

EC10-005a

JISSA

NTB10-056a

June 25, 2010

Date:

2007 – 2010 ALTIMA HYBRID; DTC P0300 – P0304

This bulletin has been amended. Notes were added to Page 8, Step 3. <u>No other changes have been made</u>. Discard all previous copies.

APPLIED VEHICLE:	2007 – 2010 Altima Hybrid (L32HV)
APPLIED VINs:	2007-2009 all VINs
	2010 built before VIN 1N4CL2AP(*)AC 155521
APPLIED DATE:	Built on or before April 9 th , 2010

IF YOU CONFIRM

The vehicle has more than 15,000 miles on the odometer, and DTC P0300, P0301, P0302, P0303, and/or P0304 is stored.

NOTE: This incident may also include engine running rough and/or vehicle vibration on deceleration.

ACTION

Refer to the Diagnostic Flow Chart on page 4.

NOTE: If the vehicle has 15,000 miles <u>or less</u> on the odometer, this bulletin does not apply.

IMPORTANT SERVICE INFORMATION:

- HEV vehicles have unique operating characteristics. The internal combustion engine has a higher frequency of start/stop cycles than a conventional vehicle.
- Under certain customer driving patterns this high frequency of start/stop engine cycles can result in increased carbon build up on the exhaust valves and/or exhaust ports. Sometimes these carbon deposits may cause the engine to run rough.
- The amount of carbon build up is highly dependent on the driving pattern of the customer.
- Carbon build up is not always the root cause of a rough running HEV engine.

IMPORTANT: The purpose of **ACTION** (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the <u>entire</u> Service Procedure (starting on Page 4) as it contains information that is essential to successfully completing this repair.

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.

CLAIMS INFORMATION

If an incident is identified and resolved with the Diagnostic Inspection on page 6:

Submit a Primary Part (PP) type line claim using the following claims coding:

Refer to the current Nissan Warranty Flat Rate Manual and use the appropriate coding for the repairs performed.

AND in combination on the same repair line

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Diagnostics Inspection (1)	(2)	EX29AA	(3)	(3)	0.9 hrs (1)

(1) The FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do Not claim any other diagnostic operation codes with this claim.

(2) Use the PFP for the repair actually performed.

(3) Use the Symptom and Diagnostic codes that apply to the repair actually performed.

If the exhaust manifold is replaced:

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Replace Exhaust Manifold	14002–JA91E	AR38AA	AC	32	(4)

(4) Refer to the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

AND in combination on the same repair line

DESCRIPTION	OP CODE	FRT
Diagnostics Inspection	EX29AA	0.9 hrs. (5)

(5) The FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do not claim any other diagnostic operation codes with this claim.

AND if needed in combination on the same repair line

DESCRIPTION	OP CODE	FRT
Replace Front Exhaust Tube	FD10AA	(6)

(6) Refer to the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

Claims Information is continued on the next page.

CLAIMS INFORMATION continued

If the cylinder head is replaced:

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIAG	FRT
Replace Complete Cylinder Head	11040-JA00H	AX26AA	AC	32	13.5 hrs

AND in combination on the same repair line

DESCRIPTION	OP CODE	FRT
Diagnostics Inspection	EX29AA	0.9 hrs. (7)

(7) The FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do Not claim any other diagnostic operation codes with this claim.

AND in combination on the same repair line

DESCRIPTION	OP CODE	FRT
Reprogram ECM	DE97AA	(8)

(8) Refer to the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

PARTS INFORMATION

DESCRIPTION	P/N	QTY
Manifold Assy – Exhaust	14002-JA91E	1
Tube Assy – Front Exhaust	20010-JA80A	1
Complete Cylinder Head Assembly	11040-JA00H	1
Gasket - Exhaust Manifold	14036-JA00A	1
Gasket - Exhaust	20691-19U00	1
Intake Manifold Gasket (Outer)	14035-JA05A	1
Intake Manifold Gasket (Inner)	14035-JA00A	1
Head Gasket	11044-ET80A	1
Gasket - Rocker Cover	13270-JA00A	1
Gasket - Water Outlet	11062-3Z000	1
Nissan Liquid Gasket	999MP-1217HP*	as needed

* Nissan Liquid Gasket is available through the Nissan Direct Ship Chemical Care Product Program: Phone 1.800.811.0502, Fax 1.770.218.0148, Website order link via dealer portal <u>www.NNAnet.com</u> or order direct <u>www.NissanChemicals.com</u>.

DIAGNOSTIC FLOW CHART



DIAGNOSTIC FLOW CHART continued



Engine sling

Intake manifold

studs

bracket

4

C

DIAGNOSTIC INSPECTION

Refer to section EC in the Service Manual under "P0300, P0301, P0302, P0303, P0304 MISFIRE" for details on the following inspection items.

- 1. Check operation of ignition coils and spark plugs.
- 2. Check fuel pressure.
- 3. Check fuel quality and condition make sure diesel fuel has not been introduced into the fuel tank.
- 4. Check intake air leaks and PCV hose connections.
- 5. Check function of fuel injectors listen to each fuel injector operating sound.
- 6. Check MASS AIR FLOW SENSOR.
- 7. Check A/F SENSOR.
- 8. Check idle speed and ignition timing.
- 9. Check items under "ROUGH IDLE/HUNTING" in the symptom chart.
 - Symptom chart is located in Section EC under SYMPTOM DIAGNOSIS.
- 10. Some tests may cause a 1st trip DTC to be set erase any 1st trip DTCs from the ECM.
- 11. Check exhaust system for dents that would restrict exhaust flow.

ECM REPROGAM

- 1. Connect CONSULT III (C-III) to the vehicle to begin the reprogramming procedure.
 - If you are not familiar with the reprogramming procedure, click here. This will link you to the "CONSULT- III (C-III) ECM Reprogramming" general procedure.

CAUTION:

- Connect a battery charger to the vehicle battery. If the 12V battery voltage drops during reprogramming, <u>the ECM may be damaged.</u>
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, <u>the ECM may be damaged.</u>
- For ECM reprogramming, the C-III MUST be connected to the VI using the USB cable.
- Be sure to connect the AC Adapter. If the C-III battery voltage drops during reprogramming, the process will be interrupted and <u>the ECM will be damaged.</u>
- 2. When you get to the ECM Reprogramming screen shown in Figure 1, confirm this bulletin applies as follows:
 - A. On your C-III screen, look at the **Part Number** column (see Figure 1 example).
 - If this column is **blank** (no part number listed), this **bulletin does not apply.**
 - If a Part Number is listed, write it on the Repair Order and then go to Step B.



Figure 1

- B. Compare the Part Number you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** below.
 - If there is a <u>match</u>, this <u>bulletin applies</u>. Continue with the reprogramming procedure.

NOTE: If there are two lines (two reprogramming options) on your C-III screen, use the one that <u>does not</u> have the message "Caution! Use ONLY with NTBXX-XXX".

• If there is not a match, this bulletin does not apply.

Table A

Model	Vehicle Configuration	Current ECM P/N
2007	HEV	23710 – JA80A, JA80B
2008	HEV	23710 – JA81A, JA81B, JA81C
2009	HEV	23710 – ZN50A, ZN50B
2010	HEV	23710 – ZX08A

3. If this bulletin applies and you have performed ECM reprogramming; when reprogramming is complete, the screen in Figure 2 displays.

NOTE: If the screen in Figure 2 does <u>NOT</u> display (reprogramming does <u>NOT</u> complete), click here. This links to the ECM Reprogram Interruption Recovery General Procedure.

• Print this screen (example Figure 2) and attach it to the repair order for warranty documentation.



Figure 2

4. Make sure to erase all DTCs from all Systems.

NOTE: During reprogramming, DTCs will set in several systems. These DTCs <u>must</u> be erased from all systems.

- 5. Disconnect C-III, start the engine and make sure the MIL (Check Engine light) is OFF.
 - If the Check Engine light comes ON, go back to ASIST for further diagnostic information.
 - Diagnosis and repairs beyond those needed for the symptoms / issues listed under "IF YOU CONFIRM" on page 1 are not covered by this bulletin.
- 6. Use C-III to perform IAVL.
 - Engine Sub-System > Work Support > IAVL Function