

Last Modified: 5-2-2016	6.6 A	Doc ID: RM000001ONP02VX
Model Year Start: 2012	Model: 4Runner	Prod Date Range: [10/2011 -]
Title: 1GR-FE BATTERY / CHARGING: GENERATOR: REMOVAL; 2012 MY 4Runner [10/2011 -]		

REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

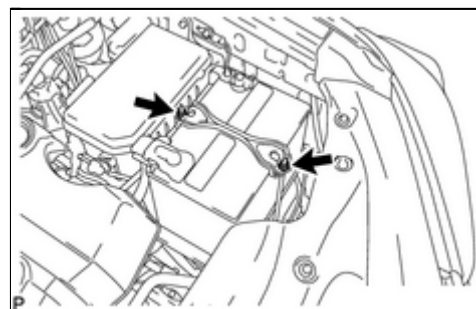
When disconnecting the cable, some systems need to be initialized after the cable is reconnected

[INFO](#)

2. DISCONNECT CABLE FROM POSITIVE BATTERY TERMINAL

3. REMOVE BATTERY CLAMP

(a) Loosen the 2 nuts and remove the battery clamp.



4. REMOVE BATTERY

5. REMOVE BATTERY TRAY

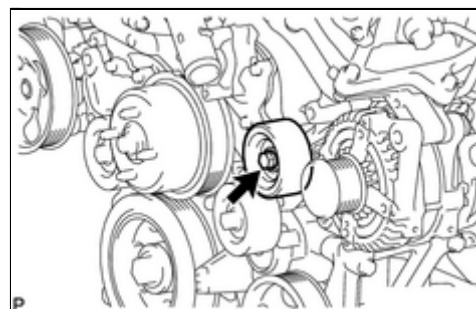
6. REMOVE V-BANK COVER [INFO](#)

7. REMOVE FAN AND GENERATOR V BELT [INFO](#)

8. REMOVE NO. 2 IDLER PULLEY SUB-ASSEMBLY

(a) for Integrated Type:

Remove the bolt and No. 2 idler pulley.

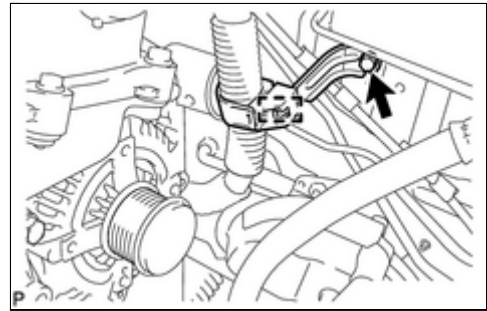


(b) for Separate Type:

Remove the bolt, No. 2 idler pulley cover plate, No. 2 idler pulley and idler pulley cover plate.

9. REMOVE WIRING HARNESS CLAMP BRACKET

- (a) Detach the clamp.

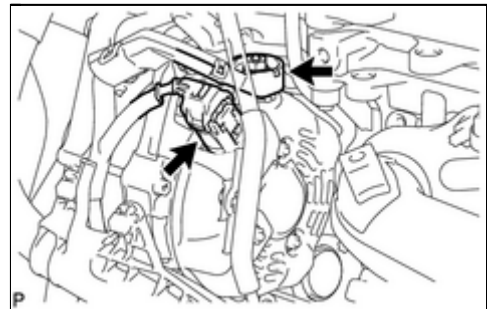


- (b) Remove the bolt and wiring harness clamp bracket.

10. REMOVE NO. 2 EXHAUST MANIFOLD HEAT INSULATOR INFO

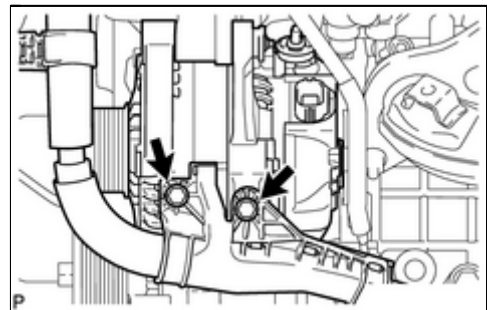
11. REMOVE GENERATOR ASSEMBLY

- (a) Open the terminal cap.

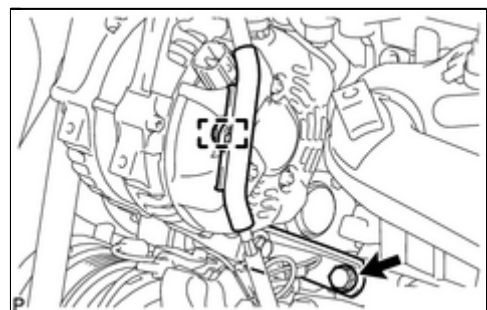


- (b) Remove the nut and disconnect the wire harness from terminal B.

- (c) Disconnect the generator connector from the generator assembly.



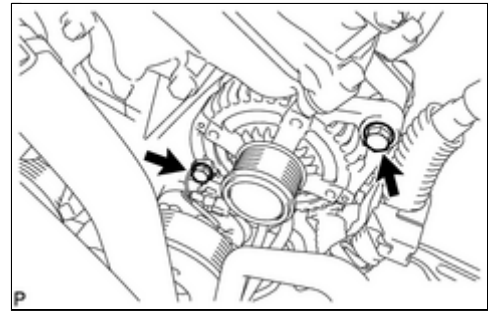
- (d) Remove the 2 bolts and disconnect the wire harness.



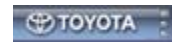
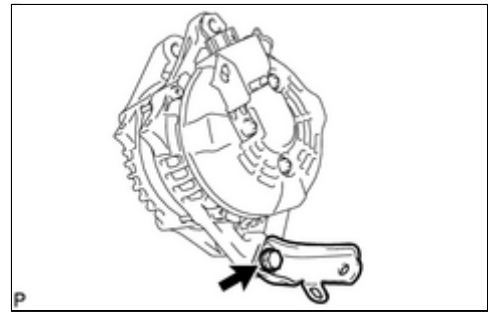
- (e) Disconnect the wire harness clamp.

- (f) Remove the bolt and disconnect the generator bracket.

(g) Remove the 2 bolts and generator assembly.



(h) Remove the bolt and generator bracket.



Last Modified: 5-2-2016	6.6 A	Doc ID: RM000001ONM02UX
Model Year Start: 2012	Model: 4Runner	Prod Date Range: [10/2011 -]
Title: 1GR-FE BATTERY / CHARGING: GENERATOR: INSTALLATION; 2012 MY 4Runner [10/2011 -]		

INSTALLATION

1. INSTALL GENERATOR ASSEMBLY

(a) Install the generator bracket to the generator with the bolt.

Torque:

20 N·m {204 kgf·cm, 15ft·lbf}

(b) Install the generator with the 2 bolts.

Torque:

43 N·m {438 kgf·cm, 32ft·lbf}

(c) Install the generator bracket with the bolt.

Torque:

20 N·m {204 kgf·cm, 15ft·lbf}

(d) Attach the wire harness clamp.

(e) Install the wire harness with the 2 bolts.

Torque:

8.0 N·m {82 kgf·cm, 71in·lbf}

(f) Connect the generator connector to the generator.

(g) Install the generator wire with the nut.

Torque:

9.8 N·m {100 kgf·cm, 87in·lbf}

(h) Close the terminal cap.

2. INSTALL NO. 2 EXHAUST MANIFOLD HEAT INSULATOR INFO

3. INSTALL WIRING HARNESS CLAMP BRACKET

(a) Install the wiring harness clamp bracket with the bolt.

Torque:

8.0 N·m {82 kgf·cm, 71in·lbf}

(b) Attach the clamp.

4. INSTALL NO. 2 IDLER PULLEY SUB-ASSEMBLY

(a) for Integrated Type:

Install the No. 2 idler pulley with the bolt.

Torque:

54 N·m {551 kgf·cm, 40ft·lbf}

(b) for Separate Type:

Install the idler pulley cover plate, No. 2 idler pulley and No. 2 idler pulley cover plate with the bolt.

Torque:

54 N·m {551 kgf·cm, 40ft·lbf}

5. INSTALL FAN AND GENERATOR V BELT

6. INSTALL V-BANK COVER

7. INSTALL BATTERY TRAY

8. INSTALL BATTERY

9. INSTALL BATTERY CLAMP

(a) Install the battery clamp with the 2 nuts.

Torque:

6.0 N·m {61 kgf·cm, 53in·lbf}

10. CONNECT CABLE TO POSITIVE BATTERY TERMINAL

11. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected

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