



SERVICE BULLETIN

Classification: EC95-015	Reference: NTB95-090	Date: September 20, 1995
-----------------------------	-------------------------	-----------------------------

1995 MAXIMA HARD CRANKING

APPLIED VEHICLE(S): 1995 Maxima (A32)
APPLIED VIN(S): Prior to JN1CA21D*ST635158
 Prior to JN1CA21D*ST082594
APPLIED DATE(S): Vehicles built prior to January 10, 1995

SERVICE INFORMATION

If a customer complains of a hard/slow cranking condition which occurs when the engine is being restarted within one second of the first start attempt, the ECM may not have time to accurately determine Top Dead Center on #1 cylinder. The result is extremely advanced spark timing and a hard/slow cranking condition may occur. A countermeasure (C/M) ECM is now available with revised control logic to reduce the chance that this incident will occur. Vehicles built after January 10, 1995 have this C/M ECM installed during production.

SERVICE PROCEDURE

The most important part of this diagnosis is to interview the customer to determine if his/her complaint can be effectively resolved by replacing the ECM. The best way to verify this is by observing the customer's starting procedure while the incident is occurring.

Not all hard cranking/starting incidents can be resolved by replacing the ECM. By using the following diagnostic procedures, a technician can determine if a C/M ECM is required to resolve a hard cranking incident.

This table can be used to determine that proper repair **does** require a C/M ECM:

Step	If this condition exists,	then perform this action.
1	Verify that the customer's starting procedure includes a rapid key cycle (within one second of the first start attempt) where the engine has stopped rotating. CONSULT shows no trouble codes have been recorded.	See PARTS INFORMATION table for the proper ECM part number.
2	Malfunction Indicator Light (MIL) is on. CONSULT shows a problem with the ECM.	See PARTS INFORMATION table for the proper ECM part number.

This table can be used to determine that proper repair **does not** require a C/M ECM:

Step	If this condition exists,	then perform this action.
1	Hard/slow cranking on 1st turn of the key.	Use CONSULT to check battery condition, ECM, cam & crank position sensors, etc. Also check electrical wire harness for intermittent open or short circuits.
2	Fast cranking on 1st turn of the key and the customer is not pressing on the accelerator pedal.	Refer the customer to page 4-9 of the owner's manual which instructs the customer to depress the accelerator pedal during cold or hot weather.
3	Hard cranking seems temperature related and the customer is not pressing on the accelerator pedal.	Refer the customer to page 4-9 of the owner's manual which instructs the customer to depress the accelerator pedal during cold or hot weather.
4	Customer releases key before engine starts.	Instruct the customer to hold the key in the start position until the engine starts (never longer than 15 seconds). Review starting procedures in the owner's manual on page 4-9 with the customer.
5	CONSULT shows start signal off during cranking.	Check electrical wire harness between pin 20 at the ECM and the ignition switch for intermittent open or short circuits. (Refer to the Service Manual circuit diagram, Pg. EC-7). Also see #9 below.
6	Vehicle will not start and there is no fuel pressure.	Check electrical continuity (fuse, connectors, ground) in the fuel pump power circuit. If OK, ensure the fuel pump output hose is connected to the fuel pump in the fuel tank.
7	If the vehicle is an M/T and the complaint is really an intermittent crank.	Check for proper operation of the clutch interlock relay (service manual page EL-24).
8	If the vehicle is an A/T and the complaint is really an intermittent crank.	Check for proper operation of the theft warning relay and inhibitor relay (service manual page EL-24).
9	The vehicle has an aftermarket security system and/or ignition "kill" switch.	This is not an NMC warranty item. Return vehicle to customer for fault diagnosis/repair/removal of the ignition kill switch by the installer of the security system, or diagnose & repair at customer expense.
10	You cannot duplicate the incident, the MIL is off , CONSULT shows no trouble codes, and the VIN is after ST635159 or ST082595.	This vehicle already has a countermeasure ECM which was installed during production (1/10/95 & later). Review starting procedures in the owner's manual on page 4-9 with the customer.

PARTS INFORMATION

MODEL & TRIM LEVEL	MODEL #	TRANS-MISSION	FEDERAL	CALIFORNIA
GXE w/o Security & Convenience pkg.	08415	A/T	2371M-40U75RE	2371M-41U76RE
GXE w/o Security & Convenience pkg.	08455	M/T	2371M-40U64RE	2371M-41U66RE
SE (all) GXE w/ Security & Convenience Pkg. GLE (all)	08215 08415 08615	A/T	2371M-40U15RE	2371M-41U16RE
SE (all) GXE w/ Security & Convenience Pkg.	08255 08455	M/T	2371M-40U04RE	2371M-41U06RE

CLAIMS INFORMATION ¹

OPERATION	OP CODE	PNC ²	SYMPTOM	DIAGNOSIS	FRT
Replace EFI Control Unit (ECM)	DE28AA	22611	AA	41	0.4 hrs
EFI/CONSULT Diagnosis (if required)	DE888A				0.6 hrs

Note:

1. To be used only if the problem is **NOT DUE** to a non-warrantable customer error or a customer -installed aftermarket alarm system.
2. New Claims System dealers: Reference the "Parts Information" table above and submit a Primary Part claim using the indicated ECM Part Number as the Primary Failed Part (PFP).