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## HYBRID LITHIUM-ION BATTERY CARE DURING EXTENDED STORAGE

This bulletin has been amended. The APPLIED VEHICLES and SERVICE INFORMATION sections have been revised.  
Please discard previous versions of this bulletin.

### APPLIED VEHICLES:

2012-2013 M35 Hybrid (Y51)  
2014-2015 Q70 Hybrid (Y51)  
2014-2015 Q50 Hybrid (V37)  
2014-2015 QX60 Hybrid (L50)

### SERVICE INFORMATION

For QX60 Hybrid Vehicles, go to page 4.

#### Q50, Q70, and M35 Hybrid Vehicles

The internal combustion (IC) engine in the Q50, Q70, and M35 Hybrid vehicles is started using a high voltage motor that is integrated into the transmission.

The high voltage motor gets its power from the high voltage Lithium-Ion (Li-ion) battery that is mounted between the trunk room and the rear seat.

**The Li-ion battery cannot be recharged using an external battery charger; therefore it is very important that the battery state of charge (SOC) is properly maintained during extended storage periods.**

Action must be taken in order to prevent excessive discharge of the high voltage Li-ion battery during an extended storage period. **If the reserve capacity of the Li-ion battery is not sufficient, the hybrid system cannot be started.**

Perform the **Battery Discharge Prevention During Extended Storage** procedure in this bulletin once a month (every 30 days).

**NOTE:** A discharged high voltage Li-ion battery is not a warrantable issue.

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti dealer to determine if this applies to your vehicle.

## Battery Discharge Prevention During Extended Storage for Q50, Q70, and M35 Hybrid Vehicles

- For QX60 Hybrid Vehicles, go to page 4.

### NOTE:

- The hybrid system should be started once a month (every 30 days).
- The IC engine portion of the hybrid system will start and run, and keep running, if the engine coolant temperature is below 122°F (50°C). Once the coolant temperature is above 122°F (50°C), the IC engine will start and stop as designed.

1. Place a service hat on the vehicle or raise the hood. This will help call attention to the vehicle so you do not forget to turn it OFF once the procedure is complete.
2. Fasten the driver seat belt.
  - The seat belt must be fastened for the duration of this procedure.
  - You do not need to remain in the driver seat during the entire procedure. Fasten the driver seat belt behind you if you do not plan to stay in the vehicle.
3. Close the driver door.
4. Set the parking brake and confirm the transmission is in PARK.

5. Depress the brake pedal and push the ignition switch once, to the ON position.
  - The vehicle should now be in "READY to drive" mode (see Figure 1).
  - The "READY to drive" indicator light will illuminate solid when the vehicle is in "READY to drive" mode.
  - The IC engine should start, assuming the IC engine coolant temperature is below 122°F (50°C).

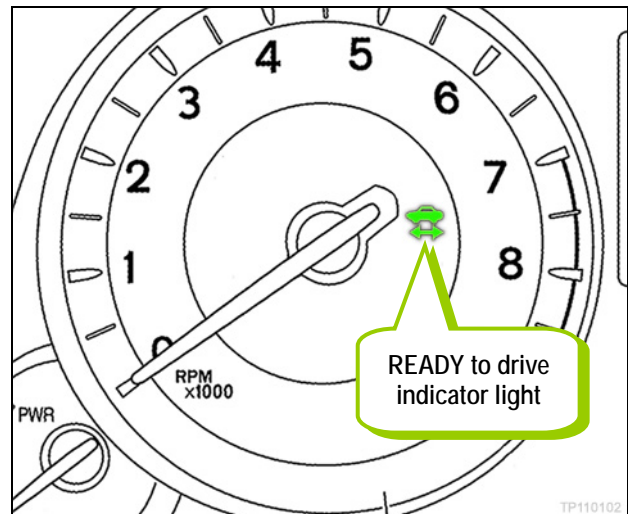


Figure 1

6. Confirm the HVAC system is OFF.
7. Confirm the vehicle has sufficient fuel to run the engine at idle for more than 15 minutes (1/4 tank of fuel should be maintained in the vehicle while in dealer storage).

8. Allow the IC engine to continue to run until it automatically stops. The IC engine will stop once the Li-ion battery state of charge reaches an appropriate level of charge.
  - In summer weather, the run time may be approximately 2-3 minutes.
  - In winter weather, the run time may be approximately 10 minutes or more.

**NOTE:**

- Run time is dependent on the IC engine coolant temperature and the Li-ion battery state of charge.
- The tachometer will read "0" when the IC engine has stopped.

9. If you exited the vehicle, return to the driver seat and confirm the driver door is closed.

10. Check the Li-ion battery charge level in the vehicle display.

- If not already displayed, push the  trip computer button until the Li-ion battery charge level is shown.
- The level should show approximately 1/3 charge or more (see Figure 2).



Figure 2

11. Push the ignition switch **once** to turn OFF the vehicle.

- Confirm the vehicle is OFF by checking the ignition switch and making sure it is not illuminated in ACC or ON mode.

12. Unbuckle the driver seat belt and open the driver door.

**NOTE:** If the vehicle is still in "READY" to drive mode, the IC engine will start. Confirm the vehicle is turned OFF.

13. Remove the service hat or close the hood, if open.

**Perform Step 14 only if the vehicle has not been moved (driven) for 3 months.**

14. Drive the vehicle for 3 minutes.

## Battery Discharge Prevention During Extended Storage for QX60 Hybrid Vehicles

**NOTE:** The hybrid system should be started once a month (every 30 days).

1. Place a service hat on the vehicle or raise the hood.
  - This will help call attention to the vehicle so you do not forget to turn it OFF once the procedure is complete.
2. Set the parking brake and confirm the transmission is in PARK.

3. Depress the brake pedal and push the ignition switch once, to the ON position.
  - The vehicle should now be in "READY to drive" mode (see Figure 1).
  - The "READY to drive" indicator light will illuminate solid when the vehicle is in "READY to drive" mode.

**NOTE:** If the IC (Internal Combustion) engine is at operating temperature and the High Voltage battery is sufficiently charged, the IC engine may not start.

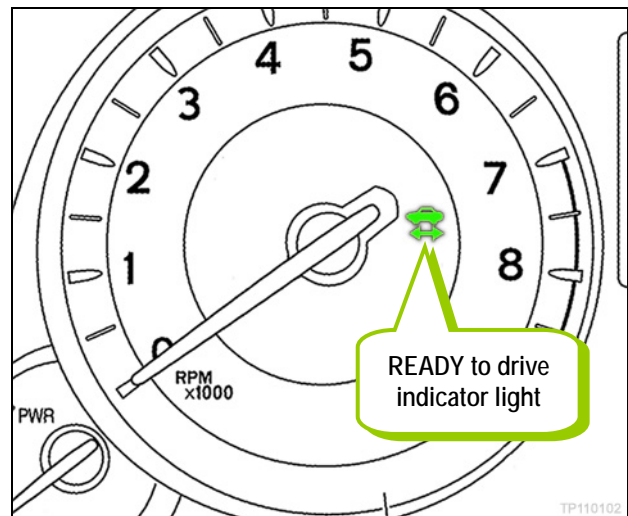


Figure 1

4. Confirm the HVAC system is OFF.
5. Confirm the vehicle has sufficient fuel to run the engine at idle for more than 10 minutes.
  - 1/4 tank of fuel should be maintained in the vehicle while in dealer storage.
6. Run the IC engine at idle for approximately 10 minutes.

### NOTE:

- If the IC engine is at operating temperature and the High Voltage battery is sufficiently charged, the IC engine may not start and continue to run.
- If the IC engine does not start and run, there is no need for the 10 minute run time.

7. Push the ignition switch **once** to turn OFF the vehicle.
  - Confirm the vehicle is OFF by checking the ignition switch and making sure it is not illuminated in ACC or ON mode.
8. Remove the service hat or close the hood, if open.

**Perform Step 9 only if the vehicle has not been moved (driven) for 3 months.**

9. Drive the vehicle for 3 minutes.

