



SERVICE BULLETIN

Classification: GI07-001i	Reference: NTB07-007i	Date: September 25, 2019
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2007-2011 ALTIMA HYBRID; PRODUCT SERVICE INFORMATION

This bulletin has been amended. See **AMENDMENT HISTORY** on the last page.
Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2007-2011 Altima Hybrid (HL32)

SERVICE INFORMATION

This bulletin contains product service information and special handling procedures for the 2007-2011 Altima Hybrid.

WARNING: These vehicles contain **high voltage systems**. Service technicians **must complete** the “Altima Hybrid New Technology Introduction” Service Training before they can service this vehicle.

Procedures detailed in this bulletin:

- Requesting Approval and Order of an Altima Hybrid Battery Assembly
- Long-Term Storage of the Altima Hybrid
- Jump-Starting an Altima Hybrid with a Discharged 12-Volt Battery
- Charging / Testing an Altima Hybrid 12-Volt Battery
- Engine Oil for the Altima Hybrid
- Diagnostic Troubleshooting When Using CONSULT-III

Nissan 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 Nissan dealer to determine if this applies to your vehicle.

REQUESTING APPROVAL AND ORDER OF AN ALTIMA HYBRID BATTERY ASSEMBLY

Refer to WBP19-012 - Altima HEV Battery Repair Order Process Update at www.NNAnet.com.

LONG-TERM STORAGE OF THE ALTIMA HYBRID

IMPORTANT:

- This procedure is required to maintain the High Voltage battery and the 12-volt battery function during long term storage.
- The High Voltage battery cannot be charged using an external charger. It can be charged only by running the vehicle's hybrid system engine.

1. Disconnect the negative (-) battery cable from the 12-volt battery. See Figure 1.
 - Open the RH inner trunk access panel to get to the 12-volt battery.
2. Perform the following charging procedure **every 30 days**:
 - a. Reconnect the negative (-) battery cable to the 12-volt battery.
 - b. Confirm the vehicle transmission is in the **P** (Park) position.

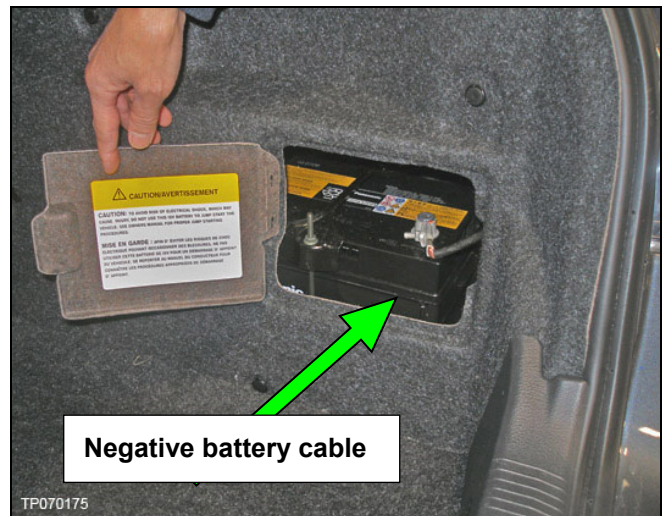


Figure 1

c. Confirm the fuel level:

- For this procedure, do not depress the brake pedal.
- Press the “Start Stop” button on the instrument panel twice with the brake pedal not depressed (IGNITION ON mode).
- Confirm that the low fuel warning indicator is not illuminated.

NOTE: If illuminated, the low fuel warning indicator (See Figure 2) will display in the vehicle information display located under the speedometer.



Figure 2
Vehicle Information Display Warning

- **If the low fuel warning indicator is illuminated:**
 - Press the “Start Stop” button to turn OFF the vehicle systems.
 - Fill the fuel tank with 4 gallons of fuel.
 - Press the “Start Stop” button twice, with the brake pedal not depressed (IGNITION ON mode).
 - Confirm the low fuel warning indicator is not illuminated.

d. Depress the brake pedal and press the “Start Stop” button on the instrument panel.

e. Confirm the vehicle is in READY mode.

- The word “READY” will illuminate green in the instrument cluster.

f. Leave the vehicle in the READY mode for 30 minutes.

NOTE: The gas engine might start and stop during this period, depending on the battery charge level.

g. After 30 minutes, press the “Start Stop” button to turn off the vehicle systems.

h. Disconnect the negative (-) battery cable from the 12-volt battery.

NOTE: Power window initialization is required every time the 12-volt battery is disconnected. Refer to NTB06-065.

JUMP-STARTING AN ALTIMA HYBRID WITH A DISCHARGED 12-VOLT BATTERY

CAUTION: Do not connect the jumper cables to the 12-volt battery located in the trunk. To jump-start the Altima Hybrid, use the **positive stud** and one of the bolt heads located in the LH rear of the engine compartment. See Figure 3.

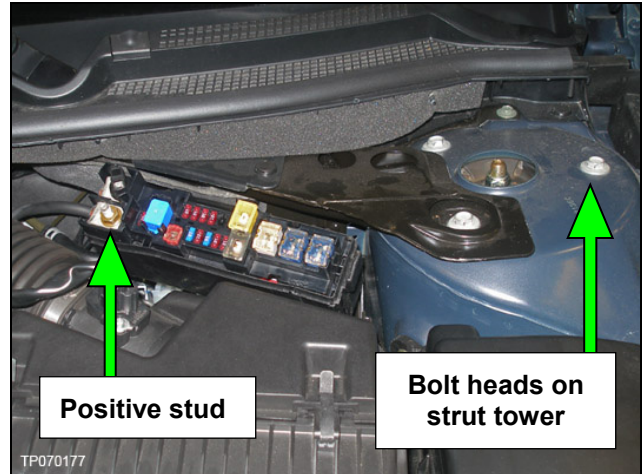


Figure 3

NOTE: Follow all standard safety procedures for typical jump-starting of a vehicle.

1. Remove the fuse box cover at the LH rear of the engine compartment. See Figure 4.
 - The fuse box cover has a red + on it.

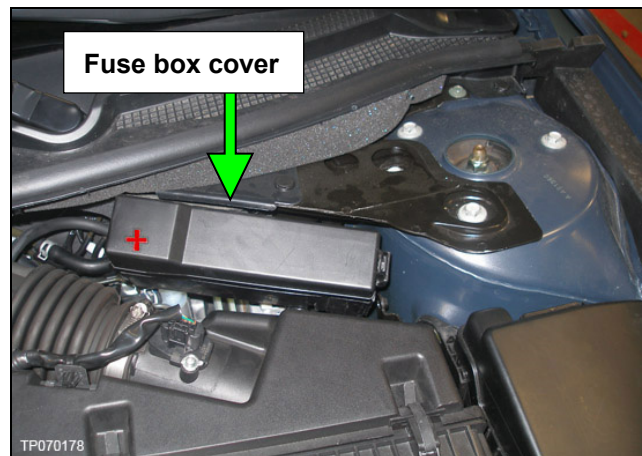


Figure 4

2. Connect the positive (+) jumper cable to the positive stud inside the fuse box. See Figure 5.
3. Connect the negative (-) jumper cable to one of the bolt heads. See Figure 5.

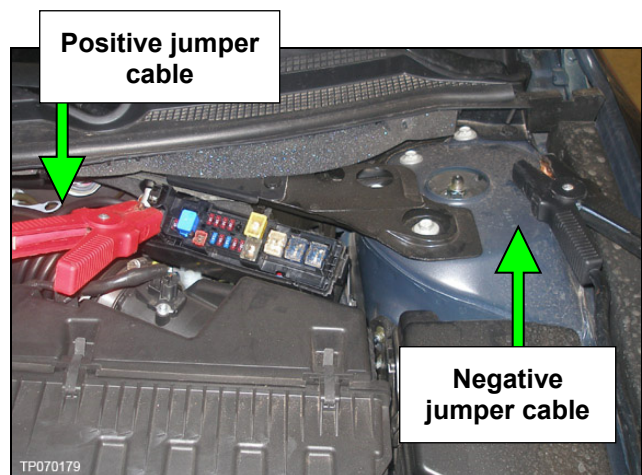


Figure 5

4. Confirm the fuel level:

- For this procedure, do not depress brake pedal.
- Press the “Start Stop” button on the instrument panel twice with the brake pedal not depressed (IGNITION ON mode).
- Confirm that the low fuel warning indicator is not illuminated.
- If illuminated, the low fuel warning indicator (see Figure 6) will display in the vehicle information display located under the speedometer.



Figure 6

Vehicle Information Display Warning

- **If the low fuel warning indicator is illuminated:**
 - Press the “Start Stop” button to turn off the vehicle systems.
 - Fill the fuel tank with 4 gallons of fuel.
 - Press the “Start Stop” button twice, with the brake pedal not depressed (IGNITION ON mode).
 - Confirm the low fuel warning indicator is not illuminated.

5. Confirm the vehicle transmission is in the **P** (Park) position.

6. Depress the brake pedal and press the “Start Stop” button on the instrument panel.

7. Confirm the vehicle is in **READY** mode.

- The word “READY” will illuminate green in the instrument cluster.

8. Disconnect the negative (-) jumper cable.

9. Disconnect the positive (+) jumper cable.

CHARGING / TESTING AN ALTIMA HYBRID 12-VOLT BATTERY

CAUTION:

- Do not quick-charge the Altima Hybrid 12-volt battery. This battery is an AGM battery and **should never be quick-charged**.
- A battery charger compatible with AGM batteries must be used to charge or test the Altima Hybrid 12-volt battery.
- **Do not attempt to charge or test the Altima Hybrid 12-volt battery using the positive stud and strut mount bolt** as described in the Jump-Starting an Altima Hybrid with a Discharged 12-Volt Battery portion of this bulletin.
- Do not attempt to charge or test the Altima Hybrid 12-volt battery through the RH inner trunk access panel. **The RH trunk side finisher MUST BE REMOVED prior to charging / testing.**

1. Remove the RH trunk side finisher.
2. Confirm the trunk lid is completely open.
3. Connect the battery charger the battery.

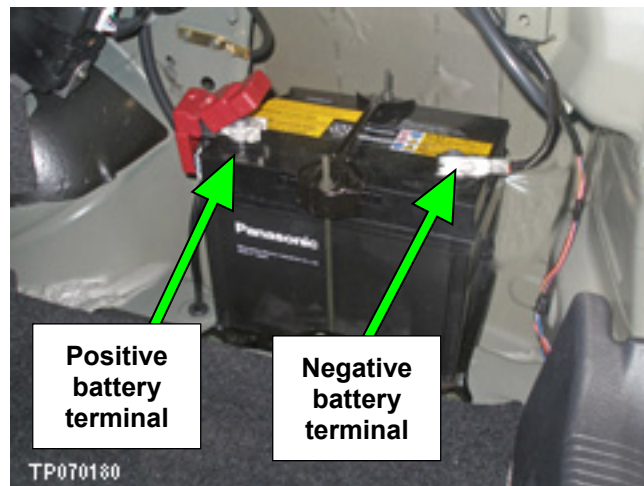


Figure 7

4. Perform necessary charging / testing.

ENGINE OIL FOR THE ALTIMA HYBRID

- SAE 0W-20 is recommended.
- SAE 5W-20 OR 5W-30 engine oil may also be used. However, SAE 0W-20 is the best choice for optimum fuel economy and optimum starting in cold weather.

DIAGNOSTIC TROUBLESHOOTING WHEN USING CONSULT-III

- DTCs with the accompanying Freeze Frame (FF) Data information are required to investigate hybrid system components.
- Use the following steps to **store and display DTCs and FF Data**.

1. While in the **All DTC Reading** screen, click on **Store**.

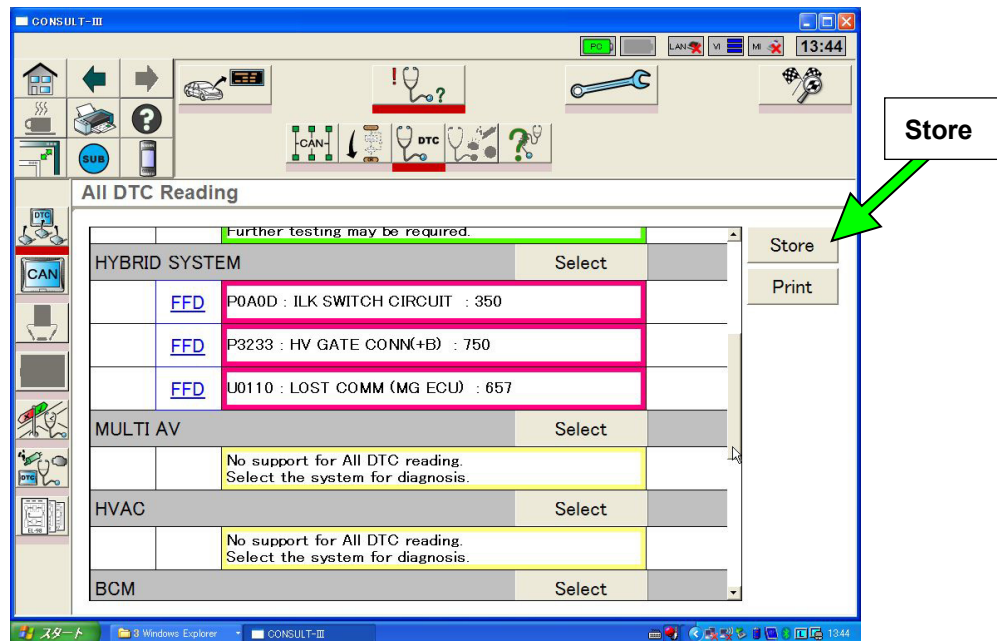


Figure 8

2. Wait for the **Recorded** pop-up window to display. (This could take a minute or two.)

IMPORTANT: WRITE DOWN the file name you are saving on the Repair Order for future reference.

3. Click on **Save** in the pop-up window.

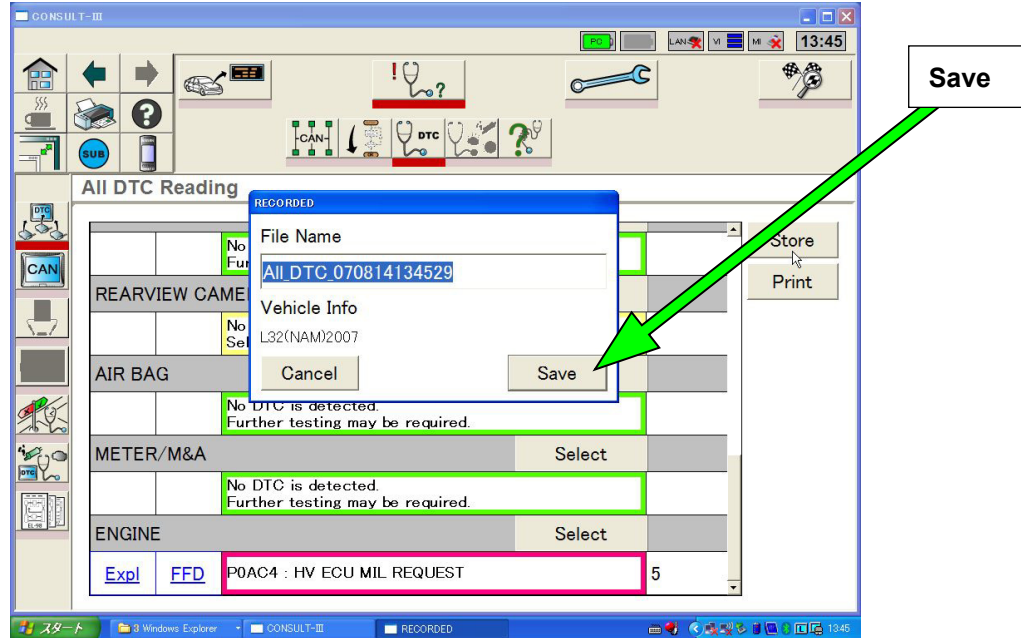


Figure 9

4. Confirm the DTCs and FF Data was saved as follows:

a. Click on **SUB**.

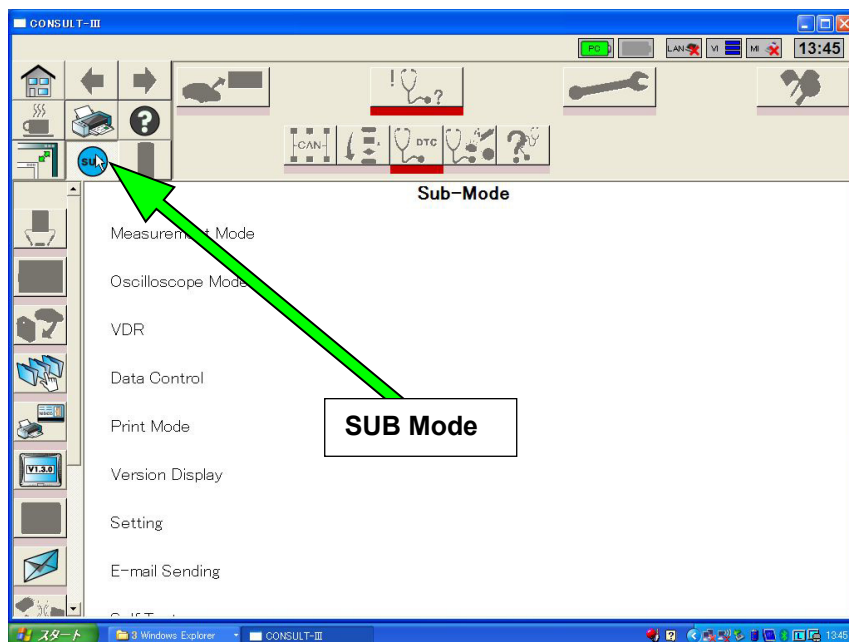


Figure 10

b. Click on **Self Diagnosis**.

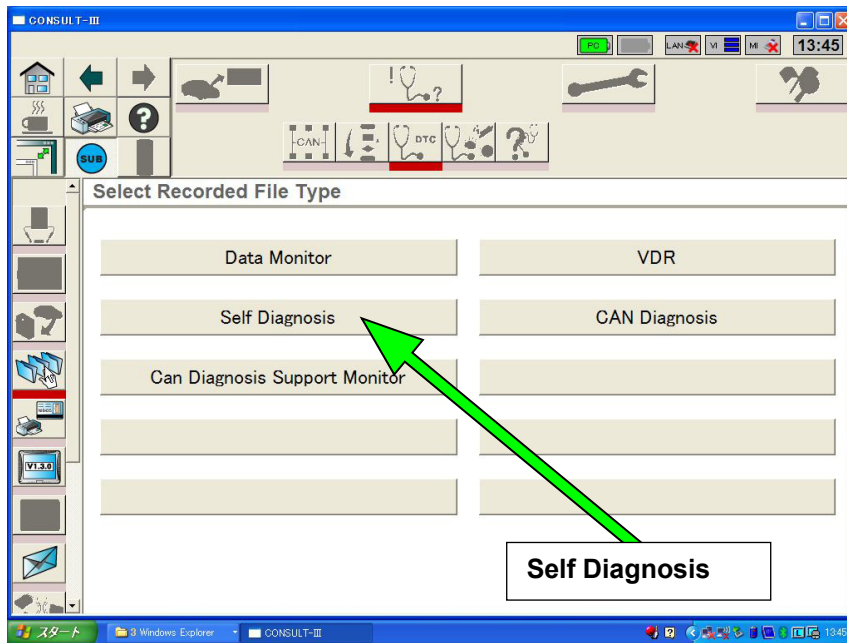


Figure 11

c. Select the saved information file.

d. Click on **Display**.

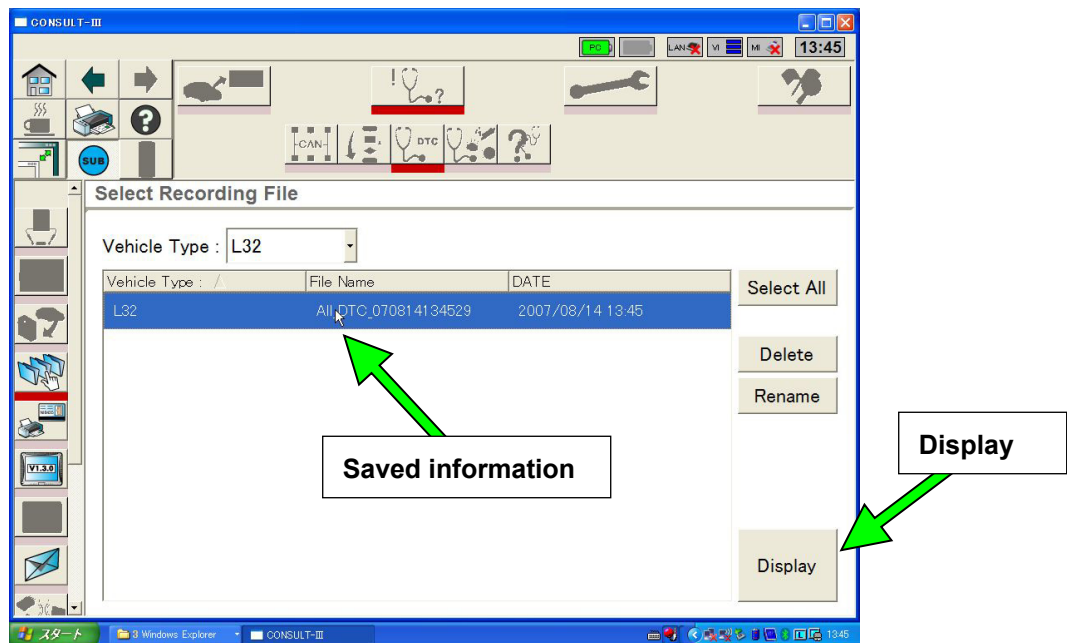


Figure 12

- The saved DTCs and FF Data information will display.

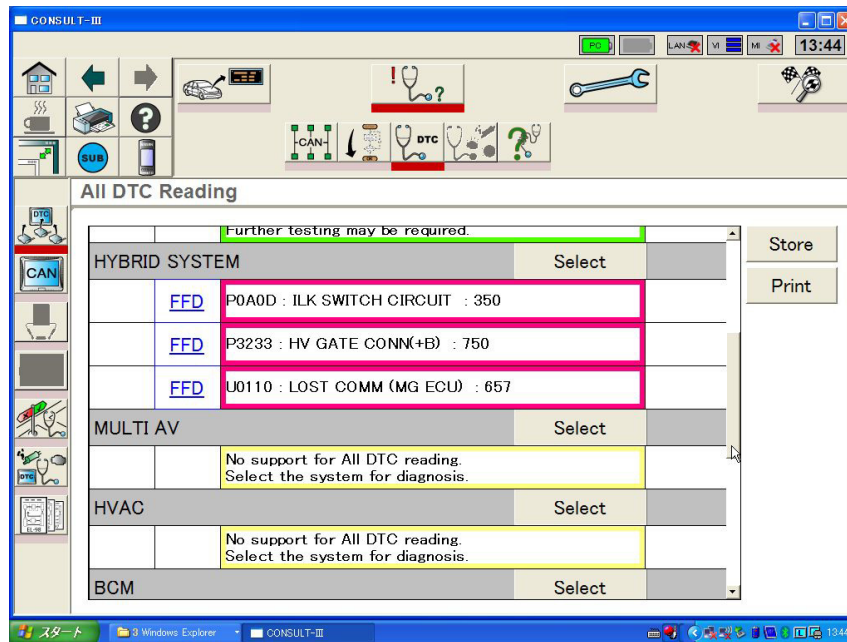


Figure 13

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
January 25, 2007	NTB07-007	Original bulletin published
March 20, 2007	NTB07-007a	Changes made throughout
June 25, 2007	NTB07-007b	Pages 1, 3, 6, and 9 revised
August 23, 2007	NTB07-007c	Pages 1-4 and 9-11 revised
September 19, 2007	NTB07-007d	APPLIED VEHICLES and Charging an Altima Hybrid 12-Volt Battery revised
-	NTB07-007e	Version not released
October 26, 2007	NTB07-007f	Charging an Altima Hybrid 12-Volt Battery revised and Sending Recorded Data to TECH LINE added
June 23, 2008	NTB07-007g	Charging an Altima Hybrid 12-Volt Battery revised
December 4, 2009	NTB07-007h	APPLIED VEHICLES and SERVICE INFORMATION revised
September 25, 2019	NTB07-007i	APPLIED VEHICLES and page 6 revised. Reporting Altima Hybrid Incidents to the Nissan TECH LINE and Sending Data Recorded with CONSULT-III to TECH LINE sections removed. Requesting Approval and Order of an Altima Hybrid Battery Assembly added.