



SERVICE BULLETIN

Classification: GI07-001h	Reference: NTB07-007h	Date: December 4, 2009
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2007-2010 ALTIMA HYBRID; PRODUCT SERVICE INFORMATION

This bulletin has been amended. The Applied Vehicles and Service Information sections have been revised. Please discard all previous copies of this bulletin.

APPLIED VEHICLES: 2007-2010 Altima Hybrid (L32HV)

SERVICE INFORMATION

This bulletin contains product service information and special handling procedures for the 2007-2010 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:

- Reporting Altima Hybrid Incidents to the Nissan TECH LINE
- 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
- Sending Data Recorded with CONSULT-III to TECH LINE.

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.

REPORTING ALTIMA HYBRID INCIDENTS TO THE NISSAN TECH LINE

IMPORTANT:

- You **MUST** call the Nissan TECH LINE to report the details of each incident involving the High Voltage battery assembly of an Altima Hybrid.
- When calling the Nissan TECH LINE, listen for the appropriate Hybrid-related prompt.
- DTCs with the accompanying Freeze Frame Data should always be collected for TECH LINE reporting purposes.

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.

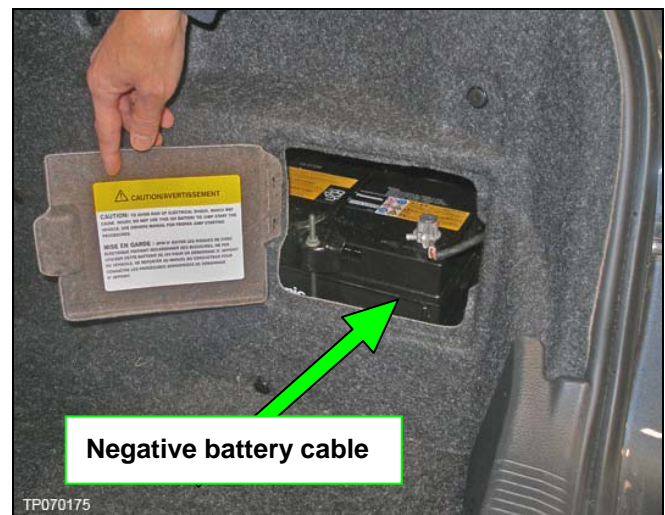


Figure 1

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.

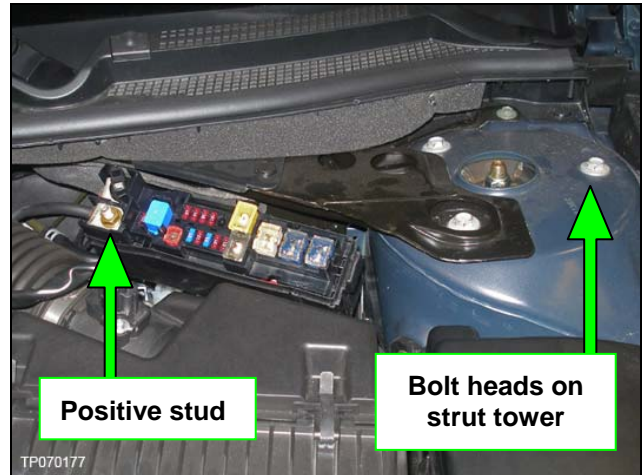


Figure 3

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.

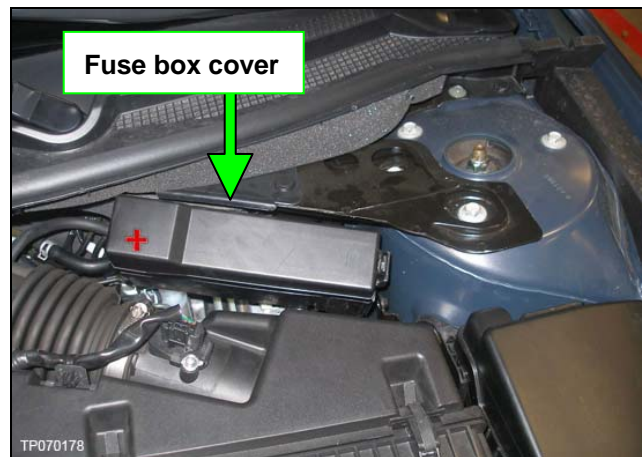


Figure 4

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.

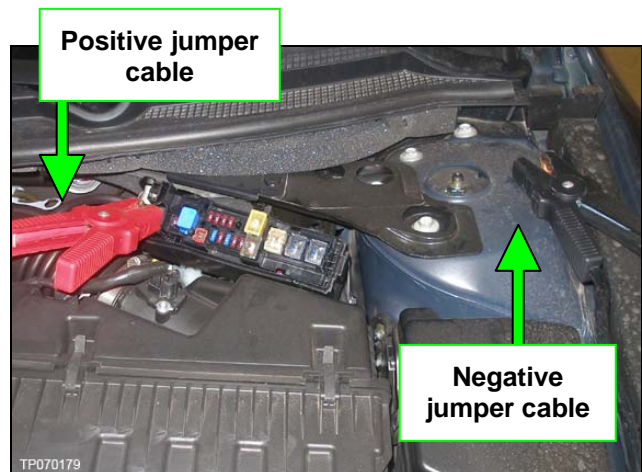


Figure 5

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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:

- The Midtronics GR-8 must be used to charge and/or test the Altima Hybrid 12-volt battery. (Make sure to select Altima Hybrid.)
- Do not quick-charge the Altima Hybrid 12-volt battery. This battery is a “sealed-type” battery and **should never be quick-charged**.
- **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 GR-8 to the battery.

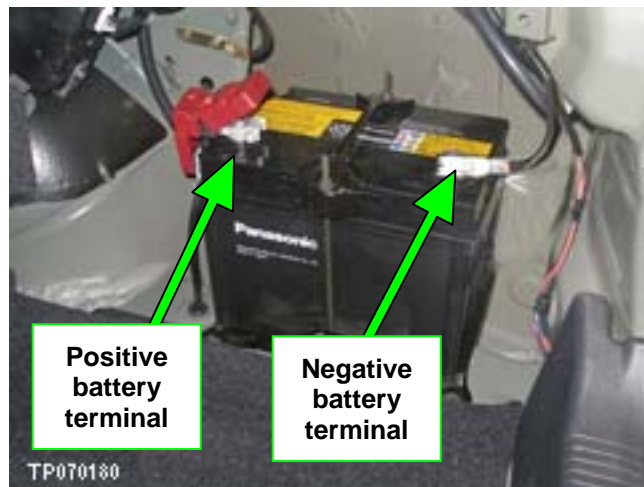


Figure 7

4. Perform necessary charging / testing:
 - Follow the GR-8 user guide.
 - Make sure to select by model the Altima Hybrid.

ENGINE OIL FOR THE ALTIMA HYBRID

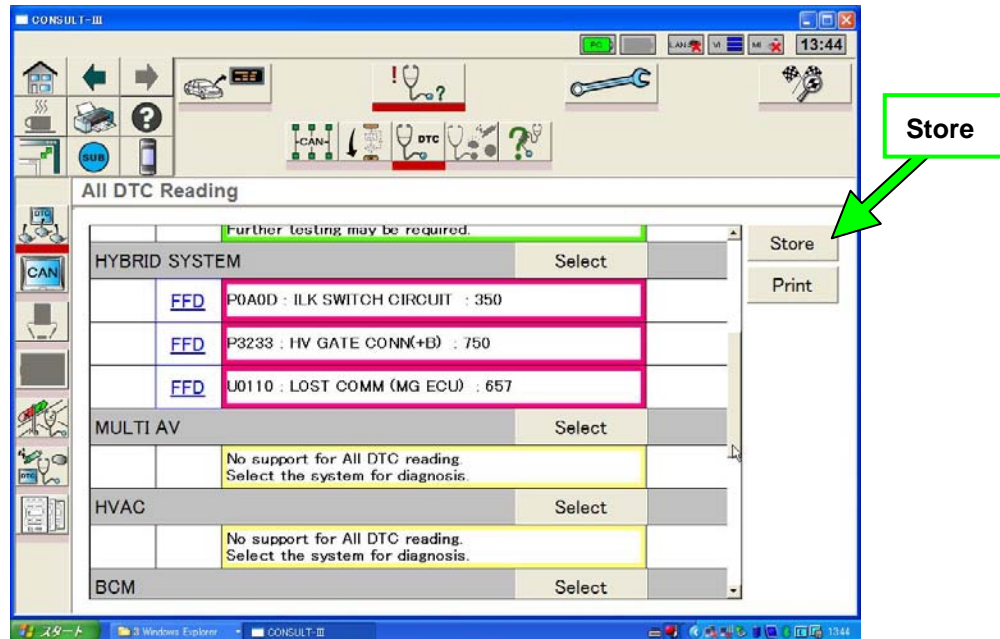
- SAE 0W-20 is recommended.
- SAE 5W-20 OR 5W-30 engine oil may also be used. However, SAE 0W-20 is the best choice for optimum fuel economy and optimum starting in cold weather.

DIAGNOSTIC TROUBLESHOOTING WHEN USING CONSULT-III

CAUTION: The Atima Hybrid diagnostic system is designed to use **ONLY 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.**
- Data stored can also be sent to TECH LINE.

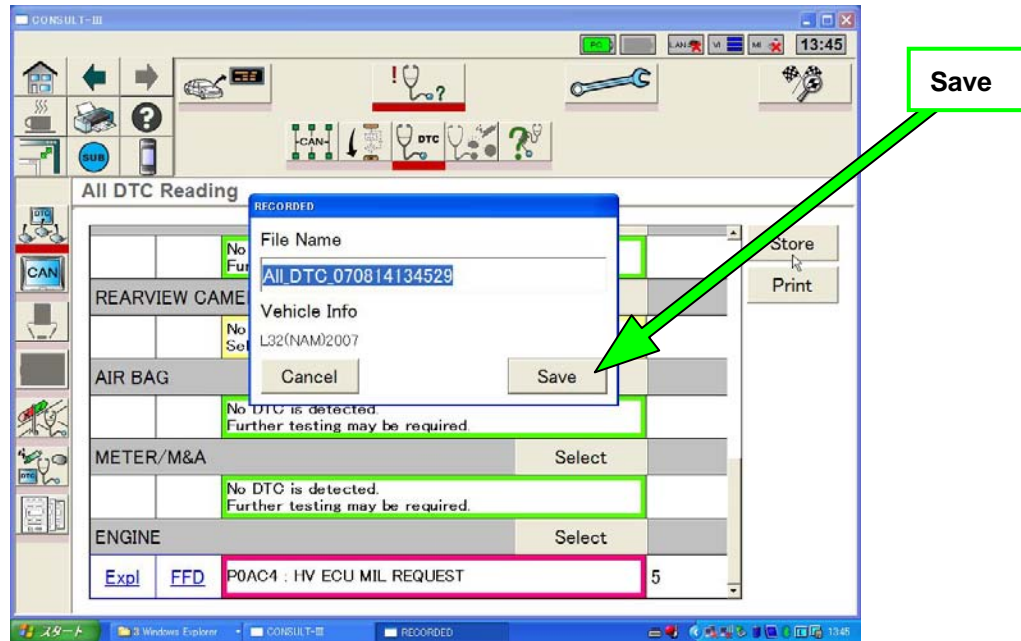
1. While in the **All DTC Reading** screen, click on **Store**.



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

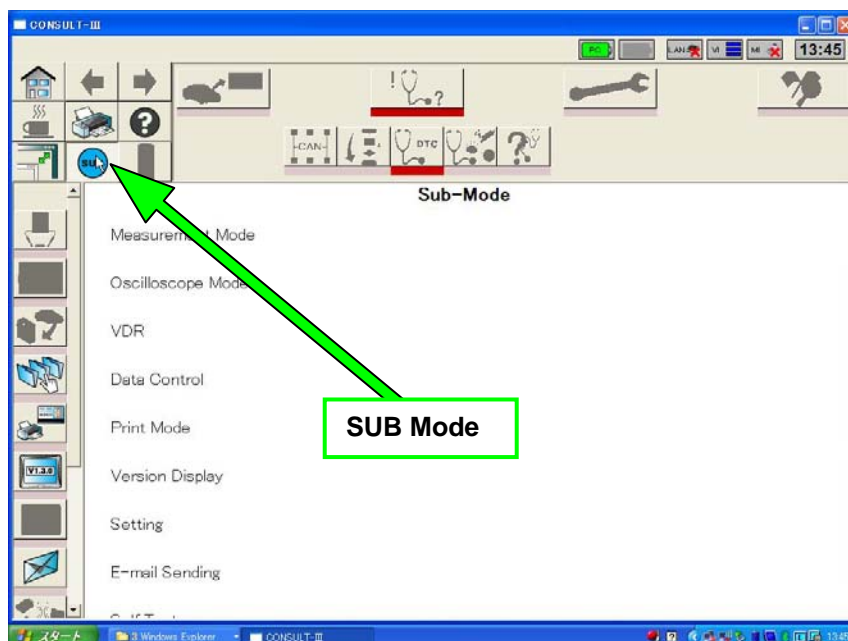
IMPORTANT: WRITE DOWN the file name you are saving on the Repair Order for future reference.

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

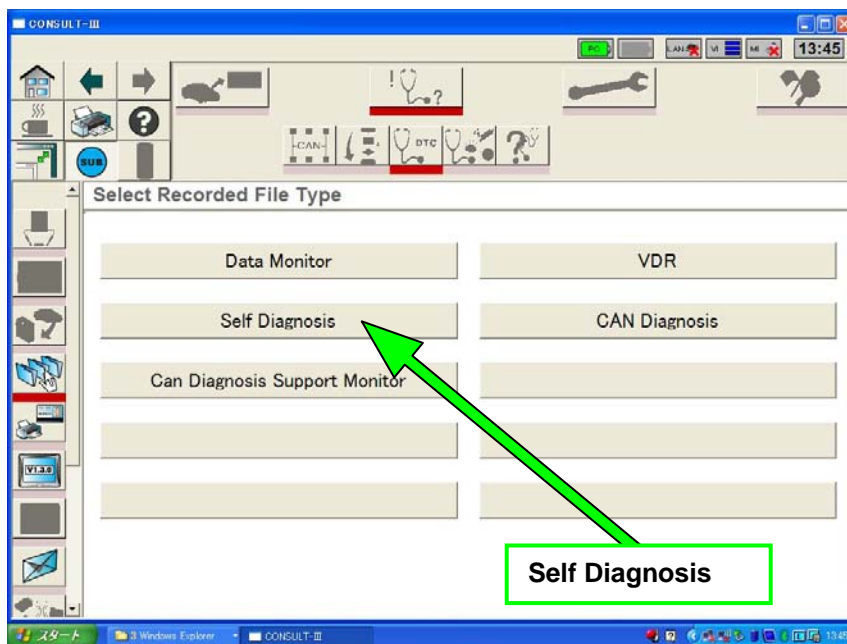


4. Confirm the DTCs and FF Data was saved as follows:

a) Click on **SUB**.

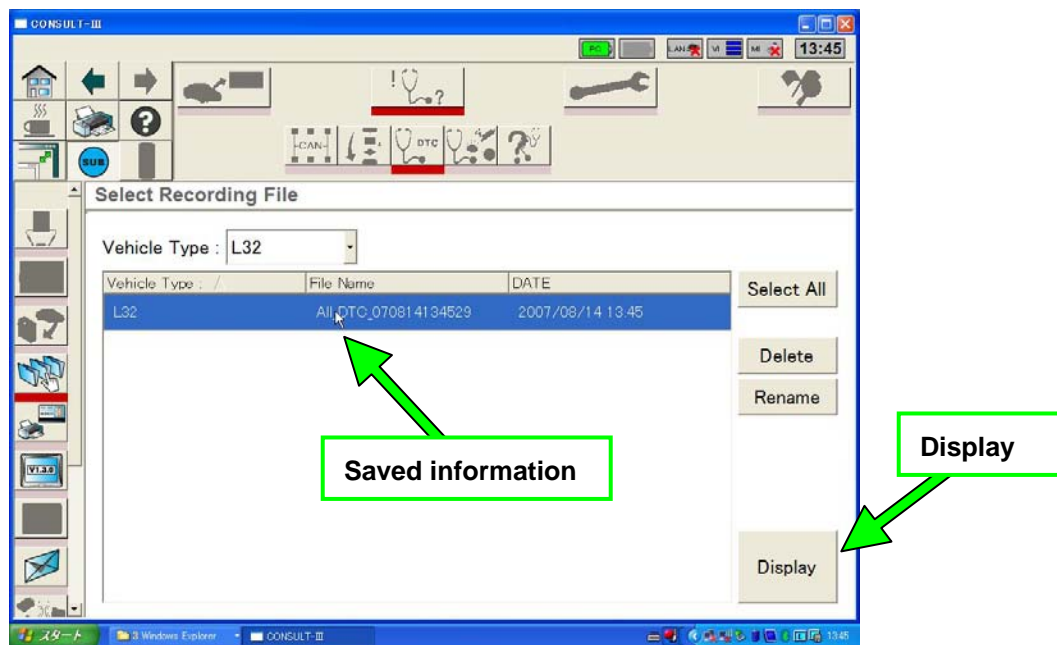


b) Click on **Self Diagnosis**.

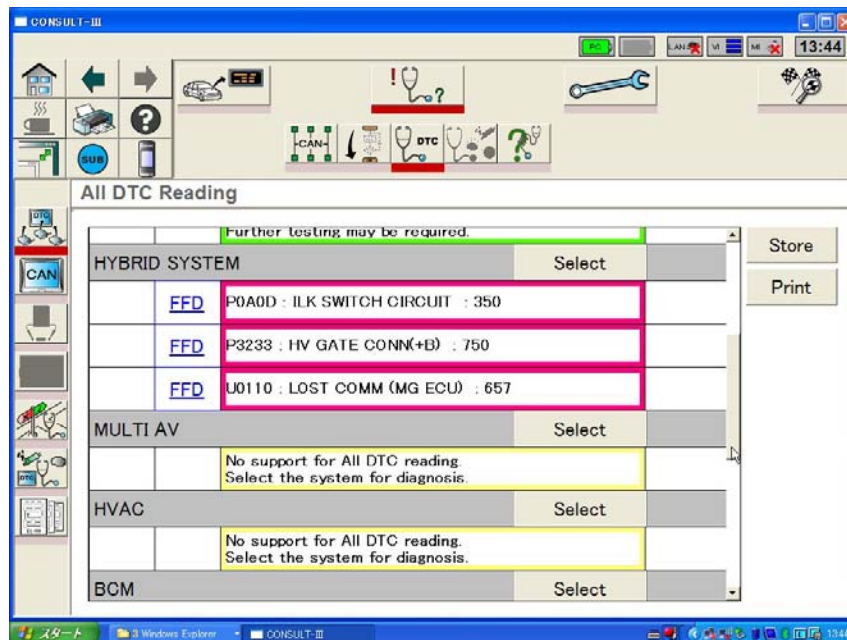


c) Select the saved information file.

d) Click on **Display**.



e) The saved DTCs and FF Data information will display.



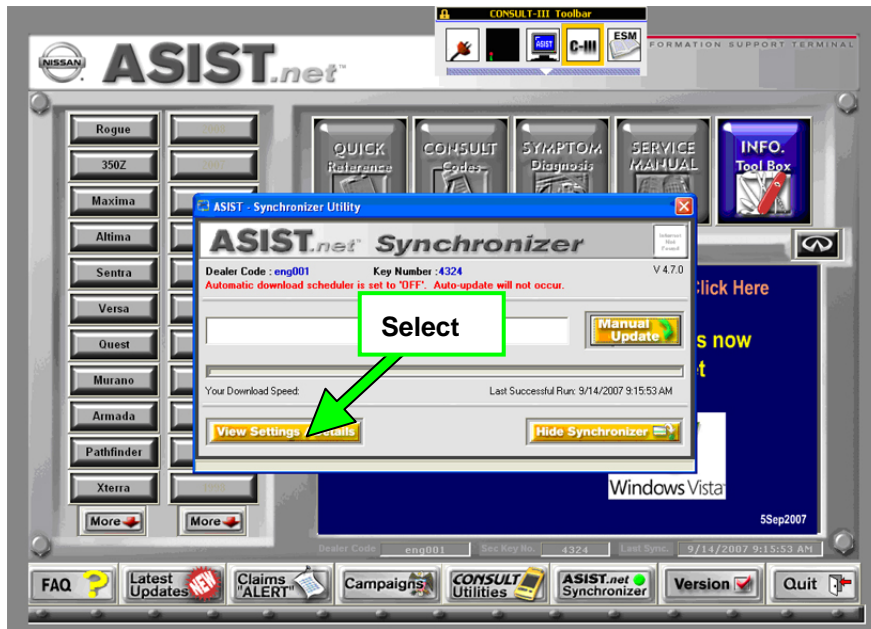
SENDING DATA RECORDED WITH CONSULT-III TO TECH LINE

NOTE: First follow the steps in the **Diagnostic Troubleshooting When Using CONSULT-III** section of this bulletin to save and store the data. **WRITE DOWN** the file name you are saving in step 2 of that section for reference during this section.

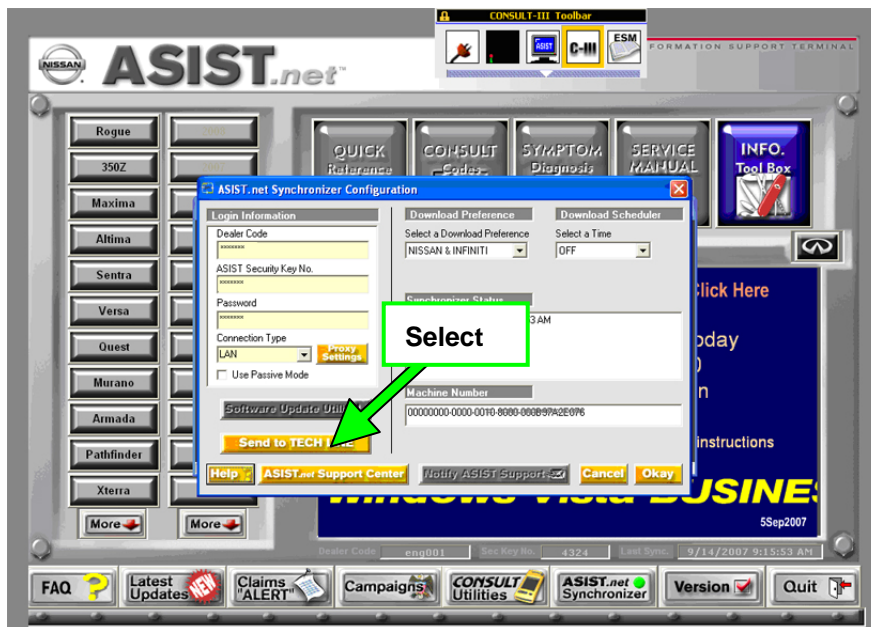
1. Open the ASIST Synchronizer.



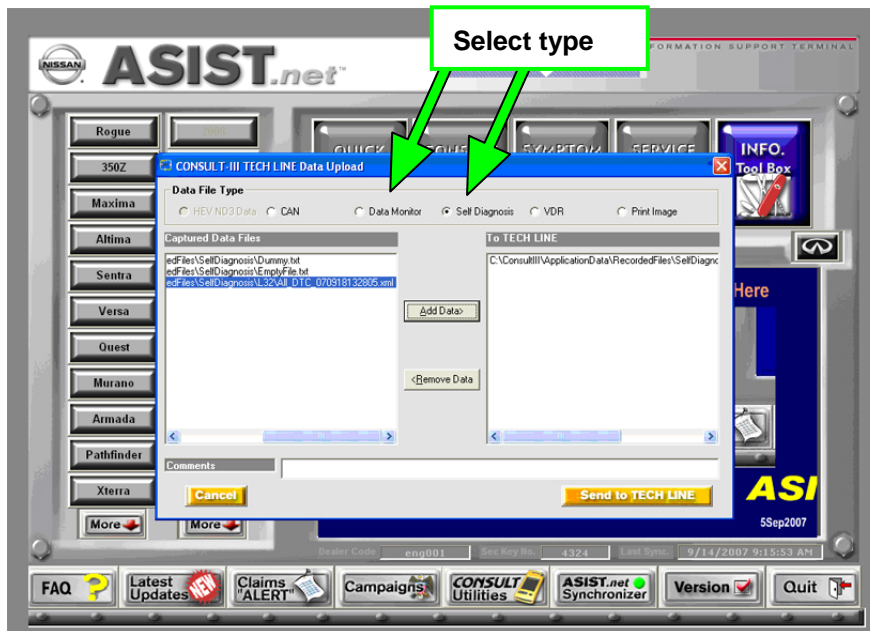
2. Click on **View Settings / Details**.



3. Click on **Send to TECH LINE**.

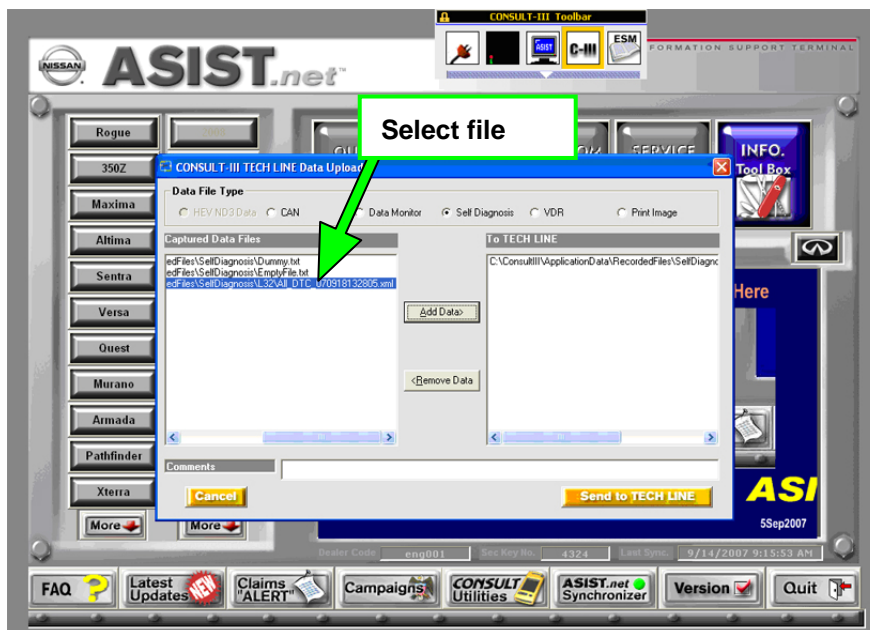


4. Select the Data File Type you want to send.



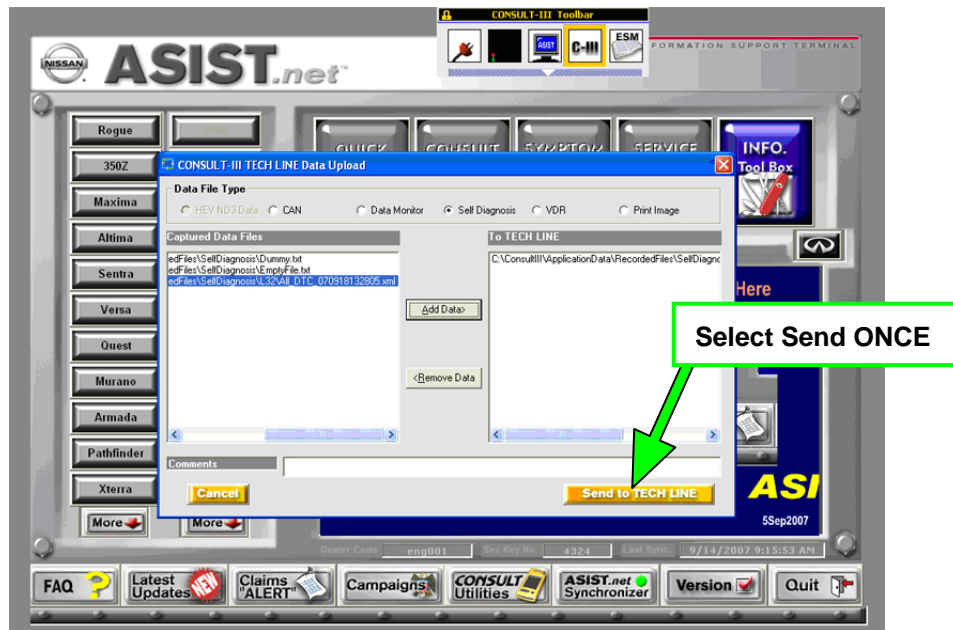
5. Refer to the file name(s) you wrote down in step 2 of the **Diagnostic Troubleshooting When Using CONSULT-III** section of this bulletin.

- Select file name(s) on the screen that you want to send.
- Select “Add Data” or “Remove Data” as needed.
- You can send multiple files and file types.



6. To send the data, click on (**ONE CLICK ONLY** - do not double-click) **Send to TECH LINE**.

NOTE: A double click will send the data twice.



7. Click on **OK** on the completion pop-up box.

NOTE: An automated email response will be sent to you acknowledging receipt of each file sent.

