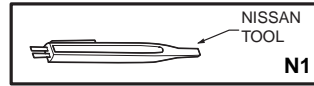


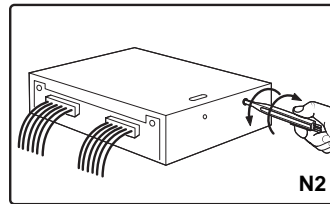
### OVERVIEW OF NISSAN/INFINITI DIAGNOSTIC SYSTEMS

- Retrieving codes from Nissan/Infiniti vehicles requires the use of the flat end of the code retrieval tool shown in Figure N1.
- Nissan/Infiniti vehicles use a variety of computer systems which are equipped with either a single-LED (Light Emitting Diode) or a dual-LED display.
- To retrieve codes, you need to first locate the LED display on the vehicle's computer. The LED(s) are mounted inside the computer, but may be seen by looking through an opening in the top of or on the side of the computer housing. In some cases you may have to remove the computer from its mount.



**NOTE:** Refer to the vehicle's service manual when removing the computer from its mount, as it is easily damaged.

All Nissan/Infiniti vehicles covered in this manual are equipped with a screw-type diagnostic mode selector on the vehicle's computer. The diagnostic mode selector is accessed through a cutout in the computer housing. Two marks show the operating limits of the diagnostic mode selector. The Code Reader is used to adjust the position of the diagnostic mode selector (N2).



**NOTE:** Some Nissan/Infiniti models do not require a tool to retrieve codes. The "Tool Req?" column in the "Code Retrieval Procedures Tables" on pages 24 through 29 will let you know if a tool is required. If no tool is required, just follow the procedures as indicated to retrieve codes.

## CODE RETRIEVAL PROCEDURE

- Always observe safety precautions whenever working on a vehicle.
  - Fix any known mechanical problems before this test.
  - Warm up engine before this test.
  - Have a pencil and paper handy.
1. Locate your vehicle in the appropriate table (see below for “Nissan Code Retrieval Procedures”; see page 29 for “Infiniti Code Retrieval Procedures”).
  2. Follow the procedures applicable to your vehicle.
    - Refer to page 30 for “ECU Locations”, (Figures N3 through N7).
    - Refer to page 31 for “Code Examples” (Figures N8 through N11).
  3. Refer to pages 34-36 for “Nissan/Infiniti Fault Code Definitions”. Match the retrieved Diagnostic Trouble Codes with those listed, read the associated definition(s), and consult the vehicle’s service manual for further evaluation.
  4. Refer to page 32 for the “Erasing Codes” procedure. Consult the appropriate table for your vehicle (“Nissan Erasing Procedure” or “Infiniti Erasing Procedure”) and follow the procedure listed.

**Nissan Code Retrieval Procedures**

Model	Years	Eng.	Tool Req?	Perform the following:
Altima Maxima Sentra Stanza 200SX	93-95 92-94 91-95 90-92 95	2.4 3.0 (DOHC) 2.0 2.4 1.6, 2.0	Y	<p><b>Procedure:</b> Access ECU (located behind center console) (N3). Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise; wait two seconds, then turn selector fully counterclockwise. Observe red LED on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed using a combination of long and short blinks. Codes are determined by the number and duration of blinks. A long blink indicates the first digit (ten); a short blink indicates the second digit (ones) (N8). Example: long blink-pause short blink short blink = code 12 (N9). If</p>

# Nissan/Infiniti

## CODE RETRIEVAL PROCEDURE

### Nissan Code Retrieval Procedures (Cont)

Model	Years	Eng.	Tool Req?	Perform the following:
Altima Maxima Sentra Stanza 200SX (cont)	93-95 92-94 91-95 90-92 95	2.4 3.0 (DOHC) 2.0 2.4 1.6, 2.0	Y	more than one code is stored, the ECU will blink the lowest number code first, pause for two seconds, then display the next highest number code. This continues until all stored codes have been displayed; the cycle then repeats.
Stanza 200SX	86 84-86	2.0 1.8, 2.0	Y	<p><b>Procedure:</b> Access ECU (from driver's side kick panel) (N6) (except Stanza Wagon, which is located under driver's seat). Make sure diagnostic mode selector is turned fully counterclockwise. Turn ignition on. Using Nissan tool, turn selector fully clockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>
Pulsar Sentra Stanza 200SX	88-90 88-90 87-90 87-88	1.6, 1.8 1.6 2.0, 2.4 2.0, 3.0	Y	<p><b>Procedure:</b></p> <ul style="list-style-type: none"> <li>• <b>All except 200 SX:</b> Access ECU (located under passenger seat) (N5) (except Stanza Wagon, which is located under driver's seat).</li> <li>• <b>200 SX only:</b> Access ECU (located behind driver side kick panel) (N6).</li> <li>• Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise and observe LEDs on ECU. When LEDs have flashed three times, turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</li> </ul> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>

**Nissan Code Retrieval Procedures (Cont)**

Model	Years	Eng.	Tool Req?	Perform the following:
Maxima	86-94	3.0 (SOHC)	Y	<p><b>Procedure:</b></p> <ul style="list-style-type: none"> <li>• <b>All <i>except</i> 87, 88 Maxima:</b> Access ECU (located under passenger seat) (N5).</li> <li>• <b>87, 88 Maxima <i>only</i>:</b> Access ECU (located behind center console) (N3).</li> <li>• Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise, wait at least two seconds, then turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</li> </ul> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>
NX 240SX 300ZX	91-93 91-95 90-95	1.6, 2.0 2.4 3.0 (incl. Turbo)	Y	<p><b>Procedure:</b> Access ECU (located behind center console) (N3) (except 300ZX, which is located in passenger side footwell under carpet (N5)). Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise; wait two seconds, then turn selector fully counterclockwise. Observe red LED on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed using a combination of long and short blinks. Codes are determined by the number and duration of LED blinks. A long blink indicates the first digit (tens); a short pause indicates the second digit (ones) (N8). Example: long blink-pause-short blink short blink = code 12 (N9). If more than one code is stored, the ECU will blink the lowest number code lowest number code first, pause for two seconds, then display the next highest number code. This continues until all stored codes have been displayed; the cycle then repeats.</p>

**Nissan/Infiniti**  
CODE RETRIEVAL PROCEDURE

**Nissan Code Retrieval Procedures (Cont)**

Model	Years	Eng.	Tool Req?	Perform the following:
Van Pathfinder Hard-body Pickup	87-88, 90 87-95 87-95	2.4 2.4, 3.0 2.4, 3.0	Y	<p><b>Procedure:</b> Access ECU (located under passenger seat) (N5). Using Nissan tool, turn diagnostic mode selector fully clockwise and observe LEDs on ECU. When LEDs have blinked three times, turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>
240SX	89-90	2.4	Y	<p><b>Procedure:</b> Access ECU (from passenger side front kick panel) (N4), and position it so LEDs can be observed. Using Nissan tool, turn diagnostic mode selector fully clockwise and observe LEDs on ECU. When LEDs have blinked three times, turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>
300ZX	86	3.0 (incl. Turbo)	Y	<p><b>Procedure:</b> Access ECU (from passenger side front kick panel) (N4). Make sure diagnostic mode selector is turned fully counterclockwise. Turn ignition on. Using Nissan tool, turn selector fully clockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates</p>

**Nissan/Infiniti**  
CODE RETRIEVAL PROCEDURE

**Nissan Code Retrieval Procedures (Cont)**

Model	Years	Eng.	Tool Req?	Perform the following:
300ZX (cont)	86	3.0	Y	the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).
300ZX	87-89	3.0 (incl. Turbo)	Y	<p><b>Procedure:</b> Access ECU (from passenger side front kick panel) (N4). Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise and observe LEDs on ECU. When LEDs have blinked three times, turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>
Axxess	90	2.4	Y	<p><b>Procedure:</b> Access ECU (located behind center console) (N3). Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise and observe LEDs on ECU. When LEDs have blinked three times, turn selector fully counterclockwise. Observe both red and green LEDs on ECU for codes.</p> <p><b>Codes:</b> Codes are displayed by blinking of both Red and Green LEDs (N10). The Red LED blinks first, followed by the Green LED. The Red LED indicates the first digit (tens); the Green LED indicates the second digit (ones). Example: one Red flash and two Green flashes = code 12 (N11).</p>

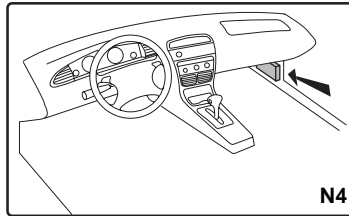
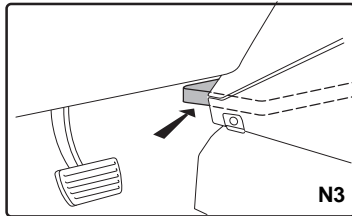
**Nissan/Infiniti**  
CODE RETRIEVAL PROCEDURE

**Infiniti Code Retrieval Procedures**

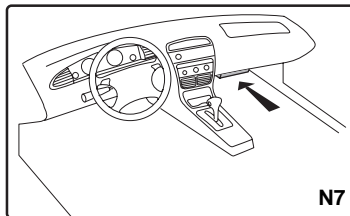
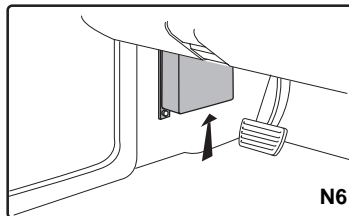
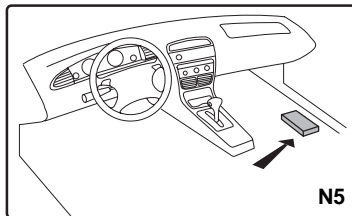
Model	Years	Eng.	Tool Req?	Perform the following:
G20	91-95	2.0	Y	<p><b>Procedure:</b> Access ECU (from passenger side kick panel) (N4). Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise; wait for two seconds, then turn selector fully counterclockwise. Observe LED on ECU (or vehicle's "Check Engine" light) for codes.</p> <p><b>Codes:</b> Codes are displayed using both long and short blinks (N8). The long blinks represent the first digit, the short blinks represent the second digit (N9). Codes are displayed in numeric order, beginning with the lowest number code and ending with the highest number code.</p>
J30 M30 Q45	93-95 90-92 90-95	3.0 3.0 4.5	Y	<p><b>Procedure:</b> Access ECU (from passenger side kick panel) (N4) and position it to observe LED. Turn ignition on. Using Nissan tool, turn diagnostic mode selector fully clockwise, wait for two seconds, then turn selector fully counterclockwise. Observe LED on ECU (or vehicle's "Check Engine" light) for codes.</p> <p><b>Codes:</b> Codes are displayed using both long and short blinks (N8). The long blinks represent the first digit, the short blinks represent the second digit (N9). Codes are displayed in numeric order, beginning with the lowest number code and ending with the highest number code.</p>

**ECU Locations**

The physical locations of the ECU for Nissan/Infiniti vehicles are shown in Figures N3 through N7. Refer to the code retrieval instructions in Table N1 (Nissan) or Table N2 (Infiniti) to determine the correct location for your vehicle.



ECU may need to be accessed from driver or passenger side, depending on model.



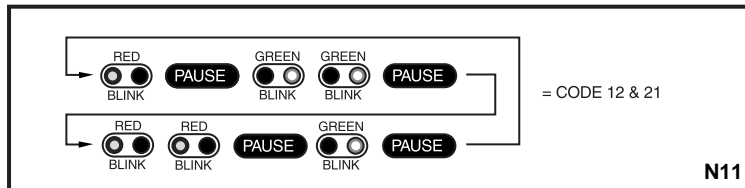
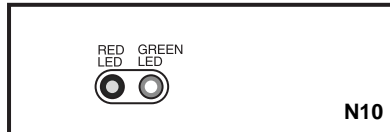
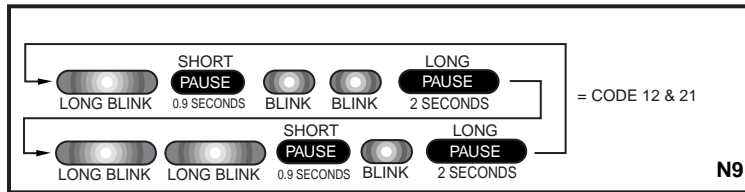
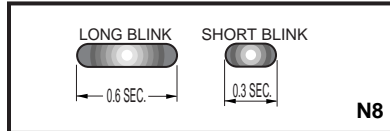


# Nissan/Infiniti

## CODE RETRIEVAL PROCEDURE

### Code Examples

Examples of Nissan/Infiniti fault codes are shown in Figures N8 through N11. Refer to the code retrieval instructions in Table N1 (Nissan) or Table N2 (Infiniti) to determine the code display for your vehicle.



**ERASING CODES**

- Always observe safety precautions whenever working on a vehicle.
- Erase codes only when all repairs have been completed. Refer to “Nissan Erasing Procedures” or “Infiniti Erasing Procedures” for specific instructions for your year, make and model.
- After erasing codes, verify that repairs were successfully completed. Start the engine and warm to normal operating temperature. After normal operating temperature is reached, turn off the ignition and repeat the code retrieval procedure for your vehicle. If no codes are retrieved, the repair(s) was successful.

**Nissan Erasing Procedures**

Model	Years	Procedure
Altima	93-95	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
Axxess	90	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
Maxima	87-92	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
	93-94	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
NX	91-93	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
Path-finder	87-95	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
Hard-body Pickup	87-95	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
Pulsar	88-90	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
Sentra	88-90	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
	91-95	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.

## Nissan/Infiniti

### ERASING CODES

#### Nissan Erasing Procedures (Cont)

Model	Years	Procedure
Stanza	86	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
	87-89	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
	91-92	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
Van	87-90	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
200SX	84-86	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
	87-88	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
	90	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
240SX	89-90	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
	91-95	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
300ZX	86	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.
	87-89	After codes have been retrieved turn selector fully clockwise. After the LED's have blinked four times turn the selector fully counterclockwise. ECU code memory is now erased.
	90-95	After codes have been retrieved turn selector fully clockwise and wait for two seconds. ECU code memory is now erased.

#### Infiniti Erasing Procedures

Model	Years	Procedure
All	All	After you have finished retrieving codes turn the selector back fully clockwise to erase the ECU code memory.

### NISSAN/INFINITI FAULT CODE DEFINITIONS

***IMPORTANT:*** Retrieving and utilizing Diagnostic Trouble Codes (DTCs) for troubleshooting vehicle operation problems is only one part of an overall diagnostic strategy. Never replace a part based solely on the DTC definition. Always consult the vehicle's service manual for more detailed testing instructions. Each DTC has a set of testing procedures, instructions and flow charts that must be followed to confirm the exact location of the problem. This type of information is found in the vehicle's service manual.

Code	Description	Possible Cause
11	CKP sensor circuit	CKP sensor or circuit
12	MAF sensor circuit	MAF sensor or circuit, MAF signal too high
13	ECT sensor circuit	ECT sensor or circuit
14	VSS circuit	VSS or circuit
16	Traction Control System	Open or shorted signal circuit
21	No ignition reference pulse	Loss of primary signal
22	Fuel Pump / Idle speed control valve	Open or shorted signal circuit
23	Idle switch / throttle valve switch	Open or shorted signal circuit / defective idle speed valve
24	Idle switch / Trans. switch / Neutral/Park switch	Open or shorted signal circuit
25	Idle Speed control	Open or shorted AAC circuit
31	ECU circuit	Abnormal input signals
32	EGR sensor circuit	No EGR operation
33	HO2S fault	Open or shorted signal circuit, high HO2S signal
34	Knock Sensor circuit	Knock sensor or circuit
35	EGR temperature sensor	EGR temperature sensor or circuit
36	EGR valve / system	EGR / EVAP valve or circuit
37	Closed loop control	HO2S, intake/fuel system
41	Air temperature sensor	Air temperature sensor or circuit
42	Fuel temperature sensor	Fuel temperature sensor or circuit
43	TPS circuit	TPS or circuit
44	No faults / no malfunctions	
45	Injector leak	Leak at injector
46	Secondary TPS circuit	Secondary TPS or circuit
51	Injector circuit	Defective injector

## Nissan/Infiniti

### FAULT CODE DEFINITIONS (53 - 111)

Code	Description	Possible Cause
53	Oxygen sensor - right side	Open or shorted signal circuit, high O2 signal
54	A/T signal	Open signal in trans. Control unit
55	No faults / no malfunctions	
63	No. 6 cylinder misfire	Wiring, fuel or ignition system, ECM
64	No. 5 cylinder misfire	Wiring, fuel or ignition system, ECM
65	No. 4 cylinder misfire	Wiring, fuel or ignition system, ECM
66	No. 3 cylinder misfire	Wiring, fuel or ignition system, ECM
67	No. 2 cylinder misfire	Wiring, fuel or ignition system, ECM
68	No. 1 cylinder misfire	Wiring, fuel or ignition system, ECM
71	Random misfire	Wiring, fuel or ignition system, ECM
72	TWC function RH bank	Catalytic converter, wiring, ECM
73	TWC function LH bank	Catalytic converter, wiring, ECM
76	Fuel injection system function RH bank	Wiring, injector, oxygen sensor
77	Rear HO2S circuit	Wiring, injector, oxygen sensor
82	CKP sensor	Wiring, CKP sensor, ECM
84	A/T diagnosis communication line	Wiring, ECM
85	CMP actuator - circuit malfunction	Wiring, CMP sensor, ECM
86	Fuel injection system function LH bank	Wiring, oxygen sensor, MAF, ECM
87	Canister control solenoid valve circuit	Wiring, EVAP valve, ECM
91	Front HO2S heater circuit RH bank	Wiring, HO2S, ECM
94	TCC solenoid valve	Wiring, clutch solenoid, ECM
95	CKP sensor	Wiring, CKP sensor, ECM
98	ECT sensor	Wiring, ECT sensor, ECM
101	Front HO2S heater circuit LH bank	Wiring HO2S, ECM
101	CMP sensor circuit	CMP sensor or circuit
102	MAF sensor circuit	MAF sensor or circuit
103	ECT sensor circuit	ECT sensor or circuit
104	VSS circuit malfunction	VSS or circuit
111	EVAP canister purge control system	EVAP valve

## ***Nissan/Infiniti***

### **FAULT CODE DEFINITIONS (113 - 115)**

<b>Code</b>	<b>Description</b>	<b>Possible Cause</b>
113	EVAP canister purge control system	EVAP valve
114	Fuel trim - right side - fuel too rich	Oxygen sensor or circuit, fuel pressure
115	Fuel trim - right side - fuel too rich	Oxygen sensor or circuit, fuel pressure