



# SERVICE BULLETIN

Classification: EC97-026	Reference: NTB97-057	Date: August 27, 1997
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## 1995-97 MAXIMA INTERMITTENT NO START

This bulletin supersedes NTB96-103/EC96-012 dated October 23, 1996.  
Please discard NTB96-103/EC96-012.

**APPLIED VEHICLE:** 1995-97 Maxima (A32)  
**APPLIED VIN:** Vehicles built before JN1CA21D8VT833870, JN1CA21D1VT215614  
and JN1CA21D5VM510709  
**APPLIED DATE:** Vehicles built before December 10, 1996

### SERVICE INFORMATION

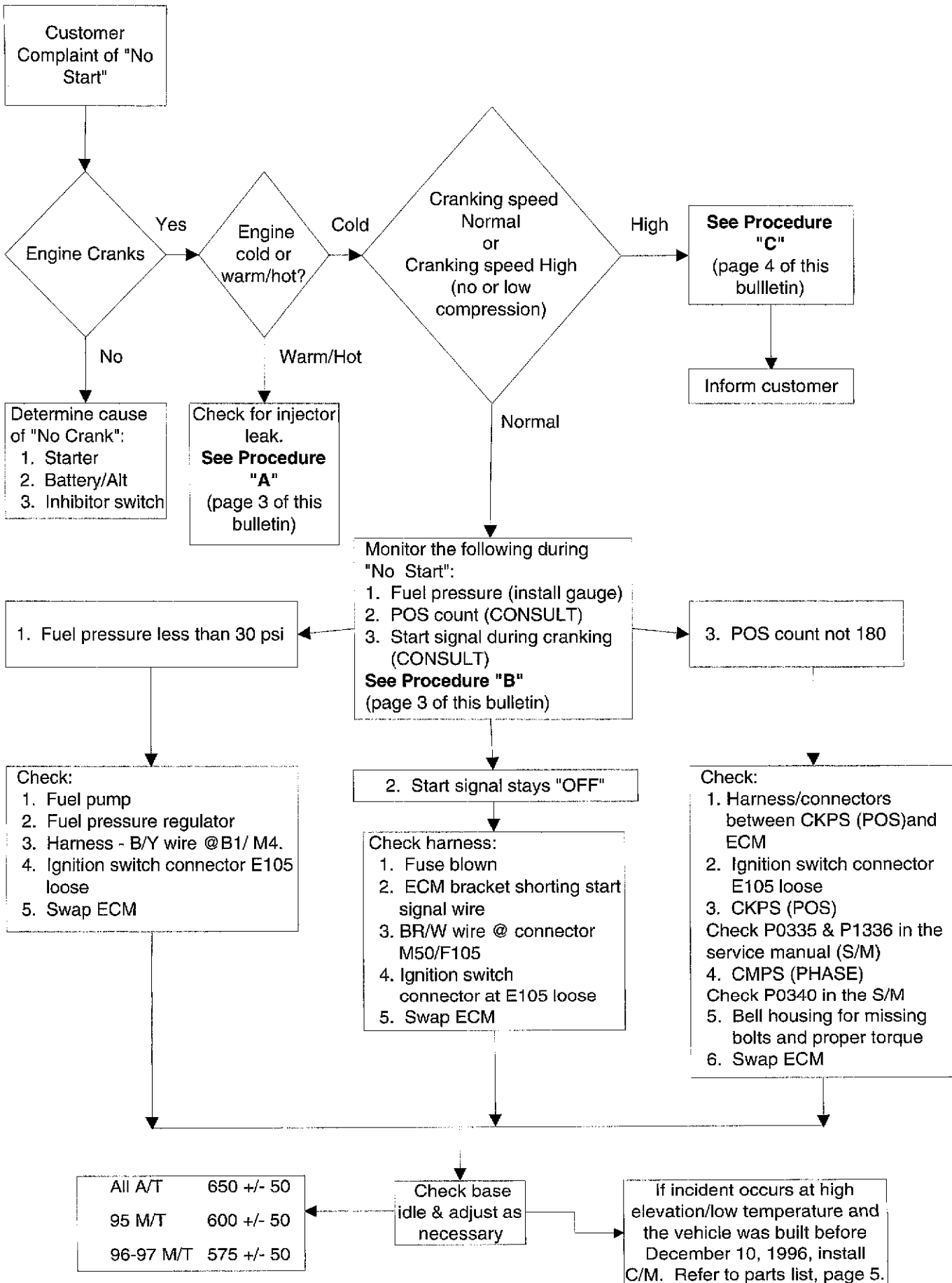
This is not considered a product campaign; normal warranty conditions apply. Please refer to your current Flat Rate Schedule (FRT).

If a 1995-97 Maxima has difficulty starting after 2 to 4 hours cooling from operating temperature, or after an overnight cold soak at elevations above approximately 5,000 feet and ambient temperatures below approximately 40 F, the cause may be an over-rich fuel mixture during cranking. The engine will start after a long cranking period.

### SERVICE PROCEDURE

1. If you can verify the incident with the conditions listed above, follow the diagnostic flowchart on page 2 (cold engine, normal cranking speed).
2. Make sure the base idle is correct (see the flowchart).
3. Replace the engine control module (ECM) only if no other trouble is found. Use the chart on page 5 for the correct part number.

# Diagnostic Flowchart



## Service Procedure "A"

If the vehicle cranks at normal speed but does not start when warm or hot, check the fuel injectors for leakage using the following procedure:

1. Release the fuel pressure.
2. Disconnect the fuel hoses between the fuel filter and the fuel tube.
3. Install a fuel pressure gauge between the fuel filter and fuel tube.
4. Clamp the fuel return line after the fuel pressure regulator. Be careful not to damage the hose.
5. Turn the ignition key to the "ON" position. You may need to cycle the key on/off several times to build up pressure in the line. Wait five seconds after turning the key off before repeating the cycle.
6. Clamp the inlet fuel hose just before the fuel pressure regulator.
7. Note the reading on the fuel pressure gauge.
8. If the pressure drops to almost zero within 1 minute, remove the fuel tubes with the injectors installed and repeat the test to isolate a leaking fuel injector.

**WARNING:** Be sure workshop has a CO2 fire extinguisher.  
Keep open flames and sparks away from work area.

**CAUTION:** Before removing fuel line parts, carry out the following procedures:  
Put drained fuel in an explosion-proof container and put the lid on securely.  
Refer to 'Changing Fuel Filter' in the MA section of the service manual.  
Disconnect the battery ground cable.  
Do not kink or twist tubes when they are being installed.  
Do not tighten hose clamps excessively to avoid damaging hoses.  
After installing tubes, run the engine and check for fuel leaks at connections.

9. Replace any leaking injectors and reassemble.

## Service Procedure "B"

The image shows two screenshots of a vehicle diagnostic display. Each screen has a title bar with '☆ MONITOR' and '☆ NO FAIL' and a small icon. Below the title bar is a list of parameters and their values. At the bottom of each screen is a 'RECORD' button and a control panel with buttons for BACK, MODE, LIGHT ON, LIGHT OFF, and directional arrows (left, right, up, down, enter).

Parameter	Value
CKPS•RPM (POS)	975rpm
POS COUNT	180
MAS AIR/FL SE	1.46V
COOLAN TEMP/S	125;F
FR 02 SEN-B2	0.07V
RR 02 SENSOR	0.08V
FR 02 MNTR-B2	RICH
FR 02 MNTR-B1	RICH
VHCL SPEED SE	0mPh

Parameter	Value
BATTERY VOLT	12.8V
THRTL POS SEN	0.58V
START SIGNAL	ON
CLSD THL/P SW	ON
AIR COND SIG	ON
P/N POSI SW	ON
PW/ST SIGNAL	OFF
LOAD SIGNAL	OFF
INJ PULSE-B2	1.5msec

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## **Service Procedure "C"**

If the vehicle cranks fast as if it has no compression when cold, perform a cylinder leakage or compression test to verify compression loss. Compression test results of 160 psi or less may indicate carbon deposits on the valve seats. If a cylinder leakage test is performed, the front O2 sensor may be removed to listen for leakage past the exhaust valves of #2, #4, and #6 to confirm this condition.

If you can confirm this condition, install C/M starter P/N 23300-31U01R. This starter has 10 teeth on the pinion gear to crank the engine faster, restoring the sealing at the valve seats more quickly. If the no start incident cannot be duplicated, but the customer describes that the engine cranks fast as if there is no compression cold, install the C/M starter. This C/M starter was applied to production on December 8, 1995.

Check the "Base Idle Speed" using CONSULT (Work Support, IACV-AAC Valve Adjust) and adjust to specification if necessary.

### **Information for Customer**

A no start condition is sometimes preceded by a driving cycle of very short duration (less than one minute). The no start incident may occur on the next starting attempt. Should this pattern be observed, the vehicle can be started by holding the throttle wide open and cranking until the engine starts. Never crank for more than 10 seconds, or the starter may be damaged by overheating.

During cold weather, Nissan suggests the following procedure to make starting the vehicle easier when this incident occurs. This method is an expansion of the procedure outlined in the owner's manual and should be used to remedy a "no start" condition when ambient temperature is low.

1. Depress the accelerator pedal approximately 1/3 of the way to the floor.
2. Hold the accelerator pedal in this position while cranking the engine.
3. Once the engine has started, release the accelerator pedal. (Do not race the engine while warming it up).
4. If the engine does not start within 10 seconds, wait at least 10 seconds before cranking the engine, again repeating steps 1 through 3.

Once a vehicle is started, in cold weather conditions, the engine should be run for a minimum of two to three minutes before shutting it off. Starting and stopping the engine over a short period of time may make the vehicle more difficult to restart. This type of usage may also adversely affect a vehicle's fuel economy.

Another factor which may affect a vehicle's "startability" is the viscosity or thickness of the oil that is used. An API SG quality, SAE 5W-30 is the preferred engine oil, all year-round for most models. In colder weather, oil that is rated as 5W-30 will not thicken as much as a 10W-30 rated oil; this makes it easier to start the engine and maintain a stable idle during warm up.

**PARTS INFORMATION**

DESCRIPTION	MODEL	PART #/PFP		QUANTITY
		FORMER	C/M	
1995 ECM (FED, M/T) <sup>1</sup>	SE	23710-40U05	23710-40U06	1
1995 ECM (FED, A/T) <sup>1</sup>	GXE, GLE, SE	23710-40U16	23710-40U17	1
1995 ECM (CAL, M/T) <sup>1</sup>	SE	23710-41U06	23710-41U07	1
1995 ECM (CAL, A/T) <sup>1</sup>	GXE, GLE, SE	23710-41U16	23710-41U17	1
1995 ECM (FED, M/T) <sup>2</sup>	GXE	23710-40U65	23710-40U66	1
1995 ECM (FED, A/T) <sup>2</sup>	GXE	23710-40U76	23710-40U77	1
1995 ECM (CAL, M/T) <sup>2</sup>	GXE	23710-41U66	23710-41U67	1
1995 ECM (CAL, A/T) <sup>2</sup>	GXE	23710-41U76	23710-41U77	1
1996 ECM (NAM, M/T) <sup>1</sup>	GXE, GLE, SE	23710-54U04	23710-54U05	1
1996 ECM (NAM, A/T) <sup>1</sup>	GXE, GLE, SE	23710-54U14	23710-54U15	1
1996 ECM (NAM, M/T) <sup>2</sup>	GXE, GLE, SE	23710-56U63	23710-56U64	1
1996 ECM (NAM, A/T) <sup>2</sup>	GXE, GLE, SE	23710-56U73	23710-56U74	1
1997 ECM (M/T) <sup>1</sup>	GXE, GLE, SE	23710-0L702	23710-0L708	1
1997 ECM (A/T) <sup>1</sup>	GXE, GLE, SE	23710-0L712	23710-0L718	1
1997 ECM (NAM, M/T) <sup>2</sup>	GXE, GLE, SE	23710-0L762	23710-0L768	1
1997 ECM (NAM, A/T) <sup>2</sup>	GXE, GLE, SE	23710-0L772	23710-0L778	1

- NOTE:**
1. With Security and Convenience Package.
  2. Without Security and Convenience Package.

**CLAIMS INFORMATION**

When applicable, standard claims coding applies.