capacity	50	AmpHrs
Battery Lifetime Number Of Closes	190	
Battery Cell Voltage Maximum	3565	mV
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Average	3559	mV
HV Battery Voltage (cell sum)	341.70	Volts
Battery Cell Voltage Minimum	3556	mV
HV Battery Voltage (Module Sum)	341.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor A Pack Voltage	242.80	Volts
Battery Temperature Maximum Module	75	°F
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Average Module	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling Battery coolant inlet temp	75	°F
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Bat SOH-C	96.9	%
HV Bat SOH-R	19.2	%
Isolation Battery Impedance	0.8480	Mega Ohms
BPCM L2 SM Hw Reset Error Counter	0	No Unit
BPCM Sec MM Hw Reset Error Counter	0	cnts
BPCM Sec QA Error Counter	0	cnts
Engine Speed	0	rpm
Real time clock-OS Task Delay Timer	0	
Real time clock	429496.7295	seconds
Accelerator position	7.5	%
Most Recent Odometer Value	1163	miles
Original Odometer Value	1163	miles

HCP | P0642-00 | Active | Sensor Reference Voltage 1 Circuit Low-

NAME	VALUE	UNITS
DTC	06 42 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	
Warning Indicator Requested	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
Propulsion System Active	False	
PRND Position Display	P	
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Over Current 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 SPI Error Fault - High-Side	True	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Short 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 Hardware Error Fault - Low-Side	True	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Thermal Shutdown 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 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	True	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	

Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	True	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	True	
Motor A Phase W Short 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 Over Current 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	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Cross Conduction 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 Over Current Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
Impact Event	False	
HCP System Shutdown Command	Default	
APM Status	Idle	
OBCM Operating Mode	UTC	
Commanded Inverter A State	Disable Immediate	
J1772 Prox Detected State	Prox Out	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - 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 Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VH - 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 Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-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 Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-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 Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - 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 W Cross Conduction Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - High-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Under Voltage Fault VH - 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 Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - 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	
Frequency Counter	1	
Original Odometer Value	1163.4	miles
Most Recent Odometer Value	1163.4	miles
Real time clock	9670584	sec
RAM stamps keyOn	135	sec
Accelerator Pedal Position	0	%
Engine Speed	0	rpm
HV Battery SOC	24	%
Ignition Cycle Counter	0	
RAM Stamps	54	Min
Vehicle Speed	0.0000	MPH

Barometric Pressure	15	PSI
Engine Coolant Temperature	75	°F
Actual Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase A	-4	AMP
Motor A - Inverter Current - phase B	0	AMP
Motor A - Inverter Current - phase C	-4	AMP
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 2 Sense	11.376	Volts
Battery Feed Voltage 3 Sense	11.232	Volts
Internal EPS Voltage Sense A	0.072	Volts
Internal EPS Voltage Sense B	0.000	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
PIM DC Link Voltage - A	42	Volts
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	77.0	°F
Battery Feed Voltage 1 Sense	11.592	Volts
Actual Torque - Motor B	0.092	Ft-Lbs
Available Motor Torque - Motor B	127.765	Ft-Lbs
Available Regen Torque - Motor B	-127.765	Ft-Lbs
Available Regen Torque - Motor A	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 B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B Resolver Angle	336	Degree
Motor B Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
HV Battery Sleep Time	0	Days
Motor B Torque	0.092	Ft-Lbs

GPS Date - Month	5	
GPS Date - Year	2021	Year
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	988	ms
UTC Time - Minutes	51	

HCP | P06B1-00 | Active | Sensor Power Supply 1 Circuit Low-

NAME	VALUE	UNITS
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Pending DTC	True	
Test Failed	True	
DTC	06 B1 00	
Test Failed This Operation Cycle	True	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
Warning Indicator Requested	True	
PHEV Charging Status	No Charging	
Propulsion System Active	False	
Ignition State	Reserved	
PRND Position Display	P	
Motor A Resolver Offset Learn Erase	not requested	
Motor B Resolver Offset Learning Status Flag	Applied	
Motor A Resolver Offset Learning Status Flag	Applied	
Motor A Resolver to Digital Low Level Driver Faults	No fault	
Motor B Resolver to Digital Low Level Driver Faults	No fault	
Hybrid System State	SNA	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Open	
Impact Event	False	
HCP System Shutdown Command	Default	
APM Status	Idle	
J1772 Prox Detected State	Prox Out	
Motor B Resolver Offset Learn Erase	not requested	
OBCM Operating Mode	UTC	
Original Odometer Value	1163.4	miles
RAM Stamps	54	Min
Most Recent Odometer Value	1163.4	miles

Ignition Cycle Counter	0	
Accelerator Pedal Position	0	%
Frequency Counter	1	
Motor B Temp Sensor	79	°F
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	81	°F
Real time clock	9670584	sec
Engine Speed	0	rpm
HV Battery SOC	24	%
Motor A Resolver Angle Offset	1.60	Degree
Motor B Resolver Angle Offset	2.00	Degree
Engine Coolant Temperature	75	°F
RAM stamps keyOn	135	sec
Barometric Pressure	15	PSI
Motor B Resolver Supply Voltage Value	15.75	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
Internal EPS Voltage Sense B	0.000	Volts
Available Motor Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Actual Torque - Motor A	0.000	Ft-Lbs
Battery Feed Voltage 2 Sense	11.376	Volts
Internal EPS Voltage Sense A	0.072	Volts
Available Regen Torque - Motor B	-150.996	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	150.996	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Electric Motor B Speed	0.5	rpm
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase B	0	AMP
Battery Feed Voltage 1 Sense	11.592	Volts
Motor A - Inverter Current - phase C	-4	AMP
Battery Feed Voltage 3 Sense	11.232	Volts
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Outside Air Temperature	77.0	°F
Motor A - Inverter Current - phase A	-4	AMP
PIM DC Link Voltage - A	42	Volts
PIM DC Link Voltage - B	4	Volts
Inverter A IGBT Temperature for phase A	93	°F
HV Battery Voltage from BPCM	180.00	Volts
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F

Motor A Torque	0.000	Ft-Lbs
Motor B Torque	0.092	Ft-Lbs
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase C	81	°F
UTC Time - Hours	23	Hours
GPS Date - Year	2021	Year
GPS Date - Day	1	Days
HV Battery Sleep Time	0	Days
ECU Time - Milliseconds	175	ms
GPS Date - Month	5	
UTC Time - Minutes	51	
UTC Time - Seconds	0	seconds

HCP | P084F-00 | Stored | Park/Neutral Switch Output-

NAME	VALUE	UNITS
DTC	08 4F 00	
Test Failed This Operation Cycle	True	
Test Failed	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
Ignition State	Ignition Lock	
PHEV Charging Status	No Charging	
Brake Switch Status	Not Applied	
Warning Indicator Requested	False	
Propulsion System Active	False	
Shift Lock Status	Locked	
PRND Position Display	P	
Reverse Shift Lock Status	Unlocked	
Auto Correction Request	APCM Off	
Park Pawl Motor Enable Feedback	Disabled	
Failure Reasons for Level 2 eShift	Reserved	
Park Pawl Status Feedback	Segment Two Complete	
Park Gated Switch	In Park	
PRND Blink	Initialization	
Park Pawl Motor Direction	Out of Park/Move Towards Disengage	
Hybrid System State	Power Up	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	

HV Contactor Status	Open	
EPT LOC Diag Enable	Disable LOC Daignostic	
APM Status	Idle	
HCP System Shutdown Command	Default	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Impact Event	False	
Frequency Counter	1	
Most Recent Odometer Value	1163.4	miles
Real time clock	9927186	sec
RAM stamps keyOn	0	sec
Ignition Cycle Counter	0	
Barometric Pressure	15	PSI
HV Battery SOC	24	%
RAM Stamps	0	Min
Original Odometer Value	1163.4	miles
Accelerator Pedal Position	0	%
Vehicle Speed	0.0000	MPH
Park Pawl Motor PWM1	0	%
Engine Coolant Temperature	176	°F
Battery Feed Voltage 2 Sense	12.456	Volts
Park Pawl Motor Counts	400	Counts
Park Pawl Motor Current	0.1	AMP
PP Actuator Position Sensor Voltage	4.00	Volts
Battery Feed Voltage 3 Sense	12.528	Volts
Internal EPS Voltage Sense B	0.000	Volts
Internal EPS Voltage Sense A	0.072	Volts
Engine Speed	0	rpm
Actual Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	116.150	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Battery Feed Voltage 1 Sense	12.240	Volts
Available Motor Torque - Motor A	43.603	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-116.150	Ft-Lbs
Available Regen Torque - Motor A	-43.603	Ft-Lbs
Motor A - Inverter Current - phase B	0	AMP
Motor A - Inverter Current - phase A	0	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	0	AMP
Outside Air Temperature	80.6	°F
Motor B Temp Sensor	81	°F
Motor B Resolver Angle	336	Degree
Motor A Resolver Angle	196	Degree

Motor A - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Electric Motor A Speed	0.0	rpm
PIM DC Link Voltage - B	4	Volts
Electric Motor B Speed	0.0	rpm
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase C	79	°F
PIM DC Link Voltage - A	45	Volts
Inverter B IGBT Temperature for phase C	79	°F
Inverter A IGBT Temperature for phase B	79	°F
Motor A Temp Sensor	81	°F
Inverter A IGBT Temperature for phase A	90	°F
Inverter B IGBT Temperature for phase A	79	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
HV Battery Sleep Time	0	Days
Inverter B IGBT Temperature for phase B	79	°F
GPS Date - Day	1	Days
Motor B Torque	0.092	Ft-Lbs
UTC Time - Seconds	2	seconds
GPS Date - Month	1	
UTC Time - Hours	0	Hours
UTC Time - Minutes	0	
GPS Date - Year	0	Year
ECU Time - Milliseconds	619	ms

HCP | P0A78-00 | Active | Drive Motor A Inverter Performance-

NAME	VALUE	UNITS
Test Failed	True	
Pending DTC	True	
Confirmed DTC	True	
Test Failed This Operation Cycle	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
DTC	0A 78 00	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	

Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Over Current 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 Thermal Shutdown Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U Thermal Warning Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
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 Shutdown Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Short 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 Cross Conduction Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
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	True	
Motor A Phase V Hardware Error Fault - Low-Side	True	
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 Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - High-Side	True	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	

Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP System Shutdown Command	Default	
APM Status	Idle	
Impact Event	False	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Commanded Inverter A State	Disable Immediate	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over 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 Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Over 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 Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Under Voltage Fault VL - High-Side	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 VDD - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - High-Side	False	

Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over 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	
Frequency Counter	1	
Original Odometer Value	1163.4	miles
Most Recent Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
RAM stamps keyOn	135	sec
Real time clock	9670584	sec
RAM Stamps	54	Min
HV Battery SOC	24	%
Engine Speed	0	rpm
Engine Coolant Temperature	75	°F
Vehicle Speed	0.0000	MPH
Inverter A Input DC Current	0.0	AMP
Available Motor Torque - Motor A	0.000	Ft-Lbs
Accelerator Pedal Position	0	%
Actual Torque - Motor A	0.000	Ft-Lbs
Barometric Pressure	15	PSI
Motor A - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase C	0	AMP
Electric Motor A Speed	0.0	rpm
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 2 Sense	11.376	Volts
Battery Feed Voltage 3 Sense	11.232	Volts
Motor A - Inverter Current - phase A	-4	AMP
Internal EPS Voltage Sense B	0.000	Volts
Internal EPS Voltage Sense A	0.072	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
PIM DC Link Voltage - A	42	Volts

Outside Air Temperature	77.0	°F
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Actual Torque - Motor B	0.184	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Battery Feed Voltage 1 Sense	11.592	Volts
Available Regen Torque - Motor B	-141.685	Ft-Lbs
Available Motor Torque - Motor B	141.685	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	-4	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B Resolver Angle	336	Degree
Motor B Temp Sensor	79	°F
Electric Motor B Speed	0.5	rpm
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter A IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
Inverter B IGBT Temperature for phase C	81	°F
Motor B Torque	0.184	Ft-Lbs
HV Battery Sleep Time	0	Days
GPS Date - Year	2021	Year
GPS Date - Month	5	
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
UTC Time - Minutes	51	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	106	ms

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

NAME	VALUE	UNITS
Test Failed	True	
Test Failed This Operation Cycle	True	
DTC	0E 15 00	
Pending DTC	True	
Confirmed DTC	False	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	

Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag		
PHEV Charging Status		
Brake Switch Status		
Propulsion System Active		
PRND Position Display		
Ignition State		
HV Coolant Heater - Below 60V		
HV Coolant Heater - Response Error		
HV Coolant Heater - Communication Error (SPI Interface Issue)		
HV Coolant Heater - Low Voltage Out of Range		
HV Coolant Heater - HV Protection		
HV Coolant Heater - Overheat Protection		
HV Coolant Heater - Heater Core Temp Sensor Defect		
HV Coolant Heater - High Voltage Out of Range		
HV Coolant Heater - Short or Open Circuit at IGBTs		
HV Coolant Heater - Memory Error		
HV Coolant Heater - DC/DC Voltage Out of Range		
HV Coolant Heater - Current Consumption at High Voltage Out of Range		
HV Coolant Heater - Coolant Outlet Temp Sensor Defect		
HV Coolant Heater - Coolant Inlet Temp Sensor Defect		
HV Coolant Heater - Coolant Temp Out of Range		
Hybrid System State		
EPT LOC Diag Enable		
HV Contactor Status		
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
APM Status		
Impact Event		
OBCM Operating Mode		
J1772 Prox Detected State		
HCP System Shutdown Command		
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Accelerator Pedal Position		%
Original Odometer Value		miles
HV Battery SOC		%
RAM Stamps		Min
Real time clock		sec
Vehicle Speed		MPH
RAM stamps keyOn		sec
Barometric Pressure		PSI

HV Coolant Heater - Actual Current Consumption	AMP
Engine Speed	rpm
Engine Coolant Temperature	°F
HV Coolant Heater - Actual Calculated Power Consumption	W
HV Coolant Heater - Measured Coolant Inlet Temp	°F
Battery Feed Voltage 3 Sense	Volts
HV Coolant Heater - Measured Coolant Outlet Temp	°F
HV Coolant Heater - Measured High Voltage	Volts
Battery Feed Voltage 2 Sense	Volts
HV Coolant Heater - Desired Power Consumption	W
Internal EPS Voltage Sense B	Volts
Internal EPS Voltage Sense A	Volts
Battery Feed Voltage 1 Sense	Volts
Available Motor Torque - Motor A	Ft-Lbs
Available Regen Torque - Motor B	Ft-Lbs
Motor A - Inverter Current - phase B	AMP
Actual Torque - Motor A	Ft-Lbs
Actual Torque - Motor B	Ft-Lbs
Motor A - Inverter Current - phase A	AMP
Commanded Torque - Motor A	Ft-Lbs
Commanded Torque - Motor B	Ft-Lbs
Motor A Resolver Angle	Degree
Available Regen Torque - Motor A	Ft-Lbs
Available Motor Torque - Motor B	Ft-Lbs
Outside Air Temperature	°F
Motor A - Inverter Current - phase C	AMP
Motor B - Inverter Current - phase A	AMP
Motor B - Inverter Current - phase C	AMP
Motor B Resolver Angle	Degree
Motor A Temp Sensor	°F
Motor B Temp Sensor	°F
Electric Motor A Speed	rpm
Electric Motor B Speed	rpm
Motor B - Inverter Current - phase B	AMP
PIM DC Link Voltage - B	Volts
Inverter B IGBT Temperature for phase A	°F
Inverter A IGBT Temperature for phase B	°F
HV Battery Voltage from BPCM	Volts
Inverter A IGBT Temperature for phase A	°F
Inverter B IGBT Temperature for phase C	°F
Inverter A IGBT Temperature for phase C	°F
Inverter B IGBT Temperature for phase B	°F
Motor A Torque	Ft-Lbs
Motor B Torque	Ft-Lbs

HV Battery Sleep Time		Days
PIM DC Link Voltage - A		Volts
UTC Time - Minutes		
ECU Time - Milliseconds		ms
GPS Date - Year		Year
Distance Travelled with Light ON		miles
UTC Time - Seconds		seconds
UTC Time - Hours		Hours
GPS Date - Month		
GPS Date - Day		Days

HCP | P1A27-00 | Stored | On Board Charging Module System Voltage Low-

NAME	VALUE	UNITS
DTC	1A 27 00	
Test Failed	False	
Pending DTC	True	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
DTC Extended Data Record Number	07	
Test Failed This Operation Cycle	True	
Warning Indicator Requested	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
Ignition State	Ignition Lock	
HVIL Sense Input State	Open	
PRND Position Display	P	
Propulsion System Active	False	
No Charging Reasons	Power Moding Shutdown	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
Impact Event	False	
EPT LOC Diag Enable	Enable Limited LOC Diagnostic	
HCP SW Version	21B	
SW Build Release Version	PIM_21B_2011B0_RU_HCP__	
Hybrid System State	SNA	
OBCM Derating Reason	No Derating	
OBCM Operating Mode	UTC	
HCP Commanded OBCM Mode	Idle	
J1772 Prox Detected State	CP DET	
J1772 Pilot Detected State	NO EVSE	
HCP J1772 S2 Close Command	Off	
HCP Charging System Status	No Charging	

HCP Charging Level	Reserved	
OBCM Ready to Charge	Charge Disabled	
OBCM J1772 S2 Status	Off	
HCP Charging System Fault	True	
HCP Command to Enable Charging	Charge Disabled	
HCP Charging Fault Reason	Power Moding Shutdown	
DC Voltage Not Detected	Passed	
HV Battery Contactor State	Open	
AC Voltage Detected	AC Not OK	
HV Contactor Status	Open	
APM Status	Idle	
HCP System Shutdown Command	Default	
PHEV Charging Status	No Charging	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Frequency Counter	1	
Most Recent Odometer Value	1163.4	miles
Real time clock	9688406	sec
RAM Stamps	61	Min
Engine Speed	0	rpm
RAM stamps keyOn	30	sec
Vehicle Speed	0.0000	MPH
Barometric Pressure	15	PSI
Engine Coolant Temperature	176	°F
Battery Feed Voltage 2 Sense	7.056	Volts
Accelerator Pedal Position	0	%
Internal EPS Voltage Sense A	0.072	Volts
Internal EPS Voltage Sense B	0.000	Volts
Outside Air Temperature	77.0	°F
CAN Overrun Counter	0	Number
Maximum Charge Current Allowed	0.00	Amps
Charge Current Available	0.00	AMP
HV Battery Actual Current	0.00	AMP
AC Voltage for Charging	1.7	Volts
HCP Charging Current Command	0.00	AMP
OBCM Module B Max Temperature	77	°F
AC Current During Charging	0.40	Amps
Radiator Fan Command	7	%
OBCM Accumulated Charging Time	1	hrs
OBCM Module A Max Temperature	75	°F
DC Charging Current	0.20	Amps
OBCM Charging Voltage	180.0	Volts
Maximum EVSE Current Available	0	AMP
HCP Charging Voltage Command	0	Volts

HV Battery Inlet Temperature	75	°F
HV Battery Outlet Temperature	75	°F
HV Battery Min Cell Voltage	0.225	Volts
Max Cell Voltage	0.550	Volts
HV Battery Sleep Time	0	Days
OBCM Module A PCB Temperature	73	°F
Max Cell Temperature	75	°F
OBCM Module B PCB Temperature	77	°F
OBCM Charging Power	0	KW-Hrs
Min Cell Temperature	73	°F
HV Battery Pump Current	0.0	AMP
Battery Feed Voltage 3 Sense	6.984	Volts
Battery Feed Voltage 1 Sense	6.984	Volts
Actual Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-116.150	Ft-Lbs
Actual Torque - Motor B	0.184	Ft-Lbs
HV Battery SOC	24	%
Motor B - Inverter Current - phase A	0	AMP
Motor A - Inverter Current - phase C	0	AMP
Available Motor Torque - Motor A	43.603	Ft-Lbs
Available Motor Torque - Motor B	116.150	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase A	-4	AMP
Available Regen Torque - Motor A	-43.603	Ft-Lbs
Motor B Resolver Angle	336	Degree
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor A - Inverter Current - phase B	0	AMP
Motor A Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor A Speed	0.0	rpm
Motor B - Inverter Current - phase C	-4	AMP
PIM DC Link Voltage - B	4	Volts
Electric Motor B Speed	0.0	rpm
Motor A Resolver Angle	196	Degree
Inverter A IGBT Temperature for phase C	75	°F
Inverter B IGBT Temperature for phase B	75	°F
Inverter B IGBT Temperature for phase A	75	°F
Motor B Temp Sensor	79	°F
Inverter A IGBT Temperature for phase B	75	°F
Inverter B IGBT Temperature for phase C	75	°F
Distance Travelled with Light ON	0	miles
PIM DC Link Voltage - A	44	Volts
GPS Date - Day	2	Days

GPS Date - Month	5	
Inverter A IGBT Temperature for phase A	88	°F
ECU Time - Milliseconds	194	ms
UTC Time - Minutes	47	
GPS Date - Year	2021	Year
Motor B Torque	0.184	Ft-Lbs
Motor A Torque	0.000	Ft-Lbs
UTC Time - Hours	4	Hours
UTC Time - Seconds	18	seconds

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

NAME	VALUE	UNITS
DTC	1A ED 00	
Test Failed	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		
Pending DTC	True	
Test Failed This Operation Cycle	True	
Brake Switch Status		
PHEV Charging Status		
Propulsion System Active		
Ignition State		
PRND Position Display		
Motor B Phase U Cross Conduction Fault - High-Side		
Motor B Phase U Thermal Warning Fault - High-Side		
Inverter B Status Feedback		
Motor B Phase U Short Fault - High-Side		
Motor B Phase U Hardware Error 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 Cross Conduction Fault - Low-Side		
Motor B Phase U Over Current Fault - Low-Side		
Motor B Phase U SPI Error Fault - High-Side		
Motor B Phase U Thermal Shutdown Fault - Low-Side		
Motor B Phase U Short Fault - Low-Side		
Commanded Inverter B State		
Motor B Phase U SPI Error Fault - Low-Side		
Motor B Phase U Hardware Error Fault - Low-Side		
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase U Thermal Warning Fault - Low-Side		

Motor B Phase V Cross Conduction Fault - High-Side		
Motor B Phase V Over Current Fault - High-Side		
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-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 Thermal Warning Fault - High-Side		
Motor B Phase V Short Fault - High-Side		
Motor B Phase V Short Fault - Low-Side		
Motor B Phase V SPI Error Fault - High-Side		
Motor B Phase V Thermal Shutdown Fault - High-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 Over Current Fault - Low-Side		
Motor B Phase V Cross Conduction Fault - Low-Side		
Motor B Phase V Hardware Error Fault - High-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 V Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase W Hardware Error 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 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 Short Fault - Low-Side		
Motor B Phase W SPI Error Fault - Low-Side		
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase W Cross Conduction Fault - Low-Side		
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase W Hardware Error Fault - Low-Side		
Hybrid System State		
EPT LOC Diag Enable		
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
HV Contactor Status		
APM Status		
HCP System Shutdown Command		
Impact Event		

OBCM Operating Mode

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 Current Fault - High-Side

J1772 Prox Detected State

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 VH - Low-Side

Motor B Phase U Under Voltage Fault VL - Low-Side

Motor B Phase U Over Voltage Fault VDD - High-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 U Over Voltage Fault VL - Low-Side

Motor B Phase V Under Voltage Fault VL - High-Side

Motor B Phase V Under Voltage Fault VH - High-Side

Motor B Phase U Under Voltage Fault VDD - High-Side

Motor B Phase V Over Voltage Fault VDD - High-Side

Motor B Phase V Over Voltage Fault VL - Low-Side

Motor B Phase U Under Voltage Fault VH - Low-Side

Motor B Phase V Under Voltage Fault VDD - High-Side

Motor B Phase V Under Voltage Fault VH - Low-Side

Motor B Phase W Over Voltage Fault VH - High-Side

Motor B Phase V Under Voltage Fault VL - Low-Side

Motor B Phase V Over Voltage Fault VDD - Low-Side

Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side

Motor B Phase V Under Voltage Fault VDD - Low-Side

Motor B Phase W Over Voltage Fault VDD - High-Side

Motor B Phase W Over Voltage Fault VL - High-Side

Motor B Phase W Under Voltage Fault VH - High-Side

Motor B Phase W Thermal Shutdown Fault - High-Side

Motor B Phase V Over Voltage Fault VL - High-Side

Motor B Phase W Under Voltage Fault VL - High-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 VH - Low-Side

Motor B Phase W Under Voltage Fault VDD - High-Side

Motor B Phase W Under Voltage Fault VDD - Low-Side

Motor B Phase W Under Voltage Fault VH - Low-Side

Motor B Phase W Over Voltage Fault VDD - Low-Side

Motor B Phase V Over Voltage Fault VH - Low-Side

Frequency Counter

Ignition Cycle Counter

Most Recent Odometer Value

miles

Original Odometer Value		miles
Real time clock		sec
Engine Speed		rpm
Barometric Pressure		PSI
RAM stamps keyOn		sec
RAM Stamps		Min
Vehicle Speed		MPH
Electric Motor B Speed		rpm
Actual Torque - Motor B		Ft-Lbs
Accelerator Pedal Position		%
HV Battery SOC		%
Inverter B Input DC Current		AMP
Available Motor Torque - Motor B		Ft-Lbs
Motor B - Inverter Current - phase B		AMP
Engine Coolant Temperature		°F
Motor B - Inverter Current - phase A		AMP
Internal EPS Voltage Sense B		Volts
Internal EPS Voltage Sense A		Volts
Motor B Resolver Supply Voltage Value		Volts
Motor B - Inverter Current - phase C		AMP
Battery Feed Voltage 2 Sense		Volts
Actual Torque - Motor A		Ft-Lbs
Battery Feed Voltage 1 Sense		Volts
Available Regen Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Battery Feed Voltage 3 Sense		Volts
Motor A - Inverter Current - phase C		AMP
Commanded Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Motor A Temp Sensor		°F
Outside Air Temperature		°F
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A Resolver Angle		Degree
Available Regen Torque - Motor A		Ft-Lbs
PIM DC Link Voltage - A		Volts
Inverter A IGBT Temperature for phase A		°F
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
PIM DC Link Voltage - B		Volts
Inverter B IGBT Temperature for phase C		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
HV Battery Sleep Time		Days

Distance Travelled with Light ON		miles
Motor B Torque		Ft-Lbs
GPS Date - Year		Year
GPS Date - Day		Days
UTC Time - Minutes		
GPS Date - Month		
Inverter A IGBT Temperature for phase B		°F
Motor A Torque		Ft-Lbs
Inverter B IGBT Temperature for phase B		°F
ECU Time - Milliseconds		ms
UTC Time - Seconds		seconds
UTC Time - Hours		Hours

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

NAME	VALUE	UNITS
DTC	1A EE 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	
Warning Indicator Requested	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
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 Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Short 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 Cross Conduction Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	

Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Thermal Warning 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 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 Thermal Shutdown Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
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 Hardware Error Fault - Low-Side	True	
Motor A Phase V SPI Error Fault - Low-Side	True	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase W Thermal Warning Fault - High-Side	False	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W Thermal Shutdown Fault - High-Side	False	
Motor A Phase W SPI Error Fault - High-Side	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	

Commanded Inverter A State	Disable Immediate	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VH - 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 Under Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - 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 Over 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 U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Over Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Comm Error High 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 V Comm Error Low Voltage Regulator Fault - Low-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 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 Over Voltage Fault VDD - High-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	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163.4	miles
Frequency Counter	1	
Real time clock	9670584	sec
RAM Stamps	54	Min
HV Battery SOC	24	%
RAM stamps keyOn	135	sec
Engine Speed	0	rpm
Accelerator Pedal Position	0	%
Barometric Pressure	15	PSI
Engine Coolant Temperature	75	°F
Vehicle Speed	0.0000	MPH
Available Motor Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor A	0.000	Ft-Lbs
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase A	0	AMP
Inverter A Input DC Current	0.0	AMP
Battery Feed Voltage 2 Sense	11.376	Volts
Motor A - Inverter Current - phase C	0	AMP
Motor A - Inverter Current - phase B	0	AMP
Battery Feed Voltage 3 Sense	11.232	Volts
Internal EPS Voltage Sense B	0.072	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
Internal EPS Voltage Sense A	0.072	Volts
PIM DC Link Voltage - A	42	Volts
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	77.0	°F
Battery Feed Voltage 1 Sense	11.592	Volts
Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	145.188	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-145.188	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase A	0	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	336	Degree

Motor B Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
Motor B Torque	0.092	Ft-Lbs
HV Battery Sleep Time	0	Days
GPS Date - Year	2021	Year
GPS Date - Month	5	
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
ECU Time - Milliseconds	125	ms
UTC Time - Seconds	0	seconds
UTC Time - Minutes	51	

OBCM | P0562-00 | Stored | System Voltage Low-

NAME	VALUE	UNITS
Test Failed	False	
DTC	05 62 00	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed This Operation Cycle	False	
Warning Indicator Requested	False	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Error	
DTC Extended Data Record Number - Record #2	00	
AC Line Low	Not Valid	
OBCM Status AC Present	AC Not OK	
AC Line High	Not Valid	
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
HV OC	False	
HV OV	False	
NTC1 OT	False	

NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	
J1772 S2 Status	Open	
Prox Stat	Prox Out	
J1772 Stat	Veh Not Connected	
J1772 S2 Close	Open	
EVSE Pilot Stat	NO EVSE	
OBCM Mode	UTC	
HCP (EVCU) Shutdown Command	EVCU Operational	
OBCM Charger Ready	On	
HCP (EVCU) Enable Charge Command	Charge disable	
OBCM WU Status	On	
Chrg Fail Sts	Faulted - Charging Allowed	
Charge Enable Status	Chrg Disable	
OBC Control Mth	Current	
OBCM Wake Up Reason	BPCM Wake Up	
HCP (EVCU) OBC Mode Request	Idle	
Chrg Cntctr Stat	Open	
Generic Fail Sts	No Functional Fail Present	
Close Chrg Cntctr	Open	
OBCM Deraing Reason	No Derating	
Chrg Mode	Charge Mode	
OBCM Fault Reason	No Faults detected	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - HV Over Current Protect	False	
OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - Battery 12V Under Voltage Protect	True	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	
OBCM - CAN Bus Off	False	
OBCM - HV Voltage Under MinCal Protect	False	

OBCM - Loss BPCM Communication Protect	False	
OBCM - Pilot Duty Fault	False	
OBCM - ORC Loss of Communication	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - Prox Range To High	False	
OBCM - Prox Range To Low	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Stuck Shutdown	False	
Control Pilot Open fault	False	
OBCM - ARC/CRC Fault	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - AC Contact Welded 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	
Prox open fault	False	
Plant mode flag	False	
Retry fault flag	True	
Loss SBC communication (SPI)	False	
pilot input short to battery fault in Driver mode detecting	False	
pilot short to ground fault in driver mode detecting	False	
pilot input short to ground fault	False	
HCP stuck High fault	False	
Module A Primary - AC Under Voltage Protect	True	
Module A Primary - PFC Power Limit	False	
Module A Primary - PFC Enable States	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
Module A Primary - LLC Enable States	False	

Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - Relay Enable States	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - AC Vin Lost	False	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Shutdown Mode	False	
Module A Secondary - Aux Enable States	False	
Module A Primary - Operate Mode	False	
Module A Primary - Standby Mode	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 - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage 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 - Primary Turn On States	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 - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	False	

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

Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - Standby Mode	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - LV Micro Disable Command	False	
Module B Secondary - Operate Mode	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - Ambient High Temperature Derating	False	
Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	04	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
SBC State_E100	00	
SBC State_E180	88	
SBC State_DF80	00	
Module B Secondary - AC Input Voltage Derating	False	
SBC State_E580	00	
SBC State_E300	00	
SBC State_E500	00	
EPT LOC Diag Enable	Enable Limited LOC Diagnostic	
CANSIP Bus Off	False	
BPCM HV Battery Contactor Open	False	
SBC Bus Off	False	
HV Battey Contactor Open	False	
HV Contactor Status	Open	
HCP Shutdown Command	No Shutdown	
BPCM Request for HV Contactor	False	
AC Side Current	0.40	Amps
Original Odometer Value	1163	miles
Ignition Cycle Counter	2	
HCP (EVCU) AC Current Max Cal	-0.50	Amps
Frequency Counter	1	
Battery Side Current	0.20	Amps

HCP (EVCU) HV Current Max Cal	-12.00	Amps
Most Recent Odometer Value	1163	miles
AC Side Volt	1.7	Volts
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	77	°F
OBCM Temperature 3	77	°F
Battery Side Voltage	0.0	Volts
HCP (EVCU) HV Volt Max Cal	152	Volt
External OBCM Inlet Temperature (CAN)	-40	°F
OBCM Temperature 2	73	°F
J1772 ICA	0	AMP
OBCM Temperature 4	73	°F
Control Pilot Duty Cycle	0.00	%
Watt Hours of Charge the HV Bus	0	W-Hrs
Watt-Hours of AC Power	0	W-Hrs
OBC Idle Tml	1	hrs
Control Pilot Frequency	1024	Hz
Module A Primary - AC Side Current	-24.80	Amps
Control Pilot Amplitude	0.012	Volts
Module A Secondary - Ambient Temperature	73	°F
Module A Primary - PFC Temperature	75	°F
Module A Primary - AC Side Volt	2.2	Volts
Module A Primary - LLC Temperature	75	°F
Module A Secondary - Buck Temperature	73	°F
Prox Voltage	4.455	Volt
Module A Secondary - Battery Side Current	-24.90	Amps
Module B Primary - PFC Temperature	77	°F
Module B Secondary - Battery Side Voltage	0.0	Volts
Module A Secondary - Buck Output Voltage	0.1	Volts
Module B Secondary - Battery Side Current	-24.90	Amps
Module B Primary - AC Side Volt	1.3	Volts
Module A Secondary - Battery Side Voltage	0.0	Volts
Module B Primary - AC Side Current	-24.80	Amps
Module B Secondary - Buck Temperature	77	°F
OBC Charge Tml	1	hrs
Module B Secondary - Ambient Temperature	77	°F
Module B Secondary - Buck Output Voltage	0.1	Volts
Module B Primary - LLC Temperature	77	°F
Ignition on Time for DTC	0	sec
OBC Charge Time	0	sec
OBC Idle Time	0	sec
OBCM Charge Current Available	0.00	AMP

ABSO | C2222-00 | Stored | Improper Powerdown-

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
DTC	62 22 00	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed This Operation Cycle	False	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Controller Event	No	
Test Failed Since Last Clear	False	
Previous System Mode	CAN active	
System Condition	ABS fault	
Current System Mode	CAN active	
Brake Pedal Status	Released	
Rotation Direction Left Rear	Forward	
Rotation Direction Right Front	Forward	
Rotation Direction Left Front	Forward	
Rotation Direction Right Rear	Forward	
MSR control	Not Active	
ASR control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
HSA control	Not Active	
EBV control	Not Active	
ABS control	Not Active	
BLS High	No	
BLS Low	Yes	
Plant Mode	No	
ESP Control	Not Active	
ESP-OFF mode	No	
EPB Mode Status	Limp Home	
Transmission selector lever setting	P	
EPB Switch Status	Idle	
Park Brake	Not Activated	
Clutch	Not Activated	
Actual Gear	N	
Status Parking Brake Left	Brake is in an Unknown State	
Stop Coordinator Active	No	

Status Parking Brake Right	Brake is in an Unknown State	
Original Odometer Value	0	miles
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Fault Time	0.00	S
Supply Voltage Valves	12.7	V
Wheel Speed Right Front	0.000	MPH
Wheel Speed Right Rear	0.000	MPH
Brake Pedal Travel Sensor Position	0	%
Supply voltage Pump	10.0	V
Wheel Speed Left Rear	0.000	MPH
Yaw Rate	0.000	°/s
Steering Wheel Angle	0.00	°
Ignition Unfiltered	0.0	V
Primary Circuit Pressure	0.00	PSI
Lateral Acceleration	0.00	m/s^2
Wheel Speed Left Front	0.000	MPH
Longitudinal Acceleration	0.00	m/s^2
Supplier Internal Code	140	
Engine Speed	0.0	rpm
Accelerator Pedal Position	0.0	%

SNAPSHOT DATA SUMMARY

No Snapshot Data available for B224F-54

No Snapshot Data available for B224F-54

No Snapshot Data available for B2199-16

No Snapshot Data available for B2199-16

No Snapshot Data available for P0ABB-00

No Snapshot Data available for P1AE2-00

No Snapshot Data available for P0AA4-00

No Snapshot Data available for P0642-00

No Snapshot Data available for P06B1-00

No Snapshot Data available for P084F-00

No Snapshot Data available for P0A78-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1A27-00

No Snapshot Data available for P1AED-00

No Snapshot Data available for P1AEE-00

No Snapshot Data available for P0562-00

No Snapshot Data available for C2222-00



VEHICLE SCAN REPORT

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

Odometer 1163.4 miles
Publication Date Jul 15, 2021, 9:40:50 AM

ECU SUMMARY INFO

ECU	NAME	BUS TYPE	FLASH PART #	CURRENT VIN	ORIGINAL VIN	PART #
PCM	Powertrain Control Module	CAN-C	68499122AE	[REDACTED]	[REDACTED]	68499122AE
PLGM	Power Liftgate	CAN-I	68466171AG			68466171AG
ICS	Integrated Center Stack	CAN-I	7AS341X8AA			7AS341X8AA
RFH	Radio Frequency Hub	CAN-C	68500152AA			68500152AA
ESM	Electronic Shifter	CAN-C	68240089AN			68240089AN
ORC	Occupant Restraint	CAN-C	68480710AC			68480710AC
EPS	Electric Power Steering	CAN-C	68460392AA			68460392AA
HVAC	Heat, Ventilation and A/C	CAN-I	68493454AE			68493454AE
DDM	Driver Door Module	CAN-I	68496461AB			68496461AB
PDM	Passenger Door Module	CAN-I	68496460AB			68496460AB
DMRL	Door Module Rear Left	CAN-I	68508894AB			68508894AB
DMRR	Door Module Rear Right	CAN-I	68508894AB			68508894AB
PSDML	Power Sliding Doors (Left)	CAN-I	68369596AD			68369596AD
PSDMR	Power Sliding Doors (Right)	CAN-I	68369596AD			68369596AD
MSM	Memory Seat Module	CAN-I	68321862AC			68321862AC
CSWM	Comfort Seat Wheel Module	CAN-I	68517013AB			68517013AB
AMP	Amplifier	CAN-I	68448067AA			68448067AA
IPC	Instrument Panel Cluster	CAN-C	68434960AE			68434960AE
PTS	Parktronics	CAN-C	68485862AA			68485862AA
SCCM	Steering Column Control Module	CAN-C	68531525AA			68531525AA
BCM	Body Controller	CAN-C	68491085AG			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
APM	Accessory Power Module	CAN-C	05185046AB		05185046AB
BPCM	Battery Pack Control Module	CAN-C	05193183AE		05193183AE
HCP	Hybrid Control Processor	CAN-C	05185116AH		05185116AH
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
RCCC	Rear Cabin Comfort Controls	CAN-I	6WL30DX9AA		6WL30DX9AA
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	05185117AH		05185117AH
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 01 01	4422	F2DB13B9
PLGM	USA	0	5270	000200000031	
ICS	USA	0F 0C 00	13 31 01	4700	
RFH	USA / USA	10 17 00	13 26 00	4A00	
ESM	USA / USA	13 02 00	14 23 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	12 2E 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 2A 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	
APM	USA / USA	11 32 00	11 32 00	4001	
BPCM	Not programmed / COUNTRY_SNA	0E 03 00	14 2C 00	4005	79855957
HCP	USA	11 1F 04	0F 2D 00	4006	879F1587 D754327D 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	
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
DMRL	B224F-54	Door Module Internal-Missing Calibration	Active
DMRR	B224F-54	Door Module Internal-Missing Calibration	Active
PSDML	B2199-16	Battery Voltage-Circuit Voltage Below Threshold	Stored
PSDMR	B2199-16	Battery Voltage-Circuit Voltage Below Threshold	Stored
BPCM	P0ABB-00	Hybrid Battery Pack Voltage Sense 1 Circuit Performance-	Stored

BPCM	P1AE2-00	Battery Energy Control Module High Voltage System Interlock Circuit-	Active
BPCM	P0AA4-00	Hybrid/EV Battery Negative Contactor "A" Stuck Closed-	Active
HCP	P0642-00	Sensor Reference Voltage 1 Circuit Low-	Active
HCP	P06B1-00	Sensor Power Supply 1 Circuit Low-	Active
HCP	P084F-00	Park/Neutral Switch Output-	Stored
HCP	P0A78-00	Drive Motor A Inverter Performance-	Active
HCP	P0E15-00	Hybrid/EV Battery Pack Coolant Heater "A" Control Performance-	Active
HCP	P1A27-00	On Board Charging Module System Voltage Low-	Stored
HCP	P1AED-00	MCPB High Voltage Battery Voltage Sensor Circuit Performance-	Active
HCP	P1AEE-00	MCPA HV Battery System Voltage High-	Active
OBCM	P0562-00	System Voltage Low-	Stored
ABSO	C2222-00	Improper Powerdown-	Stored

ENVIRONMENTAL DATA SUMMARY

DMRL | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed	True	
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Frequency Counter	1	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	0	

DMRR | B224F-54 | Active | Door Module Internal-Missing Calibration

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
Pending DTC	False	
Test Failed	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Confirmed DTC	True	
Occurrence flag	Error	

Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Ignition Cycle Counter	0	
Original Odometer Value	1163	miles

PSDML | B2199-16 | Stored | Battery Voltage-Circuit Voltage Below Threshold

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
Pending DTC	False	
Confirmed DTC	True	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	False	
DTC Extended Data Record Number - All	FF	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	2	
Frequency Counter	5	

PSDMR | B2199-16 | Stored | Battery Voltage-Circuit Voltage Below Threshold

NAME	VALUE	UNITS
Test Failed	False	
Pending DTC	False	
Test Not Completed Since Last Clear	False	
Confirmed DTC	True	
Test Not Completed This Operation Cycle	False	
Test Failed This Operation Cycle	False	
Warning Indicator Requested	False	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	FF	
Original Odometer Value	1163	miles
Frequency Counter	4	
Most Recent Odometer Value	1163	miles
Ignition Cycle Counter	2	

BPCM | P0ABB-00 | Stored | Hybrid Battery Pack Voltage Sense 1 Circuit Performance-

NAME	VALUE	UNITS
Key in Ignition	Key_Def	
Key Position	Ign_Run	
EPT -WakeUp	Sourced	

Qualified Contactor Command - QCC	Open	
HCP Contactor Command	Impact Open	
Contactor Status	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Battery in Periodic wake up (Just battery) at time of Fault	False	
Balance Mode	False	
ChargingLevel	Plug in, but no charge	
Battery in Periodic wake up (Wake up vehicle) at time of Fault	False	
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	Fail	
Pump - Overcurrent	PASS	
Pump - Dry Run Detection	PASS	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Fault trigger level 2	False	
Fault Path	01	
Fault trigger level 3	False	
Fault trigger level 1	False	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	30	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Fault Input	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 CC Path Test Req	Undetermined	
BPCM Sec HW Timer Status	Not Active	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec Contactor State	Open	
BPCM Main HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
Real Time Clock Validity	True	
Test Failed This Operation Cycle	False	
Pending DTC	True	

DTC	0A BB 00	
Confirmed DTC	True	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	13	
FoM - for this DTC (lifetime fails)	37	events
FoM - for this DTC (lifetime fails counts on pass)	32.1600	seconds
Ignition Cycle Counter	1	
Battery Total Time Awake	9670593	seconds
FoM - for this DTC (lifetime longest fail on pass)	3.520	seconds
Battery Lifetime Miles	66A0EC	miles
Frequency Counter	2	
Battery Lifetime AmpHrs of Charge	504.8	AHr
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
SOC at time of Fault	24.3	%
Power Up SOC at time of Fault	24.3	%
System (12) Volts at time of fault	11.573	Volts
Vehicle Speed	0.0	MPH
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
HV Battery Current HVBatCmt	0.00	Amps
HVIL Returned current - Battery	0.10	mA
HV Battery Current Sensor 1 Hall High	-1.90	Amps
HVIL PWM Frequency - Vehicle	0.0	Hz
HV Cooling Speed Pump 1 Target	0	rpm
HV Cooling Speed pump 1 Speed	0	rpm
Charge indicator Temp	77	°F
BPCM temperature max	75	°F
HVIL Source Voltage- Battery	7.267	Volts
BPCM temperature min	73	°F
Isolation Circuitry Va	2.497	Volts
Isolation Circuitry Vd	0.000	Volts
Isolation Circuitry Vb	2.501	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts

WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
HV Battery Charge Power 10sec	43800	watts
HV Battery Charge Power 2sec	47742	watts
HV Battery Discharge Power 2sec	5385	watts
Cycles left to self heal	40	No Unit
HV Battery Discharge Power 10sec	4317	watts
HV Battery Power	007530	watts
Battery Full AmpHr Capacity	50	AmpHrs
Battery Cell Voltage Maximum	3565	mV
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Average	3559	mV
Battery Lifetime Number Of Closes	190	
Battery Cell Voltage Minimum	3556	mV
Cell Impedance Max Discharge	0	mOhms
HV Battery Voltage (cell sum)	341.70	Volts
HV Battery Voltage (Module Sum)	341.30	Volts
HV Sensor A Pack Voltage	231.70	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.60	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Maximum Module	75	°F
Battery Temperature Average Module	75	°F
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
HV Cooling Battery coolant inlet temp	75	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
Isolation Battery Impedance	0.8480	Mega Ohms
HV Bat SOH-R	19.2	%
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Bat SOH-C	96.9	%
BPCM Sec QA Error Counter	0	cnts
BPCM Sec MM Hw Reset Error Counter	0	cnts
Engine Speed	0	rpm
Real time clock	429496.7295	seconds
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Real time clock-OS Task Delay Timer	0	
Accelerator position	7.5	%
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles

BPCM | P1AE2-00 | Active | Battery Energy Control Module High Voltage System Interlock Circuit-

NAME	VALUE	UNITS
Key Position	Ign_ Run	

Key in Ignition	Key_Def	
EPT -WakeUp	Sourced	
HCP Contactor Command	Impact Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Contactor Status	Open	
Balance Mode	False	
ChargingLevel	Plug in, but no charge	
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	
HVIL Status -Vehicle	Not Sourced	
HVIL Status - Battery pack	Fail	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overcurrent	PASS	
Pump - Switch Power Shorted	PASS	
Pump - Overtemperature	PASS	
Fault trigger level 3	False	
Fault trigger level 2	False	
Fault Path	01	
Fault trigger level 1	False	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	26	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Battery Diagnostic Status	Run and Passed	
Isolation Vehicle Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
BPCM Sec Asic Fault Input	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec Contactor State	Open	
BPCM Sec HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
BPCM Main HW Timer Status	Not Active	
DTC	1A E2 00	

Test Failed	True	
Real Time Clock Validity	True	
Test Failed This Operation Cycle	True	
Pending DTC	True	
Confirmed DTC	True	
Test Failed Since Last Clear	True	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
DTC Extended Data Record Number - All	01	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	6C	
Ignition Cycle Counter	0	
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime fails)	38	events
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Battery Total Time Awake	9670583	seconds
Frequency Counter	1	
Battery Lifetime Miles	66A0EC	miles
Battery Lifetime AmpHrs of Charge	504.8	AHr
Vehicle Speed	0.0	MPH
Power Up SOC at time of Fault	24.3	%
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
SOC at time of Fault	24.3	%
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
System (12) Volts at time of fault	11.581	Volts
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HV Battery Current Sensor 1 Hall High	-1.05	Amps
HVIL Returned current - Battery	0.10	mA
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
BPCM temperature min	73	°F
Charge indicator Temp	77	°F
BPCM temperature max	75	°F
HV Cooling Speed pump 1 Speed	0	rpm
HVIL Source Voltage- Battery	7.260	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
Isolation Circuitry Vb	2.501	Volts

WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
WC and Circuitry Vcc Voltage	5.026	Volts
Cycles left to self heal	40	No Unit
Isolation Circuitry Va	2.497	Volts
HV Battery Charge Power 2sec	93747	watts
HV Battery Charge Power 10sec	89799	watts
HV Battery Discharge Power 2sec	42558	watts
HV Battery Discharge Power 10sec	41706	watts
HV Battery Power	007530	watts
Battery Full AmpHr Capacity	50	AmpHrs
Battery Cell Voltage Maximum	3566	mV
Cell Impedance Max Discharge	0	mOhms
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Minimum	3556	mV
Battery Lifetime Number Of Closes	190	
HV Battery Voltage (Module Sum)	341.30	Volts
Battery Cell Voltage Average	3559	mV
HV Sensor A Pack Voltage	241.20	Volts
HV Battery Voltage (cell sum)	341.70	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Maximum Module	75	°F
HV Cooling Battery coolant inlet temp	75	°F
Battery Temperature Average Module	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Cooling Battery coolant outlet temp	75	°F
Isolation Battery Impedance	0.8480	Mega Ohms
HV Bat SOH-C	96.9	%
HV Bat SOH-R	19.2	%
BPCM Sec MM Hw Reset Error Counter	0	cnts
BPCM Sec QA Error Counter	0	cnts
Engine Speed	0	rpm
Accelerator position	7.5	%
BPCM L2 SM Hw Reset Error Counter	0	No Unit
Real time clock	429496.7295	seconds
Real time clock-OS Task Delay Timer	0	
Original Odometer Value	1163	miles
Most Recent Odometer Value	1163	miles

NAME	VALUE	UNITS
Key in Ignition	Key_Def	
EPT -WakeUp	Sourced	
Key Position	Ign_ Run	
HCP Contactor Command	Impact Open	
Qualified Contactor Command - QCC	Open	
Verified Contactor Command - VCC	Invalid	
Plug in Status	Not plugged in	
Contactor Status	Open	
ChargingLevel	Plug in, but no charge	
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	
Balance Mode	False	
HVIL Status - Battery pack	Fail	
HVIL Status -Vehicle	Not Sourced	
Pump - Wire Open\Short to Gnd	PASS	
Pump - Dry Run Detection	PASS	
Pump - Overtemperature	PASS	
Pump - Switch Power Shorted	PASS	
Pump - Overcurrent	PASS	
Fault trigger level 1	False	
Fault trigger level 2	False	
Fault trigger level 3	False	
Fault Path	01	
Key - DriveRdy (CAN)	True	
Battery Cell Highest Cell number	35	
Battery Cell Lowest Cell number	19	
Battery Temperature Highest Sensor number	04	
Battery Temperature Lowest Sensor number	01	
Battery Temperature Number of Failing Sensors	00	
HV Cooling Pump Relay Drive	Not Sourced	
Pump - Battery Coolant Level Low	False	
Isolation Vehicle Diagnostic Status	Run and Passed	
Isolation Battery Diagnostic Status	Run and Passed	
BPCM Sec Asic Reset Req	Not Active	
BPCM Sec Asic Fault Input	Not Active	
BPCM Sec CC Path Test Active	Not Active	
BPCM L2 General Monitoring Flt Rsn	L2L1_CELL_MAX_V_CMP_FLT	
BPCM L2 CC Path Test Req	Undetermined	
BPCM L2 Contactor Dslb Req	Undetermined	
BPCM L2 ASIC Diagnostic Flt Rsn	ADCTest	
BPCM Sec HW Timer Status	Not Active	
BPCM Sec Asic Fault State	NOTASSERTED	
BPCM Sec Contactor State	Open	

BPCM Main HW Timer Status	Not Active	
Real Time Clock Validity	True	
DTC	0A A4 00	
Test Failed	True	
Test Failed This Operation Cycle	True	
Confirmed DTC	True	
Pending DTC	True	
Test Failed Since Last Clear	True	
Test Not Completed Since Last Clear	False	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Error	
DTC Extended Data Record Number - 2	0E	
Warning Indicator Requested	False	
FoM - for this DTC (lifetime fails)	43	events
Frequency Counter	1	
FoM - for this DTC (lifetime fails counts on pass)	0.0000	seconds
FoM - for this DTC (lifetime longest fail on pass)	0.000	seconds
Ignition Cycle Counter	0	
Battery Total Time Awake	9670583	seconds
Vehicle mileage at time of fault (ODO signal in \$3D2)	1163.36	miles
Battery Lifetime Miles	66A0EC	miles
System (12) Volts at time of fault	11.573	Volts
Vehicle Speed	0.0	MPH
Battery Lifetime AmpHrs of Charge	504.8	AHr
SOC at time of Fault	24.3	%
Battery Lifetime AmpHrs of DisCharge	509.8	AHr
Power Up SOC at time of Fault	24.3	%
HVIL PWM Duty Cycle - Vehicle	0.0	%
HVIL PWM peak voltage Sourced - Vehicle	0.364	Volts
HVIL PWM Frequency - Vehicle	0.0	Hz
HVIL PWM peak voltage Sensed - Vehicle	0.320	Volts
HVIL Returned current - Battery	0.30	mA
HV Battery Current Sensor 2 Hall Low	0.00	Amps
HV Battery Current Sensor 1 Hall High	-1.70	Amps
HV Cooling Speed Pump 1 Target	0	rpm
Charge indicator Temp	77	°F
BPCM temperature min	73	°F
BPCM temperature max	75	°F
HVIL Source Voltage- Battery	7.260	Volts
HV Battery Current HVBatCmt	0.00	Amps
Isolation Circuitry Va	2.497	Volts
HV Cooling Speed pump 1 Speed	0	rpm
Isolation Circuitry Vb	2.500	Volts

WC and Circuitry Vcc Voltage	5.026	Volts
WC and Circuitry Weld Contactor Sensor G (Pack Negative) Voltage	-2.2	Volts
Isolation Circuitry Vd	0.000	Volts
WC and Circuitry 2.5V Reference Voltage	2.501	Volts
HV Battery Charge Power 2sec	93747	watts
Cycles left to self heal	40	No Unit
WC and CircuitryISO 8V Reference Voltage	7.976	Volts
HV Battery Charge Power 10sec	89799	watts
HV Battery Discharge Power 10sec	41706	watts
HV Battery Discharge Power 2sec	42558	watts
HV Battery Power	007530	watts
Cell Impedance Max Discharge	0	mOhms
Battery Full AmpHr Capacity	50	AmpHrs
Battery Lifetime Number Of Closes	190	
Battery Cell Voltage Maximum	3565	mV
Cell Impedance Mim Discharge	0	mOhms
Battery Cell Voltage Average	3559	mV
HV Battery Voltage (cell sum)	341.70	Volts
Battery Cell Voltage Minimum	3556	mV
HV Battery Voltage (Module Sum)	341.30	Volts
HV Sensor C OBCM (HVOBC Fuse) Voltage	0.70	Volts
HV Sensor A Pack Voltage	242.80	Volts
Battery Temperature Maximum Module	75	°F
HV Sensor B Bus\Link (Pre-Fuse) Voltage	1.10	Volts
HV Sensor D Heater (HVHTR Fuse) Voltage	0.70	Volts
HV Sensor G Weld Contactor(Pack Negative) Voltage	-2.2	Volts
Battery Temperature Minimum Module	73	°F
Battery Temperature Average Module	75	°F
HV Cooling OBCM temp inlet Temp	81	°F
HV Cooling Battery coolant outlet temp	75	°F
HV Cooling Battery coolant inlet temp	75	°F
Isolation Vehicle Impedance	7.2560	Mega Ohms
HV Bat SOH-C	96.9	%
HV Bat SOH-R	19.2	%
Isolation Battery Impedance	0.8480	Mega Ohms
BPCM L2 SM Hw Reset Error Counter	0	No Unit
BPCM Sec MM Hw Reset Error Counter	0	cnts
BPCM Sec QA Error Counter	0	cnts
Engine Speed	0	rpm
Real time clock-OS Task Delay Timer	0	
Real time clock	429496.7295	seconds
Accelerator position	7.5	%
Most Recent Odometer Value	1163	miles
Original Odometer Value	1163	miles

HCP | P0642-00 | Active | Sensor Reference Voltage 1 Circuit Low-

NAME	VALUE	UNITS
DTC	06 42 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	
Warning Indicator Requested	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
Propulsion System Active	False	
PRND Position Display	P	
Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Over Current 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 SPI Error Fault - High-Side	True	
Motor A Phase U Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Short 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 Hardware Error Fault - Low-Side	True	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Cross Conduction Fault - High-Side	False	
Motor A Phase V Thermal Shutdown 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 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	True	
Motor A Phase V Cross Conduction Fault - Low-Side	False	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	

Motor A Phase V Thermal Warning Fault - Low-Side	False	
Motor A Phase V Over Current Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - Low-Side	True	
Motor A Phase V Thermal Shutdown Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - Low-Side	True	
Motor A Phase W Short 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 Over Current 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	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Cross Conduction 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 Over Current Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
Impact Event	False	
HCP System Shutdown Command	Default	
APM Status	Idle	
OBCM Operating Mode	UTC	
Commanded Inverter A State	Disable Immediate	
J1772 Prox Detected State	Prox Out	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - 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 Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over Voltage Fault VH - 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 Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - High-Side	False	
Motor A Phase V Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - Low-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 Over Voltage Fault VL - High-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-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 Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - 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 W Cross Conduction Fault - High-Side	False	
Motor A Phase W Over Voltage Fault VH - High-Side	False	
Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Over Voltage Fault VL - High-Side	False	
Motor A Phase W Under Voltage Fault VH - 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 Over Voltage Fault VDD - Low-Side	False	
Motor A Phase W Under Voltage Fault VL - 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	
Frequency Counter	1	
Original Odometer Value	1163.4	miles
Most Recent Odometer Value	1163.4	miles
Real time clock	9670584	sec
RAM stamps keyOn	135	sec
Accelerator Pedal Position	0	%
Engine Speed	0	rpm
HV Battery SOC	24	%
Ignition Cycle Counter	0	
RAM Stamps	54	Min
Vehicle Speed	0.0000	MPH

Barometric Pressure	15	PSI
Engine Coolant Temperature	75	°F
Actual Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor A	0.000	Ft-Lbs
Inverter A Input DC Current	0.0	AMP
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase A	-4	AMP
Motor A - Inverter Current - phase B	0	AMP
Motor A - Inverter Current - phase C	-4	AMP
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 2 Sense	11.376	Volts
Battery Feed Voltage 3 Sense	11.232	Volts
Internal EPS Voltage Sense A	0.072	Volts
Internal EPS Voltage Sense B	0.000	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
PIM DC Link Voltage - A	42	Volts
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	77.0	°F
Battery Feed Voltage 1 Sense	11.592	Volts
Actual Torque - Motor B	0.092	Ft-Lbs
Available Motor Torque - Motor B	127.765	Ft-Lbs
Available Regen Torque - Motor B	-127.765	Ft-Lbs
Available Regen Torque - Motor A	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 B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase A	0	AMP
Motor B Resolver Angle	336	Degree
Motor B Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
HV Battery Sleep Time	0	Days
Motor B Torque	0.092	Ft-Lbs

GPS Date - Month	5	
GPS Date - Year	2021	Year
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	988	ms
UTC Time - Minutes	51	

HCP | P06B1-00 | Active | Sensor Power Supply 1 Circuit Low-

NAME	VALUE	UNITS
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Pending DTC	True	
Test Failed	True	
DTC	06 B1 00	
Test Failed This Operation Cycle	True	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
Warning Indicator Requested	True	
PHEV Charging Status	No Charging	
Propulsion System Active	False	
Ignition State	Reserved	
PRND Position Display	P	
Motor A Resolver Offset Learn Erase	not requested	
Motor B Resolver Offset Learning Status Flag	Applied	
Motor A Resolver Offset Learning Status Flag	Applied	
Motor A Resolver to Digital Low Level Driver Faults	No fault	
Motor B Resolver to Digital Low Level Driver Faults	No fault	
Hybrid System State	SNA	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HV Contactor Status	Open	
Impact Event	False	
HCP System Shutdown Command	Default	
APM Status	Idle	
J1772 Prox Detected State	Prox Out	
Motor B Resolver Offset Learn Erase	not requested	
OBCM Operating Mode	UTC	
Original Odometer Value	1163.4	miles
RAM Stamps	54	Min
Most Recent Odometer Value	1163.4	miles

Ignition Cycle Counter	0	
Accelerator Pedal Position	0	%
Frequency Counter	1	
Motor B Temp Sensor	79	°F
Vehicle Speed	0.0000	MPH
Motor A Temp Sensor	81	°F
Real time clock	9670584	sec
Engine Speed	0	rpm
HV Battery SOC	24	%
Motor A Resolver Angle Offset	1.60	Degree
Motor B Resolver Angle Offset	2.00	Degree
Engine Coolant Temperature	75	°F
RAM stamps keyOn	135	sec
Barometric Pressure	15	PSI
Motor B Resolver Supply Voltage Value	15.75	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
Internal EPS Voltage Sense B	0.000	Volts
Available Motor Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Actual Torque - Motor A	0.000	Ft-Lbs
Battery Feed Voltage 2 Sense	11.376	Volts
Internal EPS Voltage Sense A	0.072	Volts
Available Regen Torque - Motor B	-150.996	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Available Motor Torque - Motor B	150.996	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Electric Motor B Speed	0.5	rpm
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase B	0	AMP
Battery Feed Voltage 1 Sense	11.592	Volts
Motor A - Inverter Current - phase C	-4	AMP
Battery Feed Voltage 3 Sense	11.232	Volts
Motor B - Inverter Current - phase A	0	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Outside Air Temperature	77.0	°F
Motor A - Inverter Current - phase A	-4	AMP
PIM DC Link Voltage - A	42	Volts
PIM DC Link Voltage - B	4	Volts
Inverter A IGBT Temperature for phase A	93	°F
HV Battery Voltage from BPCM	180.00	Volts
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F

Motor A Torque	0.000	Ft-Lbs
Motor B Torque	0.092	Ft-Lbs
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase C	81	°F
UTC Time - Hours	23	Hours
GPS Date - Year	2021	Year
GPS Date - Day	1	Days
HV Battery Sleep Time	0	Days
ECU Time - Milliseconds	175	ms
GPS Date - Month	5	
UTC Time - Minutes	51	
UTC Time - Seconds	0	seconds

HCP | P084F-00 | Stored | Park/Neutral Switch Output-

NAME	VALUE	UNITS
DTC	08 4F 00	
Test Failed This Operation Cycle	True	
Test Failed	False	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Test Failed Since Last Clear	True	
Ignition State	Ignition Lock	
PHEV Charging Status	No Charging	
Brake Switch Status	Not Applied	
Warning Indicator Requested	False	
Propulsion System Active	False	
Shift Lock Status	Locked	
PRND Position Display	P	
Reverse Shift Lock Status	Unlocked	
Auto Correction Request	APCM Off	
Park Pawl Motor Enable Feedback	Disabled	
Failure Reasons for Level 2 eShift	Reserved	
Park Pawl Status Feedback	Segment Two Complete	
Park Gated Switch	In Park	
PRND Blink	Initialization	
Park Pawl Motor Direction	Out of Park/Move Towards Disengage	
Hybrid System State	Power Up	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	

HV Contactor Status	Open	
EPT LOC Diag Enable	Disable LOC Daignostic	
APM Status	Idle	
HCP System Shutdown Command	Default	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Impact Event	False	
Frequency Counter	1	
Most Recent Odometer Value	1163.4	miles
Real time clock	9927186	sec
RAM stamps keyOn	0	sec
Ignition Cycle Counter	0	
Barometric Pressure	15	PSI
HV Battery SOC	24	%
RAM Stamps	0	Min
Original Odometer Value	1163.4	miles
Accelerator Pedal Position	0	%
Vehicle Speed	0.0000	MPH
Park Pawl Motor PWM1	0	%
Engine Coolant Temperature	176	°F
Battery Feed Voltage 2 Sense	12.456	Volts
Park Pawl Motor Counts	400	Counts
Park Pawl Motor Current	0.1	AMP
PP Actuator Position Sensor Voltage	4.00	Volts
Battery Feed Voltage 3 Sense	12.528	Volts
Internal EPS Voltage Sense B	0.000	Volts
Internal EPS Voltage Sense A	0.072	Volts
Engine Speed	0	rpm
Actual Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	116.150	Ft-Lbs
Actual Torque - Motor B	0.092	Ft-Lbs
Battery Feed Voltage 1 Sense	12.240	Volts
Available Motor Torque - Motor A	43.603	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-116.150	Ft-Lbs
Available Regen Torque - Motor A	-43.603	Ft-Lbs
Motor A - Inverter Current - phase B	0	AMP
Motor A - Inverter Current - phase A	0	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	0	AMP
Outside Air Temperature	80.6	°F
Motor B Temp Sensor	81	°F
Motor B Resolver Angle	336	Degree
Motor A Resolver Angle	196	Degree

Motor A - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase C	-4	AMP
Electric Motor A Speed	0.0	rpm
PIM DC Link Voltage - B	4	Volts
Electric Motor B Speed	0.0	rpm
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase C	79	°F
PIM DC Link Voltage - A	45	Volts
Inverter B IGBT Temperature for phase C	79	°F
Inverter A IGBT Temperature for phase B	79	°F
Motor A Temp Sensor	81	°F
Inverter A IGBT Temperature for phase A	90	°F
Inverter B IGBT Temperature for phase A	79	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
HV Battery Sleep Time	0	Days
Inverter B IGBT Temperature for phase B	79	°F
GPS Date - Day	1	Days
Motor B Torque	0.092	Ft-Lbs
UTC Time - Seconds	2	seconds
GPS Date - Month	1	
UTC Time - Hours	0	Hours
UTC Time - Minutes	0	
GPS Date - Year	0	Year
ECU Time - Milliseconds	619	ms

HCP | P0A78-00 | Active | Drive Motor A Inverter Performance-

NAME	VALUE	UNITS
Test Failed	True	
Pending DTC	True	
Confirmed DTC	True	
Test Failed This Operation Cycle	True	
Test Not Completed Since Last Clear	False	
Test Failed Since Last Clear	True	
DTC	0A 78 00	
Test Not Completed This Operation Cycle	False	
Warning Indicator Requested	True	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	

Motor A Phase U Short Fault - High-Side	False	
Motor A Phase U Cross Conduction Fault - High-Side	False	
Motor A Phase U Thermal Warning Fault - High-Side	False	
Motor A Phase U Over Current 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 Thermal Shutdown Fault - High-Side	False	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Cross Conduction Fault - Low-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U Short Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	
Motor A Phase U Thermal Shutdown Fault - Low-Side	False	
Motor A Phase U Thermal Warning Fault - Low-Side	False	
Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
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 Shutdown Fault - High-Side	False	
Motor A Phase V Thermal Warning Fault - High-Side	False	
Motor A Phase V Short 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 Cross Conduction Fault - Low-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
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	True	
Motor A Phase V Hardware Error Fault - Low-Side	True	
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 Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - High-Side	True	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	

Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
HCP System Shutdown Command	Default	
APM Status	Idle	
Impact Event	False	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	
Commanded Inverter A State	Disable Immediate	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Under Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VDD - High-Side	False	
Motor A Phase U Under Voltage Fault VH - Low-Side	False	
Motor A Phase U Over 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 Under Voltage Fault VDD - Low-Side	False	
Motor A Phase U Over 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 Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Under Voltage Fault VL - High-Side	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 VDD - Low-Side	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Comm Error High Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Cross Conduction Fault - High-Side	False	

Motor A Phase V Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Under Voltage Fault VH - High-Side	False	
Motor A Phase W Over 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	
Frequency Counter	1	
Original Odometer Value	1163.4	miles
Most Recent Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
RAM stamps keyOn	135	sec
Real time clock	9670584	sec
RAM Stamps	54	Min
HV Battery SOC	24	%
Engine Speed	0	rpm
Engine Coolant Temperature	75	°F
Vehicle Speed	0.0000	MPH
Inverter A Input DC Current	0.0	AMP
Available Motor Torque - Motor A	0.000	Ft-Lbs
Accelerator Pedal Position	0	%
Actual Torque - Motor A	0.000	Ft-Lbs
Barometric Pressure	15	PSI
Motor A - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase C	0	AMP
Electric Motor A Speed	0.0	rpm
Motor A Resolver Supply Voltage Value	03FD	Volts
Battery Feed Voltage 2 Sense	11.376	Volts
Battery Feed Voltage 3 Sense	11.232	Volts
Motor A - Inverter Current - phase A	-4	AMP
Internal EPS Voltage Sense B	0.000	Volts
Internal EPS Voltage Sense A	0.072	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
PIM DC Link Voltage - A	42	Volts

Outside Air Temperature	77.0	°F
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Actual Torque - Motor B	0.184	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Battery Feed Voltage 1 Sense	11.592	Volts
Available Regen Torque - Motor B	-141.685	Ft-Lbs
Available Motor Torque - Motor B	141.685	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor B - Inverter Current - phase A	-4	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase C	-4	AMP
Motor B - Inverter Current - phase B	0	AMP
Motor B Resolver Angle	336	Degree
Motor B Temp Sensor	79	°F
Electric Motor B Speed	0.5	rpm
HV Battery Voltage from BPCM	180.00	Volts
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter A IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
Inverter B IGBT Temperature for phase C	81	°F
Motor B Torque	0.184	Ft-Lbs
HV Battery Sleep Time	0	Days
GPS Date - Year	2021	Year
GPS Date - Month	5	
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
UTC Time - Minutes	51	
UTC Time - Seconds	0	seconds
ECU Time - Milliseconds	106	ms

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

NAME	VALUE	UNITS
Test Failed	True	
Test Failed This Operation Cycle	True	
DTC	0E 15 00	
Pending DTC	True	
Confirmed DTC	False	
Warning Indicator Requested	False	
Test Not Completed Since Last Clear	False	

Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag		
PHEV Charging Status		
Brake Switch Status		
Propulsion System Active		
PRND Position Display		
Ignition State		
HV Coolant Heater - Below 60V		
HV Coolant Heater - Response Error		
HV Coolant Heater - Communication Error (SPI Interface Issue)		
HV Coolant Heater - Low Voltage Out of Range		
HV Coolant Heater - HV Protection		
HV Coolant Heater - Overheat Protection		
HV Coolant Heater - Heater Core Temp Sensor Defect		
HV Coolant Heater - High Voltage Out of Range		
HV Coolant Heater - Short or Open Circuit at IGBTs		
HV Coolant Heater - Memory Error		
HV Coolant Heater - DC/DC Voltage Out of Range		
HV Coolant Heater - Current Consumption at High Voltage Out of Range		
HV Coolant Heater - Coolant Outlet Temp Sensor Defect		
HV Coolant Heater - Coolant Inlet Temp Sensor Defect		
HV Coolant Heater - Coolant Temp Out of Range		
Hybrid System State		
EPT LOC Diag Enable		
HV Contactor Status		
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
APM Status		
Impact Event		
OBCM Operating Mode		
J1772 Prox Detected State		
HCP System Shutdown Command		
Most Recent Odometer Value		miles
Frequency Counter		
Ignition Cycle Counter		
Accelerator Pedal Position		%
Original Odometer Value		miles
HV Battery SOC		%
RAM Stamps		Min
Real time clock		sec
Vehicle Speed		MPH
RAM stamps keyOn		sec
Barometric Pressure		PSI

HV Coolant Heater - Actual Current Consumption	AMP
Engine Speed	rpm
Engine Coolant Temperature	°F
HV Coolant Heater - Actual Calculated Power Consumption	W
HV Coolant Heater - Measured Coolant Inlet Temp	°F
Battery Feed Voltage 3 Sense	Volts
HV Coolant Heater - Measured Coolant Outlet Temp	°F
HV Coolant Heater - Measured High Voltage	Volts
Battery Feed Voltage 2 Sense	Volts
HV Coolant Heater - Desired Power Consumption	W
Internal EPS Voltage Sense B	Volts
Internal EPS Voltage Sense A	Volts
Battery Feed Voltage 1 Sense	Volts
Available Motor Torque - Motor A	Ft-Lbs
Available Regen Torque - Motor B	Ft-Lbs
Motor A - Inverter Current - phase B	AMP
Actual Torque - Motor A	Ft-Lbs
Actual Torque - Motor B	Ft-Lbs
Motor A - Inverter Current - phase A	AMP
Commanded Torque - Motor A	Ft-Lbs
Commanded Torque - Motor B	Ft-Lbs
Motor A Resolver Angle	Degree
Available Regen Torque - Motor A	Ft-Lbs
Available Motor Torque - Motor B	Ft-Lbs
Outside Air Temperature	°F
Motor A - Inverter Current - phase C	AMP
Motor B - Inverter Current - phase A	AMP
Motor B - Inverter Current - phase C	AMP
Motor B Resolver Angle	Degree
Motor A Temp Sensor	°F
Motor B Temp Sensor	°F
Electric Motor A Speed	rpm
Electric Motor B Speed	rpm
Motor B - Inverter Current - phase B	AMP
PIM DC Link Voltage - B	Volts
Inverter B IGBT Temperature for phase A	°F
Inverter A IGBT Temperature for phase B	°F
HV Battery Voltage from BPCM	Volts
Inverter A IGBT Temperature for phase A	°F
Inverter B IGBT Temperature for phase C	°F
Inverter A IGBT Temperature for phase C	°F
Inverter B IGBT Temperature for phase B	°F
Motor A Torque	Ft-Lbs
Motor B Torque	Ft-Lbs

HV Battery Sleep Time		Days
PIM DC Link Voltage - A		Volts
UTC Time - Minutes		
ECU Time - Milliseconds		ms
GPS Date - Year		Year
Distance Travelled with Light ON		miles
UTC Time - Seconds		seconds
UTC Time - Hours		Hours
GPS Date - Month		
GPS Date - Day		Days

HCP | P1A27-00 | Stored | On Board Charging Module System Voltage Low-

NAME	VALUE	UNITS
DTC	1A 27 00	
Test Failed	False	
Pending DTC	True	
Test Failed Since Last Clear	True	
Test Not Completed This Operation Cycle	False	
DTC Extended Data Record Number	07	
Test Failed This Operation Cycle	True	
Warning Indicator Requested	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
Ignition State	Ignition Lock	
HVIL Sense Input State	Open	
PRND Position Display	P	
Propulsion System Active	False	
No Charging Reasons	Power Moding Shutdown	
HCP ePT Wake-Up Output	On	
CBC Wake-Up Input	Off	
Impact Event	False	
EPT LOC Diag Enable	Enable Limited LOC Diagnostic	
HCP SW Version	21B	
SW Build Release Version	PIM_21B_2011B0_RU_HCP__	
Hybrid System State	SNA	
OBCM Derating Reason	No Derating	
OBCM Operating Mode	UTC	
HCP Commanded OBCM Mode	Idle	
J1772 Prox Detected State	CP DET	
J1772 Pilot Detected State	NO EVSE	
HCP J1772 S2 Close Command	Off	
HCP Charging System Status	No Charging	

HCP Charging Level	Reserved	
OBCM Ready to Charge	Charge Disabled	
OBCM J1772 S2 Status	Off	
HCP Charging System Fault	True	
HCP Command to Enable Charging	Charge Disabled	
HCP Charging Fault Reason	Power Moding Shutdown	
DC Voltage Not Detected	Passed	
HV Battery Contactor State	Open	
AC Voltage Detected	AC Not OK	
HV Contactor Status	Open	
APM Status	Idle	
HCP System Shutdown Command	Default	
PHEV Charging Status	No Charging	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Frequency Counter	1	
Most Recent Odometer Value	1163.4	miles
Real time clock	9688406	sec
RAM Stamps	61	Min
Engine Speed	0	rpm
RAM stamps keyOn	30	sec
Vehicle Speed	0.0000	MPH
Barometric Pressure	15	PSI
Engine Coolant Temperature	176	°F
Battery Feed Voltage 2 Sense	7.056	Volts
Accelerator Pedal Position	0	%
Internal EPS Voltage Sense A	0.072	Volts
Internal EPS Voltage Sense B	0.000	Volts
Outside Air Temperature	77.0	°F
CAN Overrun Counter	0	Number
Maximum Charge Current Allowed	0.00	Amps
Charge Current Available	0.00	AMP
HV Battery Actual Current	0.00	AMP
AC Voltage for Charging	1.7	Volts
HCP Charging Current Command	0.00	AMP
OBCM Module B Max Temperature	77	°F
AC Current During Charging	0.40	Amps
Radiator Fan Command	7	%
OBCM Accumulated Charging Time	1	hrs
OBCM Module A Max Temperature	75	°F
DC Charging Current	0.20	Amps
OBCM Charging Voltage	180.0	Volts
Maximum EVSE Current Available	0	AMP
HCP Charging Voltage Command	0	Volts

HV Battery Inlet Temperature	75	°F
HV Battery Outlet Temperature	75	°F
HV Battery Min Cell Voltage	0.225	Volts
Max Cell Voltage	0.550	Volts
HV Battery Sleep Time	0	Days
OBCM Module A PCB Temperature	73	°F
Max Cell Temperature	75	°F
OBCM Module B PCB Temperature	77	°F
OBCM Charging Power	0	KW-Hrs
Min Cell Temperature	73	°F
HV Battery Pump Current	0.0	AMP
Battery Feed Voltage 3 Sense	6.984	Volts
Battery Feed Voltage 1 Sense	6.984	Volts
Actual Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-116.150	Ft-Lbs
Actual Torque - Motor B	0.184	Ft-Lbs
HV Battery SOC	24	%
Motor B - Inverter Current - phase A	0	AMP
Motor A - Inverter Current - phase C	0	AMP
Available Motor Torque - Motor A	43.603	Ft-Lbs
Available Motor Torque - Motor B	116.150	Ft-Lbs
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor A - Inverter Current - phase A	-4	AMP
Available Regen Torque - Motor A	-43.603	Ft-Lbs
Motor B Resolver Angle	336	Degree
Commanded Torque - Motor A	0.000	Ft-Lbs
Motor A - Inverter Current - phase B	0	AMP
Motor A Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor A Speed	0.0	rpm
Motor B - Inverter Current - phase C	-4	AMP
PIM DC Link Voltage - B	4	Volts
Electric Motor B Speed	0.0	rpm
Motor A Resolver Angle	196	Degree
Inverter A IGBT Temperature for phase C	75	°F
Inverter B IGBT Temperature for phase B	75	°F
Inverter B IGBT Temperature for phase A	75	°F
Motor B Temp Sensor	79	°F
Inverter A IGBT Temperature for phase B	75	°F
Inverter B IGBT Temperature for phase C	75	°F
Distance Travelled with Light ON	0	miles
PIM DC Link Voltage - A	44	Volts
GPS Date - Day	2	Days

GPS Date - Month	5	
Inverter A IGBT Temperature for phase A	88	°F
ECU Time - Milliseconds	194	ms
UTC Time - Minutes	47	
GPS Date - Year	2021	Year
Motor B Torque	0.184	Ft-Lbs
Motor A Torque	0.000	Ft-Lbs
UTC Time - Hours	4	Hours
UTC Time - Seconds	18	seconds

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

NAME	VALUE	UNITS
DTC	1A ED 00	
Test Failed	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		
Pending DTC	True	
Test Failed This Operation Cycle	True	
Brake Switch Status		
PHEV Charging Status		
Propulsion System Active		
Ignition State		
PRND Position Display		
Motor B Phase U Cross Conduction Fault - High-Side		
Motor B Phase U Thermal Warning Fault - High-Side		
Inverter B Status Feedback		
Motor B Phase U Short Fault - High-Side		
Motor B Phase U Hardware Error 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 Cross Conduction Fault - Low-Side		
Motor B Phase U Over Current Fault - Low-Side		
Motor B Phase U SPI Error Fault - High-Side		
Motor B Phase U Thermal Shutdown Fault - Low-Side		
Motor B Phase U Short Fault - Low-Side		
Commanded Inverter B State		
Motor B Phase U SPI Error Fault - Low-Side		
Motor B Phase U Hardware Error Fault - Low-Side		
Motor B Phase U Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase U Thermal Warning Fault - Low-Side		

Motor B Phase V Cross Conduction Fault - High-Side		
Motor B Phase V Over Current Fault - High-Side		
Motor B Phase U Comm Error Low Voltage Regulator Fault - Low-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 Thermal Warning Fault - High-Side		
Motor B Phase V Short Fault - High-Side		
Motor B Phase V Short Fault - Low-Side		
Motor B Phase V SPI Error Fault - High-Side		
Motor B Phase V Thermal Shutdown Fault - High-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 Over Current Fault - Low-Side		
Motor B Phase V Cross Conduction Fault - Low-Side		
Motor B Phase V Hardware Error Fault - High-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 V Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase W Hardware Error 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 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 Short Fault - Low-Side		
Motor B Phase W SPI Error Fault - Low-Side		
Motor B Phase W Comm Error High Voltage Regulator Fault - Low-Side		
Motor B Phase W Cross Conduction Fault - Low-Side		
Motor B Phase W Comm Error Low Voltage Regulator Fault - Low-Side		
Motor B Phase W Hardware Error Fault - Low-Side		
Hybrid System State		
EPT LOC Diag Enable		
HCP ePT Wake-Up Output		
CBC Wake-Up Input		
HV Contactor Status		
APM Status		
HCP System Shutdown Command		
Impact Event		

OBCM Operating Mode

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 Current Fault - High-Side

J1772 Prox Detected State

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 VH - Low-Side

Motor B Phase U Under Voltage Fault VL - Low-Side

Motor B Phase U Over Voltage Fault VDD - High-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 U Over Voltage Fault VL - Low-Side

Motor B Phase V Under Voltage Fault VL - High-Side

Motor B Phase V Under Voltage Fault VH - High-Side

Motor B Phase U Under Voltage Fault VDD - High-Side

Motor B Phase V Over Voltage Fault VDD - High-Side

Motor B Phase V Over Voltage Fault VL - Low-Side

Motor B Phase U Under Voltage Fault VH - Low-Side

Motor B Phase V Under Voltage Fault VDD - High-Side

Motor B Phase V Under Voltage Fault VH - Low-Side

Motor B Phase W Over Voltage Fault VH - High-Side

Motor B Phase V Under Voltage Fault VL - Low-Side

Motor B Phase V Over Voltage Fault VDD - Low-Side

Motor B Phase U Comm Error Low Voltage Regulator Fault - High-Side

Motor B Phase V Under Voltage Fault VDD - Low-Side

Motor B Phase W Over Voltage Fault VDD - High-Side

Motor B Phase W Over Voltage Fault VL - High-Side

Motor B Phase W Under Voltage Fault VH - High-Side

Motor B Phase W Thermal Shutdown Fault - High-Side

Motor B Phase V Over Voltage Fault VL - High-Side

Motor B Phase W Under Voltage Fault VL - High-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 VH - Low-Side

Motor B Phase W Under Voltage Fault VDD - High-Side

Motor B Phase W Under Voltage Fault VDD - Low-Side

Motor B Phase W Under Voltage Fault VH - Low-Side

Motor B Phase W Over Voltage Fault VDD - Low-Side

Motor B Phase V Over Voltage Fault VH - Low-Side

Frequency Counter

Ignition Cycle Counter

Most Recent Odometer Value

miles

Original Odometer Value		miles
Real time clock		sec
Engine Speed		rpm
Barometric Pressure		PSI
RAM stamps keyOn		sec
RAM Stamps		Min
Vehicle Speed		MPH
Electric Motor B Speed		rpm
Actual Torque - Motor B		Ft-Lbs
Accelerator Pedal Position		%
HV Battery SOC		%
Inverter B Input DC Current		AMP
Available Motor Torque - Motor B		Ft-Lbs
Motor B - Inverter Current - phase B		AMP
Engine Coolant Temperature		°F
Motor B - Inverter Current - phase A		AMP
Internal EPS Voltage Sense B		Volts
Internal EPS Voltage Sense A		Volts
Motor B Resolver Supply Voltage Value		Volts
Motor B - Inverter Current - phase C		AMP
Battery Feed Voltage 2 Sense		Volts
Actual Torque - Motor A		Ft-Lbs
Battery Feed Voltage 1 Sense		Volts
Available Regen Torque - Motor B		Ft-Lbs
Available Motor Torque - Motor A		Ft-Lbs
Battery Feed Voltage 3 Sense		Volts
Motor A - Inverter Current - phase C		AMP
Commanded Torque - Motor B		Ft-Lbs
Commanded Torque - Motor A		Ft-Lbs
Motor A Temp Sensor		°F
Outside Air Temperature		°F
Motor A - Inverter Current - phase A		AMP
Motor A - Inverter Current - phase B		AMP
Motor A Resolver Angle		Degree
Available Regen Torque - Motor A		Ft-Lbs
PIM DC Link Voltage - A		Volts
Inverter A IGBT Temperature for phase A		°F
HV Battery Voltage from BPCM		Volts
Electric Motor A Speed		rpm
PIM DC Link Voltage - B		Volts
Inverter B IGBT Temperature for phase C		°F
Inverter A IGBT Temperature for phase C		°F
Inverter B IGBT Temperature for phase A		°F
HV Battery Sleep Time		Days

Distance Travelled with Light ON		miles
Motor B Torque		Ft-Lbs
GPS Date - Year		Year
GPS Date - Day		Days
UTC Time - Minutes		
GPS Date - Month		
Inverter A IGBT Temperature for phase B		°F
Motor A Torque		Ft-Lbs
Inverter B IGBT Temperature for phase B		°F
ECU Time - Milliseconds		ms
UTC Time - Seconds		seconds
UTC Time - Hours		Hours

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

NAME	VALUE	UNITS
DTC	1A EE 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	
Warning Indicator Requested	True	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Occurrence	
Brake Switch Status	Not Applied	
PHEV Charging Status	No Charging	
Ignition State	Reserved	
PRND Position Display	P	
Propulsion System Active	False	
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 Low Voltage Regulator Fault - High-Side	False	
Motor A Phase U Comm Error High Voltage Regulator Fault - High-Side	False	
Motor A Phase U Hardware Error Fault - High-Side	True	
Motor A Phase U SPI Error Fault - High-Side	True	
Motor A Phase U Short 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 Cross Conduction Fault - Low-Side	False	
Motor A Phase U Over Current Fault - Low-Side	False	

Motor A Phase U SPI Error Fault - Low-Side	True	
Motor A Phase U Hardware Error Fault - Low-Side	True	
Motor A Phase V Short Fault - High-Side	False	
Motor A Phase V Thermal Warning 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 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 Thermal Shutdown Fault - High-Side	False	
Motor A Phase V Hardware Error Fault - High-Side	True	
Motor A Phase V Short Fault - Low-Side	False	
Motor A Phase V SPI Error Fault - High-Side	True	
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 Hardware Error Fault - Low-Side	True	
Motor A Phase V SPI Error Fault - Low-Side	True	
Motor A Phase W Short Fault - High-Side	False	
Motor A Phase W Thermal Warning Fault - High-Side	False	
Motor A Phase W Over Current Fault - High-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - High-Side	False	
Motor A Phase W Thermal Shutdown Fault - High-Side	False	
Motor A Phase W SPI Error Fault - High-Side	True	
Motor A Phase W Hardware Error Fault - High-Side	True	
Motor A Phase W Cross Conduction Fault - Low-Side	False	
Motor A Phase W Over Current Fault - Low-Side	False	
Motor A Phase W Short Fault - Low-Side	False	
Motor A Phase W Thermal Warning Fault - Low-Side	False	
Motor A Phase W Comm Error Low Voltage Regulator Fault - Low-Side	False	
Motor A Phase W Thermal Shutdown Fault - Low-Side	False	
Motor A Phase W SPI Error Fault - Low-Side	True	
Motor A Phase W Hardware Error Fault - Low-Side	True	
Hybrid System State	SNA	
HV Contactor Status	Open	
Inverter B Status Feedback	Normal OFF	
CBC Wake-Up Input	Off	
HCP ePT Wake-Up Output	On	
EPT LOC Diag Enable	Enable LOC Diagnostic	
APM Status	Idle	
Impact Event	False	
HCP System Shutdown Command	Default	
OBCM Operating Mode	UTC	
J1772 Prox Detected State	Prox Out	

Commanded Inverter A State	Disable Immediate	
Inverter Status Feedback	Inverter Faulted	
Motor A Phase U Over Voltage Fault VH - High-Side	False	
Motor A Phase U Over Voltage Fault VL - High-Side	False	
Motor A Phase U Under Voltage Fault VH - 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 Under Voltage Fault VL - High-Side	False	
Motor A Phase U Over Voltage Fault VH - Low-Side	False	
Motor A Phase U Under Voltage Fault VL - 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 Over 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 U Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - High-Side	False	
Motor A Phase V Over Voltage Fault VDD - High-SideSide	False	
Motor A Phase V Over Voltage Fault VL - Low-Side	False	
Motor A Phase V Over Voltage Fault VH - Low-Side	False	
Motor A Phase V Under Voltage Fault VDD - Low-Side	False	
Motor A Phase V Over Voltage Fault VDD - Low-Side	False	
Motor A Phase V Under Voltage Fault VL - Low-Side	False	
Motor A Phase V Comm Error High 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 V Comm Error Low Voltage Regulator Fault - Low-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 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 Over Voltage Fault VDD - High-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	
Original Odometer Value	1163.4	miles
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163.4	miles
Frequency Counter	1	
Real time clock	9670584	sec
RAM Stamps	54	Min
HV Battery SOC	24	%
RAM stamps keyOn	135	sec
Engine Speed	0	rpm
Accelerator Pedal Position	0	%
Barometric Pressure	15	PSI
Engine Coolant Temperature	75	°F
Vehicle Speed	0.0000	MPH
Available Motor Torque - Motor A	0.000	Ft-Lbs
Actual Torque - Motor A	0.000	Ft-Lbs
Electric Motor A Speed	0.0	rpm
Motor A - Inverter Current - phase A	0	AMP
Inverter A Input DC Current	0.0	AMP
Battery Feed Voltage 2 Sense	11.376	Volts
Motor A - Inverter Current - phase C	0	AMP
Motor A - Inverter Current - phase B	0	AMP
Battery Feed Voltage 3 Sense	11.232	Volts
Internal EPS Voltage Sense B	0.072	Volts
Motor A Resolver Supply Voltage Value	03FD	Volts
PIM DC Link Voltage - B	4	Volts
Passive Pump Coolant Temp In Sensor	79	°F
Internal EPS Voltage Sense A	0.072	Volts
PIM DC Link Voltage - A	42	Volts
Low Temp Active Pump Speed	0	rpm
High Temp Aux Pump - Actual Speed	0	rpm
Outside Air Temperature	77.0	°F
Battery Feed Voltage 1 Sense	11.592	Volts
Actual Torque - Motor B	0.092	Ft-Lbs
Available Regen Torque - Motor A	0.000	Ft-Lbs
Available Motor Torque - Motor B	145.188	Ft-Lbs
Commanded Torque - Motor A	0.000	Ft-Lbs
Available Regen Torque - Motor B	-145.188	Ft-Lbs
Motor B - Inverter Current - phase B	-4	AMP
Motor B - Inverter Current - phase A	0	AMP
Commanded Torque - Motor B	0.000	Ft-Lbs
Motor B - Inverter Current - phase C	-4	AMP
Motor B Resolver Angle	336	Degree

Motor B Temp Sensor	79	°F
HV Battery Voltage from BPCM	180.00	Volts
Electric Motor B Speed	0.5	rpm
Inverter A IGBT Temperature for phase A	93	°F
Inverter A IGBT Temperature for phase B	81	°F
Inverter A IGBT Temperature for phase C	81	°F
Inverter B IGBT Temperature for phase A	81	°F
Inverter B IGBT Temperature for phase B	81	°F
Inverter B IGBT Temperature for phase C	81	°F
Distance Travelled with Light ON	0	miles
Motor A Torque	0.000	Ft-Lbs
Motor B Torque	0.092	Ft-Lbs
HV Battery Sleep Time	0	Days
GPS Date - Year	2021	Year
GPS Date - Month	5	
GPS Date - Day	1	Days
UTC Time - Hours	23	Hours
ECU Time - Milliseconds	125	ms
UTC Time - Seconds	0	seconds
UTC Time - Minutes	51	

OBCM | P0562-00 | Stored | System Voltage Low-

NAME	VALUE	UNITS
Test Failed	False	
DTC	05 62 00	
Pending DTC	False	
Confirmed DTC	True	
Test Not Completed Since Last Clear	False	
Test Failed This Operation Cycle	False	
Warning Indicator Requested	False	
Test Failed Since Last Clear	True	
DTC Extended Data Record Number - All	01	
Test Not Completed This Operation Cycle	False	
Occurrence flag	Error	
DTC Extended Data Record Number - Record #2	00	
AC Line Low	Not Valid	
OBCM Status AC Present	AC Not OK	
AC Line High	Not Valid	
Battery Not Detected	False	
Battery Voltage Under Min	Not Valid	
Battery Voltage Over Max	Not Valid	
HV OC	False	
HV OV	False	
NTC1 OT	False	

NTC2 OT	False	
NTC3 OT	False	
NTC4 OT	False	
J1772 S2 Status	Open	
Prox Stat	Prox Out	
J1772 Stat	Veh Not Connected	
J1772 S2 Close	Open	
EVSE Pilot Stat	NO EVSE	
OBCM Mode	UTC	
HCP (EVCU) Shutdown Command	EVCU Operational	
OBCM Charger Ready	On	
HCP (EVCU) Enable Charge Command	Charge disable	
OBCM WU Status	On	
Chrg Fail Sts	Faulted - Charging Allowed	
Charge Enable Status	Chrg Disable	
OBC Control Mth	Current	
OBCM Wake Up Reason	BPCM Wake Up	
HCP (EVCU) OBC Mode Request	Idle	
Chrg Cntctr Stat	Open	
Generic Fail Sts	No Functional Fail Present	
Close Chrg Cntctr	Open	
OBCM Deraing Reason	No Derating	
Chrg Mode	Charge Mode	
OBCM Fault Reason	No Faults detected	
OBCM - LV Aux Under Voltage Protect	False	
OBCM - HV Over Voltage Protect	False	
OBCM - LV Aux Over Voltage Protect	False	
OBCM - PFC Over Voltage Protect	False	
OBCM - PFC Under Voltage Protect	False	
OBCM - LLC Under Voltage Protect	False	
OBCM - Battery 12V Over Voltage Protect	False	
OBCM - AC Under Voltage Protect	False	
OBCM - LLC Over Voltage Protect	False	
OBCM - HV Over Current Protect	False	
OBCM - AC Over Voltage Protect	False	
OBCM - AC Over Current Protect	False	
OBCM - Battery 12V Under Voltage Protect	True	
OBCM - Over Temperature Protect	False	
OBCM - HCP Loss of Communication Protect	False	
OBCM - Internal Memory Fault	False	
OBCM - Power Stage Over Voltage Protect	False	
OBCM - HV Voltage Over MaxCal Protect	False	
OBCM - CAN Bus Off	False	
OBCM - HV Voltage Under MinCal Protect	False	

OBCM - Loss BPCM Communication Protect	False	
OBCM - Pilot Duty Fault	False	
OBCM - ORC Loss of Communication	False	
OBCM - SPI Communication Fault	False	
OBCM - Pilot Short To Battery	False	
OBCM - Prox Range To High	False	
OBCM - Prox Range To Low	False	
OBCM - HV Battery Not Contact	False	
OBCM - Loss Communication Protect	False	
OBCM - Receive HV Battery Contact Open From BPCM	False	
OBCM - WakeUp Output Stuck Low	False	
OBCM - WakeUp Output Stuck High	False	
OBCM - Secondary Aux Over Voltage Protect	False	
OBCM - Secondary Aux Under Voltage Protect	False	
OBCM - Primary Aux Under Voltage Protect	False	
OBCM - Primary Aux Over Voltage Protect	False	
OBCM - Stuck Shutdown	False	
Control Pilot Open fault	False	
OBCM - ARC/CRC Fault	False	
OBCM - Cycle Shutdown	False	
OBCM - HV Under Voltage Protect	False	
OBCM - Vehicle Impact	False	
OBCM - Internal S2 Switch Low Fault	False	
OBCM - Internal S2 Switch High Fault	False	
OBCM - Pilot Range Fault	False	
OBCM - AC Contact Welded 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	
Prox open fault	False	
Plant mode flag	False	
Retry fault flag	True	
Loss SBC communication (SPI)	False	
pilot input short to battery fault in Driver mode detecting	False	
pilot short to ground fault in driver mode detecting	False	
pilot input short to ground fault	False	
HCP stuck High fault	False	
Module A Primary - AC Under Voltage Protect	True	
Module A Primary - PFC Power Limit	False	
Module A Primary - PFC Enable States	False	
Charging ready line open fault	False	
Pilot frequency range fault	False	
Module A Primary - LLC Enable States	False	

Module A Primary - PFC Under Voltage Protect	False	
Module A Primary - PFC Over Voltage Protect	False	
OBCM - Internal S2 Switch High Fault in Driver mode detecting	False	
Module A Primary - AC Present	False	
Module A Primary - PFC Over Temperature Protect	False	
Module A Primary - LLC Hot Warning	False	
Module A Primary - AC Over Voltage Protect	True	
Module A Primary - Over Temperature Protect	False	
Module A Primary - Hot Warning	False	
Module A Primary - Aux Under Voltage Protect	False	
Module A Primary - Secondary Micro Enable Command	False	
Module A Primary - Relay Enable States	False	
Module A Primary - LLC Over Temperature Protect	False	
Module A Primary - PFC Hot Warning	False	
Module A Primary - AC Vin Lost	False	
Module A Primary - Loss Communication Protect	False	
Module A Primary - Aux Over Voltage Protect	False	
Module A Primary - Shutdown Mode	False	
Module A Secondary - Aux Enable States	False	
Module A Primary - Operate Mode	False	
Module A Primary - Standby Mode	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 - HV Enable States	False	
Module A Secondary - LLC Under Voltage Protect	False	
Module A Secondary - LLC Over Voltage 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 - Primary Turn On States	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 - Operate Mode	False	
Module A Secondary - Shutdown Mode	False	
Module A Secondary - LV Micro Disable Command	False	
Module A Secondary - Primary Shutdown States	False	
Module A Secondary - HV Under Voltage Protect	False	
Module A Secondary - Standby Mode	False	

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

Module B Secondary - Aux Over Voltage Protect	False	
Module B Secondary - HV Hot Warning	False	
Module B Secondary - Primary Turn On States	False	
Module B Secondary - Primary Shutdown States	False	
Module B Secondary - Aux Under Voltage Protect	False	
Module B Secondary - Loss Primary Communication Protect	False	
Module B Secondary - Standby Mode	False	
Module B Secondary - Loss LV Communication Protect	False	
Module B Secondary - Ambient Over Temperature Protect	False	
Module B Secondary - LV Micro Disable Command	False	
Module B Secondary - Operate Mode	False	
Module B Secondary - HV Under Voltage Protect	False	
Module B Secondary - LLC Low Temperature Derating	False	
Module B Secondary - PFC High Temperature Derating	False	
Module B Secondary - Shutdown Mode	False	
Module B Secondary - Ambient High Temperature Derating	False	
Module B Secondary - Ambient Low Temperature Derating	False	
Module B Secondary - PFC Low Temperature Derating	False	
Module B Secondary - LLC High Temperature Derating	False	
Module B Secondary - HV Output Voltage Derating	False	
SBC State_DF00	04	
Module B Secondary - HV High Temperature Derating	False	
Module B Secondary - HV Low Temperature Derating	False	
SBC State_E100	00	
SBC State_E180	88	
SBC State_DF80	00	
Module B Secondary - AC Input Voltage Derating	False	
SBC State_E580	00	
SBC State_E300	00	
SBC State_E500	00	
EPT LOC Diag Enable	Enable Limited LOC Diagnostic	
CANSIP Bus Off	False	
BPCM HV Battery Contactor Open	False	
SBC Bus Off	False	
HV Battey Contactor Open	False	
HV Contactor Status	Open	
HCP Shutdown Command	No Shutdown	
BPCM Request for HV Contactor	False	
AC Side Current	0.40	Amps
Original Odometer Value	1163	miles
Ignition Cycle Counter	2	
HCP (EVCU) AC Current Max Cal	-0.50	Amps
Frequency Counter	1	
Battery Side Current	0.20	Amps

HCP (EVCU) HV Current Max Cal	-12.00	Amps
Most Recent Odometer Value	1163	miles
AC Side Volt	1.7	Volts
HCP (EVCU) Voltage Request	0	Volts
HCP (EVCU) Current Request	0.00	AMP
HCP (EVCU) HV Volt Min Cal	244	Volt
OBCM Temperature 1	77	°F
OBCM Temperature 3	77	°F
Battery Side Voltage	0.0	Volts
HCP (EVCU) HV Volt Max Cal	152	Volt
External OBCM Inlet Temperature (CAN)	-40	°F
OBCM Temperature 2	73	°F
J1772 ICA	0	AMP
OBCM Temperature 4	73	°F
Control Pilot Duty Cycle	0.00	%
Watt Hours of Charge the HV Bus	0	W-Hrs
Watt-Hours of AC Power	0	W-Hrs
OBC Idle Tml	1	hrs
Control Pilot Frequency	1024	Hz
Module A Primary - AC Side Current	-24.80	Amps
Control Pilot Amplitude	0.012	Volts
Module A Secondary - Ambient Temperature	73	°F
Module A Primary - PFC Temperature	75	°F
Module A Primary - AC Side Volt	2.2	Volts
Module A Primary - LLC Temperature	75	°F
Module A Secondary - Buck Temperature	73	°F
Prox Voltage	4.455	Volt
Module A Secondary - Battery Side Current	-24.90	Amps
Module B Primary - PFC Temperature	77	°F
Module B Secondary - Battery Side Voltage	0.0	Volts
Module A Secondary - Buck Output Voltage	0.1	Volts
Module B Secondary - Battery Side Current	-24.90	Amps
Module B Primary - AC Side Volt	1.3	Volts
Module A Secondary - Battery Side Voltage	0.0	Volts
Module B Primary - AC Side Current	-24.80	Amps
Module B Secondary - Buck Temperature	77	°F
OBC Charge Tml	1	hrs
Module B Secondary - Ambient Temperature	77	°F
Module B Secondary - Buck Output Voltage	0.1	Volts
Module B Primary - LLC Temperature	77	°F
Ignition on Time for DTC	0	sec
OBC Charge Time	0	sec
OBC Idle Time	0	sec
OBCM Charge Current Available	0.00	AMP

ABSO | C2222-00 | Stored | Improper Powerdown-

NAME	VALUE	UNITS
Test Failed This Operation Cycle	False	
DTC	62 22 00	
Pending DTC	True	
Confirmed DTC	True	
Test Not Completed This Operation Cycle	False	
Test Failed	False	
Test Not Completed Since Last Clear	False	
Warning Indicator Requested	False	
Occurrence flag	Error	
Mirror Memory	No	
Undervoltage Suspected	No	
Controller Event	No	
Test Failed Since Last Clear	False	
Previous System Mode	CAN active	
System Condition	ABS fault	
Current System Mode	CAN active	
Brake Pedal Status	Released	
Rotation Direction Left Rear	Forward	
Rotation Direction Right Front	Forward	
Rotation Direction Left Front	Forward	
Rotation Direction Right Rear	Forward	
MSR control	Not Active	
ASR control	Not Active	
HBA control	Not Active	
Hold	No	
Braking assistance system	No assistance system is braking	
HSA control	Not Active	
EBV control	Not Active	
ABS control	Not Active	
BLS High	No	
BLS Low	Yes	
Plant Mode	No	
ESP Control	Not Active	
ESP-OFF mode	No	
EPB Mode Status	Limp Home	
Transmission selector lever setting	P	
EPB Switch Status	Idle	
Park Brake	Not Activated	
Clutch	Not Activated	
Actual Gear	N	
Status Parking Brake Left	Brake is in an Unknown State	
Stop Coordinator Active	No	

Status Parking Brake Right	Brake is in an Unknown State	
Original Odometer Value	0	miles
Ignition Cycle Counter	0	
Most Recent Odometer Value	1163	miles
Frequency Counter	1	
Fault Time	0.00	S
Supply Voltage Valves	12.7	V
Wheel Speed Right Front	0.000	MPH
Wheel Speed Right Rear	0.000	MPH
Brake Pedal Travel Sensor Position	0	%
Supply voltage Pump	10.0	V
Wheel Speed Left Rear	0.000	MPH
Yaw Rate	0.000	°/s
Steering Wheel Angle	0.00	°
Ignition Unfiltered	0.0	V
Primary Circuit Pressure	0.00	PSI
Lateral Acceleration	0.00	m/s^2
Wheel Speed Left Front	0.000	MPH
Longitudinal Acceleration	0.00	m/s^2
Supplier Internal Code	140	
Engine Speed	0.0	rpm
Accelerator Pedal Position	0.0	%

SNAPSHOT DATA SUMMARY

No Snapshot Data available for B224F-54

No Snapshot Data available for B224F-54

No Snapshot Data available for B2199-16

No Snapshot Data available for B2199-16

No Snapshot Data available for P0ABB-00

No Snapshot Data available for P1AE2-00

No Snapshot Data available for P0AA4-00

No Snapshot Data available for P0642-00

No Snapshot Data available for P06B1-00

No Snapshot Data available for P084F-00

No Snapshot Data available for P0A78-00

No Snapshot Data available for P0E15-00

No Snapshot Data available for P1A27-00

No Snapshot Data available for P1AED-00

No Snapshot Data available for P1AEE-00

No Snapshot Data available for P0562-00

No Snapshot Data available for C2222-00