

Your Current Vehicle: 2014 Toyota Prius V

Installation (2014 Prius V From 08/2013)

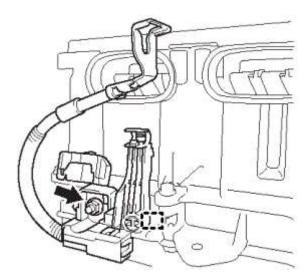
1. INSTALL NO. 2 ENGINE ROOM WIRE

NOTE

HINT:

Perform this procedure only when replacement of the No. 2 engine room wire is necessary.

• Engage the clamp to Install the No. 2 engine room wire to the inverter with converter assembly.



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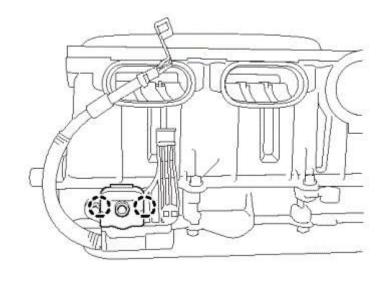
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• Install the nut to the No. 2 engine room wire.

Torque

Nm	kg.cm	inch lbs.
8.0	82	71

• Engage the 2 claws and close the terminal cover.



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2. INSTALL HIGH VOLTAGE FUSE

WARNING Wear insulated gloves.

NOTE

HINT:

Perform this procedure only when replacement of the high voltage fuse is necessary.

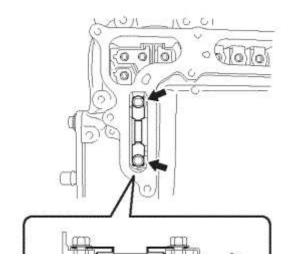
• Remove the 9 bolts and inverter cover.

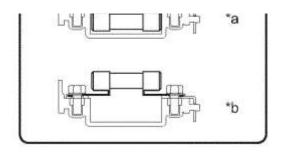
C

NOTE

Make sure to pull the inverter cover straight up, as a connector is connected to the bottom of the cover.

• Install the high voltage fuse with the 2 bolts.





Click to Enlarge

Text in Illustration

*a	CORRECT
*b	INCORRECT

Torque

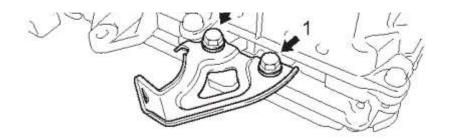
Nm	kg.cm	inch lbs.
4.0	41	35

NOTE

- Be sure to use a torque wrench to tighten the bolts.
- The fuse should be installed with its orientation as shown in the illustration.
- Temporarily install the inverter cover with the 9 bolts to prevent any foreign matter or water from entering the inverter with converter assembly.

3. INSTALL MOTOR CABLE BRACKET

- Temporarily install the motor cable bracket with the 2 bolts.
- Tighten the 2 bolts in the order shown in the illustration.



C

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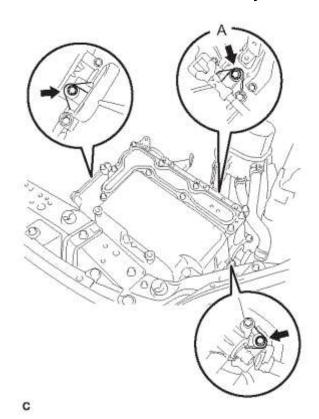
Torque

Nm	kg.cm	inch lbs.
8.0	82	71

4. INSTALL INVERTER WITH CONVERTER ASSEMBLY

WARNING Wear insulated gloves.

• Temporarily install the inverter with converter assembly with the 3 bolts.



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- Since the inverter with converter assembly is very heavy, 2 people are needed to install the inverter with converter assembly. When installing the inverter with converter assembly, do not damage the parts around it.
- To prevent damage, do not hold the inverter with converter assembly by the connectors.
- To prevent damage due to static electricity, do not touch the terminals of the disconnected connectors.
- Tighten bolt A.

Torque

Nm	kg.cm	ft. lbs.
12	122	8

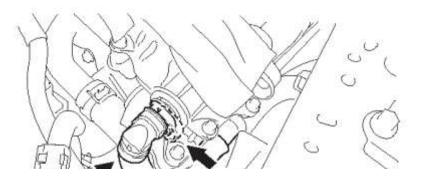
• Tighten the 2 bolts.

Torque

Nm	kg.cm	ft. lbs.
12	122	8

5. CONNECT WATER HOSE

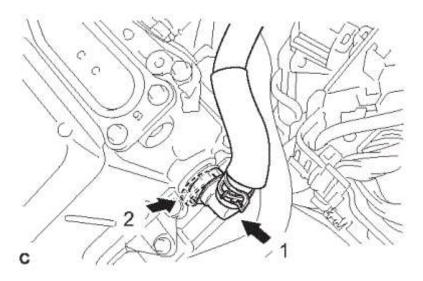
• Connect the water hose to the inverter with converter assembly and lock the hose with the retainer.





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- Insert the retainer until a click sound is heard.
- Pull on the hose to confirm that the hose is securely connected.
- If there is foreign matter on the union or the O-ring, clean it with water and finger scouring.
- To prevent foreign matter from entering the cooling system, do not remove the pieces of cloth or plastic bags from the pipes and disconnected hoses until installation.
- Connect the water hose to the inverter with converter assembly and lock the hose with the retainer.



Click to Enlarge

NOTE

- Insert the retainer until a click sound is heard.
- Pull on the hose to confirm that the hose is securely connected.
- If there is foreign matter on the union or the O-ring, clean it with water and finger scouring.
- To prevent foreign matter from entering the cooling system, do not remove the pieces of cloth or plastic bags from the pipes and disconnected hoses until installation.

6. CONNECT NO. 2 ENGINE ROOM WIRE

- Disconnect the No. 2 engine room wire from the protector.
- Connect the No. 2 engine room wire with the bolt and 2 claws.

Torque

Nm	kg.cm	inch lbs.
8.3	85	73

NOTE

Pass the No. 2 engine room wire under the two cooling hoses that pass beside the inverter.

- Install the No. 1 relay block cover and 2 clamps.
- Install the relay block cover.

7. REMOVE INVERTER COVER

WARNING

Wear insulated gloves.

• Remove the 9 bolts and inverter cover.

NOTE

Make sure to pull the inverter cover straight up, as a connector is connected to the bottom of the cover.

8. CONNECT NO. 2 ENGINE WIRE

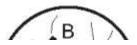
WARNING

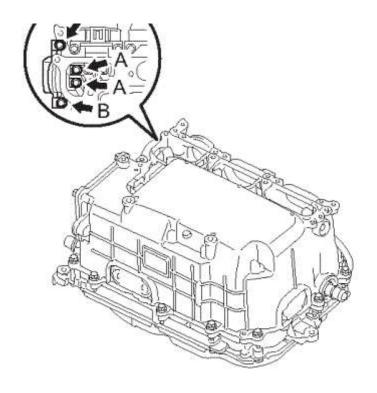
Wear insulated gloves.

NOTE

Do not allow any foreign matter or water to enter the inverter with converter assembly.

• Temporarily install the No. 2 engine wire (high voltage cables of the air conditioning) and 4 bolts to the inverter assembly by hand.





Click to Enlarge

• Fully tighten the 4 bolts.

Torque

Bolt A	t A		
Nm	kg.cm	inch lbs.	
8.0	82	71	
Bolt B			
Bolt B			
Bolt B Nm	kg.cm	inch lbs.	

NOTE

Be sure to use a torque wrench to tighten the bolts.

• Connect the harness clamp.

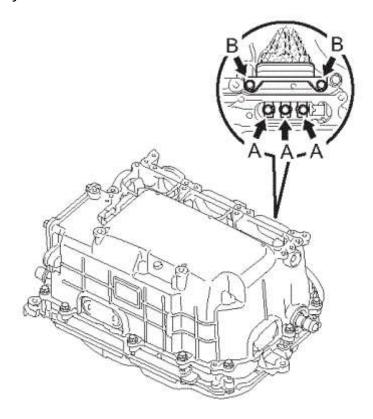
9. CONNECT MOTOR CABLE

WAKNING Wear insulated gloves.

NOTE

Do not allow any foreign matter or water to enter the inverter with converter assembly.

• Temporarily install the high voltage cable of the motor cable (MG2) and 5 bolts to the inverter assembly by hand.



Click to Enlarge

• Fully tighten the 5 bolts.

Torque

Bolt A				
Nm kg.cm inch lbs.				
8.0	82	71		
Bolt B Bolt A				
Nm	kg.cm	inch lbs.		
Nm	kg.cm kg.cm	inch lbs.		
0.2	04	01		

9.2	94	δI

Be sure to use a torque wrench to tighten the bolts.

• Connect the harness clamp.

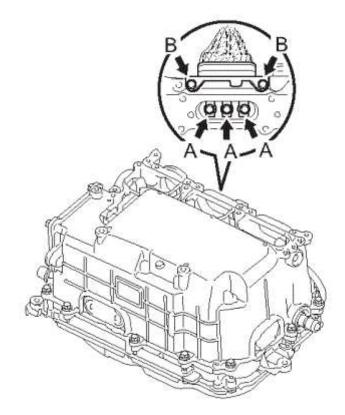
10. CONNECT GENERATOR CABLE

WARNING Wear insulated gloves.

NOTE

Do not allow any foreign matter or water to enter the inverter with converter assembly.

• Temporarily install the high voltage cable of the generator cable (MG1) and 5 bolts to the inverter assembly by hand.



Click to Enlarge

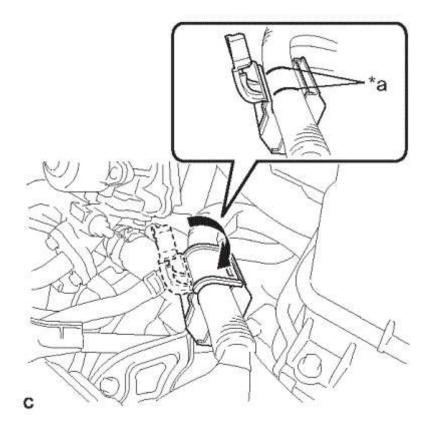
• Fully tighten the 5 bolts.

Torque		
Bolt A		
Nm Bolt A	kg.cm	inch lbs.

Nm kg.cm inch lbs.				
	Rg.ciii			
8.0	82	71		
Bolt B				
Nm	kg.cm	inch lbs.		
9.2	94	81		

Be sure to use a torque wrench to tighten the bolts.

• Install the generator cable and cover.



Click to Enlarge

Text in Illustration

*a	Alignment Mark

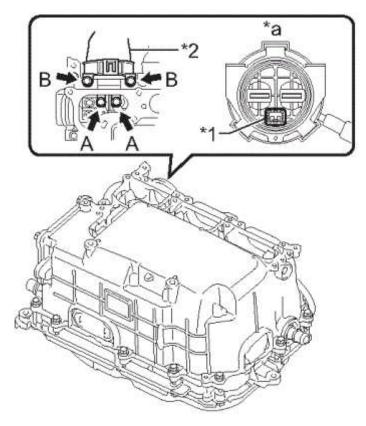
Close the cover so that the alignment marks are not visible.

11. CONNECT FRAME WIRE

WARNING Wear insulated gloves.

NOTE

- Make sure that the interlock is fully engaged.
- Do not allow any foreign matter or water to enter the inverter with converter assembly.
- Temporarily install the frame wire (high voltage cables of the hybrid battery) and 4 bolts to the inverter assembly by hand.



Click to Enlarge

Text in Illustration

*1	Interlock
*2	High voltage cables of the hybrid battery

*a	Front view of frame wire connector

• Fully tighten the 4 bolts.

Torque

Bolt A		
Nm	kg.cm	inch lbs.
8.0	82	71
Bolt B		
DOIL D		
Nm	kg.cm	inch lbs.

NOTE

- Be sure to use a torque wrench to tighten the bolts.
- Make sure that the interlock are fully engaged.
- Connect the harness clamp.

12. CHECK HIGH VOLTAGE CABLE CONNECTION

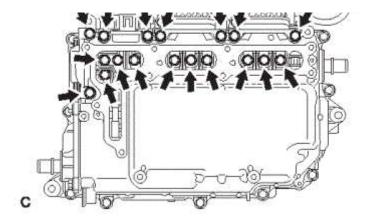
WARNING Wear insulated gloves.

NOTE

Do not allow any foreign matter or water to enter the inverter with converter assembly.

• Check that each connector and terminal is firmly installed.





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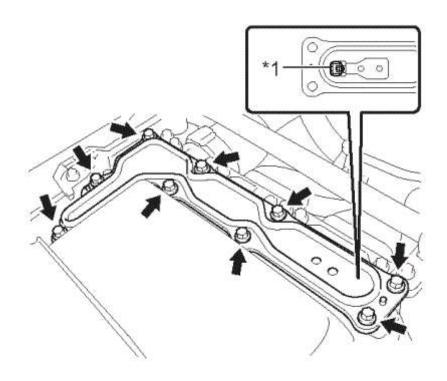
Make sure that the bolts are fully tightened.

13. INSTALL INVERTER COVER

WARNING

Wear insulated gloves.

• Install the inverter cover with the 9 bolts to the inverter with converter assembly.



Click to Enlarge

Text in Illustration

*1

Torque

Nm	kg.cm	ft. lbs.
11	112	8

NOTE

- Make sure that the interlock is fully engaged.
- Do not allow any foreign matter or water to enter the inverter with converter assembly.

14. INSTALL ENGINE ROOM MAIN WIRE

NOTE

- Make sure that the connectors are fully engaged.
- Do not allow any foreign matter or water to enter the inverter with converter assembly.
- Install the bolt, clamp and clip, and connect the engine room main ware.

Torque

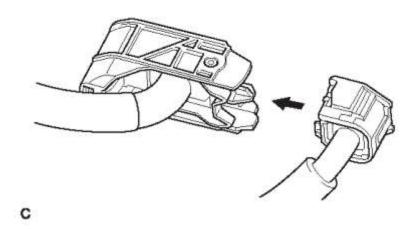
Nm	kg.cm	ft. lbs.
12	122	9

• Install the bolt.

Torque

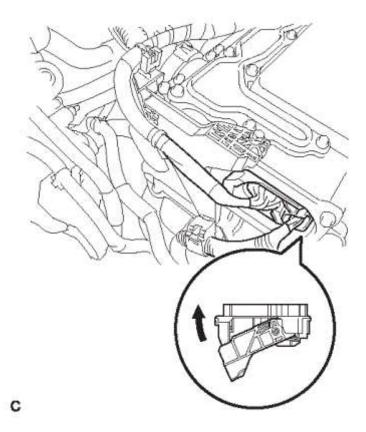
Nm	kg.cm	ft. lbs.
Nm 2	kg.cm	ft. lbs.

• Connect the engine wire to the engine room main wire.



Click to Enlarge

• Connect the connector to the inverter with converter assembly and lock the connector with the lock lever.

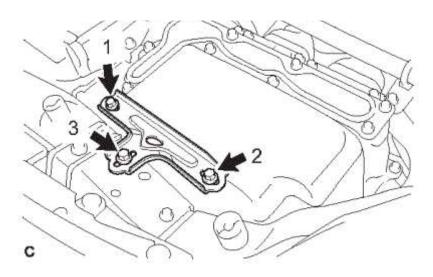


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15. INSTALL NO. 1 INVERTER BRACKET

• Temporarily install the No. 1 inverter bracket with the 3 bolts.

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• Tighten the 3 bolts in the order shown in the illustration.

Torque

Nm	kg.cm	ft. lbs.
14	138	10

16. INSTALL SERVICE PLUG GRIP

2014 MY Prius V [08/2013 -]; HYBRID / BATTERY CONTROL: SERVICE PLUG GRIP: INSTALLATION (?a=0&t=545481).

- 17. ADD COOLANT (for Inverter) 2014 MY Prius V [08/2013]; HYBRID / BATTERY CONTROL: COOLANT (for Inverter): REPLACEMENT+ (?a=0&t=543909)
- 18. INSPECT FOR COOLANT LEAK (for Inverter) 2014 MY Prius V [08/2013]; HYBRID / BATTERY CONTROL: COOLANT (for Inverter): ON-VEHICLE INSPECTION+ (? a=0&t=545495)
- 19. INSTALL NO. 1 ENGINE UNDER COVER
- 20. INSTALL RADIATOR SUPPORT OPENING COVER 2014 MY Prius V [08/2013]; EXTERIOR PANELS / TRIM: FRONT BUMPER: INSTALLATION+ (?a=0&t=545500)