Preliminary Information

PIC6229A Vehicle Will Not Crank With No DTC's

Models

Brand:	Model:	Model Years:	VIN: from	VIN: to	Engine:	Transmissions:
Chevrolet	Malibu	2016 - 2017	All	All	LKN	MKE
Buick	Lacrosse	2016 - 2017	All	All	LKN	MKE

Involved Region or Country	North America, Korea, and China
Additional Options (RPO)	Only cars equipped with hybrid transmission MKE
Condition	The vehicle did not start after several engine crank attempts and vehicle will no longer attempt to crank the engine.
Cause	After excessive crank attempts where the engine spins but does not start, the high voltage battery pack will be out of energy, similar to draining a 12 volt battery on a traditional powertrain.

Correction:

If there are other DTCs which may indicate an issue with the engine or transmission, then follow those codes first and make necessary repairs.
If the vehicle has a current P0AFA, follow SI for P0AFA.
Look for other diagnostics to guide the repair or check the fuel level and fuel quality.
Use GDS2 under the Hybrid Powertrain Control Module 2 data to determine the current pack voltage and temperature. If the voltage is below the value in the table below, the vehicle will not attempt an engine crank event.

Pack Temp Fahrenheit	-22 F	-4 F	14 F	32 F	50 F	68 F	86 F	104 F	122 F
Pack Temp Celsius	-30 C	-20 C	-10 C	0 C	10 C	20 C	30 C	40 C	50 C
Pack Voltage	154V	154V	154V	170V	170V	210V	210V	210V	210V

After finding and repairing the reason for the engine not being able to start and produce torque, the Hybrid/EV Battery Low State of Charge Recovery (SI Document ID 4725558) must be completed in order to allow the system to attempt another engine crank.
If additional engine crank attempts are needed for engine diagnosis, the recovery procedure can be used to provide approximately 15 crank attempts from the high voltage battery.

Warranty Information

Labor Operation	Description	Labor Time
5031082	Hybrid/EV Battery Low State of Charge Recovery	Use Published Labor Operation Time

Version History

Version	2
Modified	03-01-2017 Updated the Repair Procedure in the correction field and revised the title line