TOYOTA SERVICE BULLETIN

Group: 09 No.: 22 Date: May, 17

Prius (NHW20)

Corrections to Repair Manual RM1076E

Please ensure these pages are distributed to all relevant staff for their information; and a copy made available for future reference, with the above repair manual.

Section	Title	Paragraph
HYBRID CONTROL SYSTEM	HYBRID CONTROL SYSTEM	ON-VEHICLE INSPECTION
DIAGNOSTICS	HYBRID CONTROL SYSTEM	TERMINALS OF ECU

The revised pages listed above are attached.

(The corrected parts are indicated by arrows.)

This bulletin does not cause the Flat Rate Manual to be changed

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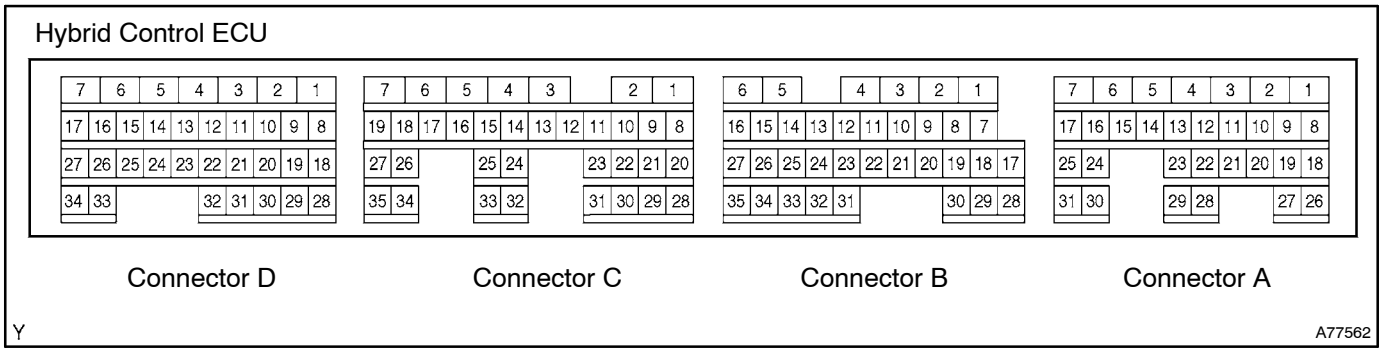
5. INSPECT ACCELERATOR POSITION

NOTICE:

- **Do not remove the accelerator position sensor from the accelerator pedal.**
- **Perform the inspection on the hybrid vehicle control ECU side of the connector.**

(a) Turn the power switch ON (IG).

(b) Using a voltmeter, measure the voltage between the terminals.



Standard:

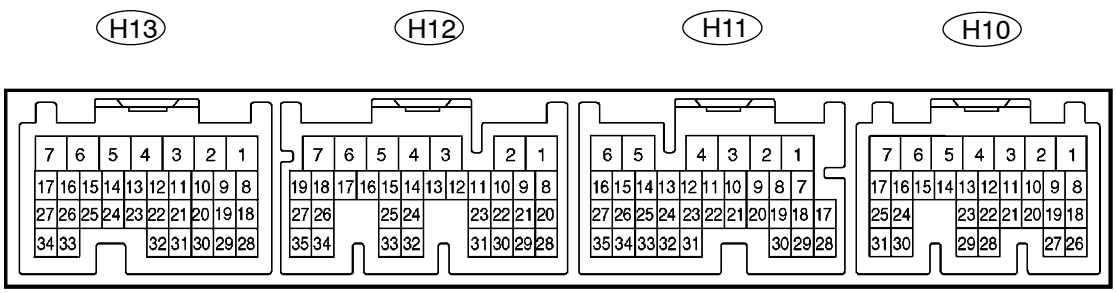
Terminals	Measuring Condition	Specified Condition
B25 – B27 (VCP1 – EP1)	Normal	4.5 to 5.5 V
B26 – B27 (VPA1 – EP1)	Do not depress the accelerator pedal	0.5 to 1.1 V
B26 – B27 (VPA1 – EP1)	Gradually depress the accelerator pedal	The voltage increases slowly
B26 – B27 (VPA1 – EP1)	Fully depress the accelerator pedal	2.6 to 4.5 V
B33 – B35 (VCP2 – EP2)	Normal	4.5 to 5.5 V
B34 – B35 (VPA2 – EP2)	Do not depress the accelerator pedal	1.2 to 2.0 V
B34 – B35 (VPA2 – EP2)	Gradually depress the accelerator pedal	The voltage increases slowly
B34 – B35 (VPA2 – EP2)	Fully depress the accelerator pedal	3.4 to 4.75 V

If the standards are not met, replace the accelerator pedal rod assembly. [Corrected]

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TERMINALS OF ECU



Y

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Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	STD Voltage (V)
ST2 (H10–5) – GND1 (H10–1)	Y – W–B	Starter signal	Power switch ON (READY)	9 to 14
IGSW (H10–7) – GND1 (H10–1)	O – W–B	IG signal	Power switch ON (IG)	9 to 14
BATT (H11–6) – GND1 (H10–1)	Y – W–B	Auxiliary battery (for measuring the battery voltage and for the HV control ECU memory)	Always	9 to 14
+B1 (H12–7) – GND1 (H10–1)	L – W–B	Power source of HV control ECU	Power switch ON (IG)	9 to 14
+B2 (H12–6) – GND1 (H10–1)	L – W–B	Power source of HV control ECU	Power switch ON (IG)	9 to 14
MREL (H12–4) – GND1 (H10–1)	O – W–B	Main relay	Power switch ON (IG)	9 to 14
CANH (H10–8) – GND1 (H10–1)	B – W–B	HIGH–level CAN bus line	Power switch ON (IG)	Pulse generation (see waveform 1)
CANL (H10–9) – GND1 (H10–1)	W – W–B	LOW–level CAN bus line	Power switch ON (IG)	Pulse generation (see waveform 2)
NEO (H12–12) – GND1 (H10–1)	LG – W–B	Engine speed signal	Engine running	Pulse generation (see waveform 3)
GO (H12–13) – GND1 (H10–1)	Y – W–B	G signal	Engine running	Pulse generation (see waveform 4)
SPDI (H10–19) – GND1 (H10–1)	V – W–B	Vehicle speed signal	Driving at approximately 20 km/h (12 mph)	Pulse generation (see waveform 5)
VPA1 (H12–26) – EP1 (H12–27)	L – B	Accelerator pedal position sensor (for the HV system)	Power switch ON (IG), accelerator pedal released	0.5 to 1.1
VPA1 (H12–26) – EP1 (H12–27)	L – B	Accelerator pedal position sensor (for the HV system)	Power switch ON (IG), engine stopped in P position, accelerator pedal fully depressed	2.6 to 4.5
VPA2 (H12–34) – EP2 (H12–35)	W – R	Accelerator pedal position sensor (for the sensor malfunction detection)	Power switch ON (IG),accelerator pedal fully depressed	1.2 to 2.0
VPA2 (H12–34) – EP2 (H12–35)	W – R	Accelerator pedal position sensor (for the sensor malfunction detection)	Power switch ON (IG), engine stopped in P position, accelerator pedal released	3.4 to 4.75 [Corrected]
VCP1 (H12–25) – EP1 (H12–27)	Y – B	Power source of accelerator pedal position sensor (for VPA1)	Power switch ON (IG)	4.5 to 5.5

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