

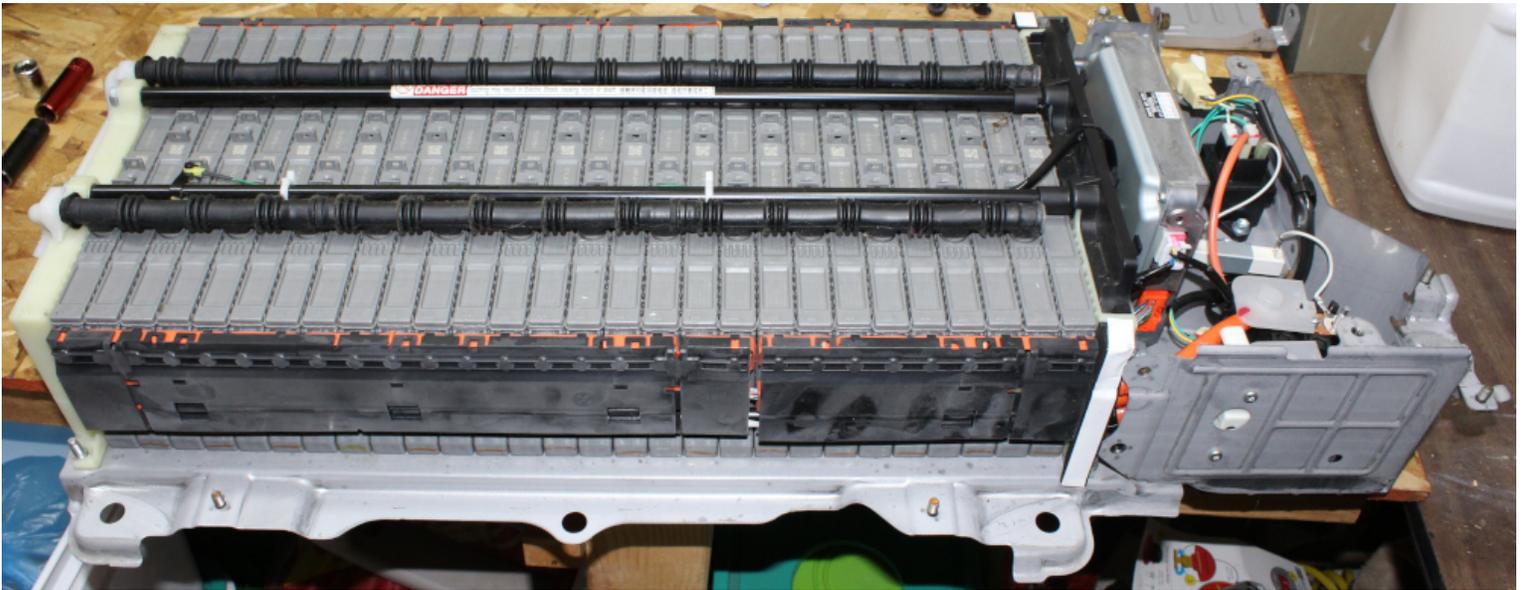
2007 Toyota Prius Main Battery Replacement



8 Battery Modules for Replacement (Up to bottom; N1, N2, N3, N4, N5, N6, N7, N8)



Main HV Battery Body Exposed



Main HV Battery Casing Removed (Battery modules are placed next to controller block, #1, to the far end, #28)

Main HV (High Voltage or Hybrid Vehicle) battery consists of 14 banks.

Each bank consists of two battery modules.

Total 28 battery modules are serially connected to provide high DC (Direct Current) voltage of 220V to 240V capable of flowing big current to DC motors for driving tires.



8 Battery Modules for Replacement (Left; N7, N5, N6, N1, N2, N3, N4, N8) vs. Target (Right; #1 - #28)
(Both up to bottom)

A summary chart at last page clarifies the relationship and each voltages.

2007 Prius (Gen2) HV Battery Replacement Results

Before Replacement			After Replacement																																																																																																								
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- (1) High voltage went up from 214.36V to 233.23V, around 20V (10%) up.
- (2) Battery block voltage became averaged (16.66 V ± 0.05V).

These facts certify that weakening battery modules were properly identified and replaced.

2007 Prius (Gen2) HV Battery Module Replacement

Block #	Module #	OBDII	Tech Stream	Measurement	Replacement Module Assignment	OBDII	Tech Stream
		Before replacement				After replacement	
1	1			7.43 V	N7	--	16.67 V
	2		15.34 V	7.72 V			
2	3		15.53 V	7.73 V		--	16.67 V
	4			7.72 V			
3	5		15.57 V	7.71 V		--	16.69 V
	6			7.71 V			
4	7		15.48 V	7.71 V		--	16.59 V
	8			7.72 V			
5	9		15.55 V	7.71 V	N5	--	16.71 V
	10			6.47 V			
6	11		15.54 V	7.73 V		--	16.67 V
	12			7.73 V			
7	13		15.56 V	6.48 V	N6	--	16.68 V
	14			7.73 V			
8	15	P3018	14.19 V	7.73 V	N1	--	16.61 V
	16				7.74 V		
9	17	P3019	15.57 V	7.73 V		--	16.69 V
	18						
10	19	P3020	14.15 V	7.72 V	N3	--	16.64 V
	20				7.72 V		
11	21	P3021	15.53 V	7.69 V		--	16.66 V
	22						
12	23		15.50 V	7.74 V		--	16.61 V
	24			7.74 V			
13	25		15.56 V	7.72 V		--	16.69 V
	26			7.74 V			
14	27		15.29 V	7.71 V	N8	--	16.65 V
	28			7.46 V			
High Voltage			214.36 V				233.23 V

Replacement Module (Refurbished)	Measurement
N1	7.94 V
N2	7.94 V
N3	7.95 V
N4	7.95 V
N5	7.94 V
N6	7.94 V
N7	7.92 V
N8	7.89 V