



SERVICE BULLETIN

Classification:

EL99-012a

Reference:

NTB99-067a

Date:

November 7, 2003

NISSAN INTEGRATED HOMELINK® TRANSMITTER

APPLIED VEHICLES:

- 1996-2004 Pathfinder - with HomeLink® Option
- 1997-2004 Maxima - with HomeLink® Option
- 1999-2004 Quest - with HomeLink® Option
- 2000-2004 Altima - with HomeLink® Option
- 2003-2004 Murano - with HomeLink® Option
- 2003-2004 350Z - with HomeLink® Option
- 2004 Pathfinder Armada - with HomeLink® Option
- 2004 Titan - with HomeLink® Option

This document amends NTB99-067 and supercedes NTB96-014a. Please discard all paper copies of NTB99-067 and NTB96-014a.

SERVICE INFORMATION

Some of the Applied Vehicles, as an option, feature the **Nissan Integrated HomeLink® Transmitter** system. This Radio Frequency (RF) system can be programmed to activate most RF-operated electronic garage doors and security gates. A laminated card contained in the vehicle's Literature Kit covers the simple programming instructions. A copy of this card is included in this bulletin as **Attachment II**. Programming instructions can also be downloaded at www.homelink.com

This bulletin summarizes important customer support and diagnostic information for Nissan dealership staff.

Customer Support - Responsibilities

Typically, three different groups might be asked to assist customers with Nissan Integrated HomeLink® related incidents:

GROUP	RESPONSIBILITIES
Dealership	<ul style="list-style-type: none">- Orient customer on transmitter use (delivery/service)- Test and diagnose (vehicle) HomeLink® systems- Access technical support through: HomeLink® <u>dealer-only</u> support website @ www.dealerlink.homelink.com or HomeLink® Hotline (see below).
HomeLink® Hotline: 1-800-355-3515 HomeLink® Website: www.homelink.com	<ul style="list-style-type: none">- Support dealership with HomeLink® related technical assistance- Support dealership and customer with answers to garage door system questions- Supply HomeLink® "Fix Kits" to customer for non-compatible systems (if available).
NNA Consumer Affairs	<ul style="list-style-type: none">- Respond to customer inquiries about transmitter programming.- Coordinate client contacts to HomeLink® Hotline (except customer or dealer initiated)- Administer related support policies

Essential Tool Already Released

To assist in diagnosing the Nissan Integrated HomeLink™ System, a Nissan Integrated HomeLink® Tester Kit was released in 2001 as an Essential Tool (Kent-Moore J-41540). The Tester Kit consists of the following components:

- Integrated HomeLink® Tester
- Hand Held (Test) Transmitter
- 12v Power Supply
- 12v Power Adapter
- Plastic Case and die cut foam

This kit will support Functionality Testing, Range Testing, and Programming Testing as described in **Attachment I** of this bulletin. These instructions are also included in the Tester Kit, and should be used with this bulletin to accurately diagnose the system.

Service Procedure

The basic procedure for handling service needs on the Nissan Integrated HomeLink® Transmitter system is as follows:

1. Customer contacts dealership (or dealership receives a Consumer Assistance Request).
2. Dealership reviews customer concern:
 - A. Verify correct transmitter programming (with customer).
 - B. Review diagnostics.
 - C. Verify (if known) that the home garage door system is compatible by contacting the HomeLink® Hotline.

NOTES:

- A copy of the Nissan Integrated HomeLink® “programming card” is included as **Attachment II**. This can be reviewed with the customer to verify proper programming. Additional programming cards can be ordered from Dymont Distribution Service by calling 440-572-0725 and requesting Dymont Part Number NHL-2.
 - Detailed programming instructions are also available at www.homelink.com.
 - Nissan Integrated HomeLink® LED Indicator Meanings are provided as **Attachment III**. Common Questions & Answers are also provided as **Attachment IV**.
3. If the customer has programmed the system correctly, but a problem still exists, the dealership should use the Nissan Integrated HomeLink® Tester Kit Essential Tool (Kent-Moore J-41540), to verify the system is transmitting a signal(s). (Also see step 6, page 3).
 4. If the Nissan Integrated HomeLink® unit fails prescribed testing, the unit should be replaced.

5. If the unit passes the prescribed tests and a problem still exists, then the HomeLink® Hotline (1-800-355-3515) should be contacted for assistance. The HomeLink® Hotline will provide technical support.

The Hotline, for example, can determine if the customer's hand-held transmitter is HomeLink® compatible.

6. If the customer's hand-held transmitter is non-compatible, HomeLink® Hotline personnel will research the garage door system and may make available a "Fix Kit" if necessary. The Nissan customer pays for the "Fix Kit" interface and applies it to their (home) garage door system.

Other Important Considerations

1. Pre-1982 Garage Door Systems

In 1982, Federal Safety Standards mandated that manufacturers of garage door openers equip their systems with the safety stop and reverse features if they did not already do so. Those systems that do not have these features cannot be enhanced with the "Fix Kit" in the event that they do not program to HomeLink®.

If these pre-1982 garage door openers are defective in any way, they cannot be serviced, and, in some states (New York, California, Minnesota, and Indiana) the openers must be totally disabled by the garage door opener service technician and the technician must notify the owner of the need to upgrade that system.

2. Fix Kit

The Fix Kit will, based on HomeLink® Hotline advice, allow most non-compatible garage door systems to work with the Nissan Integrated HomeLink® Transmitter. The Fix Kit is a **customer billable** item. *Fix Kits will not be supplied for pre-1982 garage door opening systems.*

3. Additional HomeLink® Compatible Products (details available at www.homelink.com)

- HomeLink® Lighting Package and other Lighting and Appliance Modules.
- Entry door locks.
- Estate/Community Gates.
- Security Systems.

NOTE: None of these kits, nor any similar kits are covered by any Nissan support program or warranty. The customer should refer any concerns/questions about the HomeLink® Home Lighting Kit to the HomeLink® Hotline directly. Questions about support for the other kits shown here or other such kits on the market should be directed to their respective suppliers.

Attachment I: INTEGRATED HOMELINK® TESTER OPERATING INSTRUCTIONS

NOTE: Read all instructions carefully before testing the vehicle HomeLink®. It is very important to follow all instructions in the proper sequence.

Terminology

- **HomeLink® Test Kit (Kent Moore P/N J41540):** Includes the HomeLink® Tester, Hand-Held Transmitter, and Power Supply
- **HomeLink® Tester:** The Tester with indicator lights 1, 2, 3, and Programmed
- **Hand Held Transmitter:** The transmitter included in the tester kit
- **Power Supply:** The 120VAC to 12VDC Power supply
- **Vehicle HomeLink®:** The permanent multi-button transmitter in the vehicle
- **Default Mode:** The operating mode of the Vehicle HomeLink® that contains factory installed default codes in memory
- **Normal Mode:** The operating mode of the Vehicle HomeLink® that does not contain any default codes in memory

NOTE: Before performing any tests, verify the customer's transmitter was manufactured after 1982. Garage door openers manufactured prior to 1982 may not be compatible with the HomeLink® system.

HomeLink® Functionality Test

1. While in the driver seat, plug the HomeLink® Tester into the vehicle's cigarette lighter using the cigarette lighter adapter supplied in the kit.
2. Verify that when first plugged in, all of the indicator lights on the HomeLink® Tester illuminate for approximately two seconds. If the power light is on and any of the other tester lights fail to illuminate, the HomeLink® Tester is faulty. (Call Tech-Mate at 1-800-662-2001 for instructions on unit repair or replacement).
3. Push any button on the Vehicle HomeLink® to verify that it is receiving power from the vehicle's battery. If the indicator light on the Vehicle HomeLink® does not activate, diagnose the cause of the power loss. (Refer to the appropriate Nissan service manual for a power supply diagram.)

4. Clear the Vehicle HomeLink® and place it in default mode by using the following procedure:

Hold the two outer buttons of the Vehicle HomeLink®. The red light on the Vehicle HomeLink® will be steady for about twenty seconds then will flash rapidly for another ten seconds. When the red light goes out, release the outer buttons of the Vehicle HomeLink®. The system is now placed in the default mode.

All customer transmitter codes have now been cleared from the system and will have to be input at the end of the diagnostic procedure.

5. Check each signal of the Vehicle HomeLink® by pressing all three buttons one at a time.
 - When Vehicle HomeLink® button 1 is pressed, the #1 red light on the tester should also light.
 - When Vehicle HomeLink® button 2 is pressed, the #2 red light on the tester should also light.
 - When Vehicle HomeLink® button 3 is pressed, the #3 red light on the tester should also light.

If any of the lights fail to light, the Vehicle HomeLink® needs to be replaced. After replacement, repeat the HomeLink® functionality test.

6. Verify that the hand-held transmitter operates correctly. This is performed by pointing the hand-held transmitter supplied in the HomeLink® Test Kit at the HomeLink® Tester. As the transmitter button is pushed, the green "Program" light on the tester should illuminate. If the light does not illuminate, make sure the batteries in the hand-held transmitter are good and retest.

HomeLink® Range Test

1. Position the HomeLink® Tester between 50 and 100 feet from the vehicle. Make sure the indicator lights on the tester are visible from the vehicle's driver seat. Plug the tester into a wall outlet using the power supply included in the HomeLink® Test Kit. Turn on the tester.
2. Take the hand-held transmitter and these instructions and return to the driver's seat.
3. Repeat step 5 from the HomeLink® Functionality Test.

HomeLink® Programming Test

1. Program any button on the Vehicle HomeLink® using the hand-held transmitter supplied with the tester by using the following procedure. (This procedure is the same as described on the Nissan Integrated HomeLink® Transmitter Quick Reference Card each customer received at vehicle delivery).
 - A. Select which of the three Vehicle HomeLink® channels you want to program.
 - B. Hold the end of the hand-held transmitter supplied with the HomeLink® Test Kit against the bottom surface of the Vehicle HomeLink® so that you can still see the red indicator light.
 - C. Press the desired button on the Vehicle HomeLink® until the red indicator light flashes slowly (this will take about 20 seconds). While still holding this button, press that hand-held transmitter button.
 - D. Hold down both buttons and continue to hold until the red indicator light on the Vehicle HomeLink® light starts to flash rapidly. This may take up to 60 seconds. Release both buttons. The rapid flash means that the Vehicle HomeLink® has been successfully programmed to match the hand-held transmitter.
2. Verify that the Vehicle HomeLink® has been properly programmed by pressing the button you just programmed. As the button is depressed, the green "Program" light should illuminate on the HomeLink® Tester.

NOTE: By verifying the programmability of one channel, we have verified that all three channels will program correctly.
3. The Vehicle HomeLink® is now in "normal" mode and the customer's transmitter code(s) can be programmed into the Vehicle HomeLink®. You will also notice that when you push the programmed button on the Vehicle HomeLink® the indicator light will steadily illuminate. This shows that it has been programmed. When the remaining buttons that have not been programmed are pressed, the red indicator light will slowly flash showing that these channels are clear.
4. If the Program light fails to illuminate, verify that the hand-held transmitter batteries are good. After battery replacement, repeat the programming process. If the Program light fails to illuminate after battery replacement, the Vehicle HomeLink® is faulty. (You can also test the hand-held transmitter by aiming it towards the HomeLink® Tester and pressing the button. If the "Program" light illuminates, the hand-held transmitter is good and the Vehicle HomeLink® should be replaced).

Trouble Diagnosis Tips


If a customer has installed a HomeLink® Lighting Kit in their home, it may be necessary to reprogram the customer's Vehicle HomeLink® for proper operation. In order for the HomeLink® Lighting Kit to function properly, the Vehicle HomeLink® must be placed and remain in "Default" mode. Following step #4 in the HomeLink® Functionality Test easily performs this. After the Vehicle HomeLink® is placed in default mode, simply program the customer's hand-held transmitter(s) as shown in step 1 of the HomeLink® Programming Test. The Vehicle HomeLink® is now ready to use.

If a customer has a transmitter manufactured prior to 1982, or if the customer's transmitter will not program properly after repeated attempts, they may have a transmitter that is not compatible with the HomeLink® Transmitter. A "Fix" kit may be available from HomeLink® to allow for proper compatibility, on post 1982 units.

HomeLink® Transmitter Troubleshooting Guide

- Make sure the batteries in the hand held transmitter are not dead. Replace them if necessary.
- Make sure you are holding both buttons for the duration of the programming without interruption.
- Rotate the hand held transmitter "end-over-end" and try again. For best results, place the end that is opposite the battery compartment against the HomeLink® Transmitter when programming.
- Press any button. Make sure that the LED begins to flash slowly. This indicates that the channel is cleared and ready to program. If the LED gives a solid light, clear the channel by pressing both outside buttons (#1 and #3) for 20 seconds, just until the light begin to flash slowly. (Step #1 in the instructions). Then proceed with the remainder of the programming process.
- If the original transmitter to which you are programming was made in Canada, it may be necessary to repress the button on the ORIGINAL transmitter every two seconds until the HomeLink® Transmitter is programmed. This is because many Canadian garage door opener transmitters stop transmitting a signal after 2 seconds of operation.
- If programming fails after repeated attempts, test the HomeLink® Transmitter using the HomeLink® Tester.

Attachment II: Customer HomeLink® Programming Card (visor type)



NISSAN INTEGRATED HOMELINK TRANSCEIVER

Warning: Garage doors, electric gates, entry doors, etc., will be activated during programming. To avoid injury, make sure that people and objects are clear of all doors or gates during programming. Your vehicle's engine should be turned off while programming the HomeLink Transceiver. Refer to your Owner's Manual for complete details.

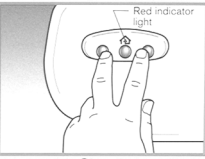
HOW TO PROGRAM YOUR NISSAN INTEGRATED HOMELINK TRANSCEIVER
To program your HomeLink Transceiver to operate a garage door, gate, or entry door opener, home or office lighting, you need to be at the same location as the device. **Note:** Garage door openers (manufactured after 1996) have "rolling code protection". To program a garage door opener equipped with "rolling code protection", you will need to use a ladder to get up to the garage door opener motor, to be able to access the "smart or learn" program button.

- To begin, press and hold the 2 outer HomeLink buttons (to clear the memory) until the indicator light blinks slowly (after 20 seconds). Release both buttons.
- Position the end of the hand-held transmitter 1-3 inches away from the HomeLink surface.
- Using both hands, simultaneously press and hold both the HomeLink button you want to program and the hand-held transmitter button. **DO NOT** release the buttons until step 4 has been completed.
- Hold down both buttons until the indicator light on the HomeLink flashes, changing from a "slow blink" to a "rapidly flashing blink". This could take up to 90- seconds. When the indicator light flashes rapidly, both buttons may be released. The rapidly flashing light indicates successful programming. To activate the garage door or other programmed device, press and hold the programmed HomeLink button - releasing when the device begins to activate.

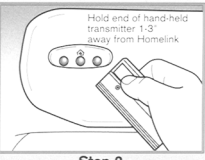
- If the indicator light on the HomeLink blinks rapidly for two seconds and then turns solid, HomeLink has picked up a "rolling code" garage door opener signal. You will need to proceed with the next steps to train the HomeLink to complete the programming which may require a ladder and another person for convenience.
- Press and release the "smart" or "learn" program button located on the garage door opener's motor to activate the "training mode". This button is usually located near the antenna wire that hangs down from the motor. If the wire originates from under a light lens, you will need to remove the lens to access the program button.
- Quickly, within 30 seconds of pressing and releasing the garage door opener program button, firmly press and release HomeLink button you've just programmed. Press and release the HomeLink button (up to three times) to complete the training.
- Your HomeLink button should now be programmed. (To program the remaining HomeLink buttons for additional door or gate openers, follow steps 2-8 only.

Note: Do not repeat step one unless you want to "clear" all previously programmed HomeLink buttons).

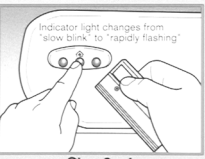
If you have any questions or are having difficulty programming your HomeLink buttons, please refer to the HomeLink web site at: www.homelink.com or call 1-800-NISSAN-1.



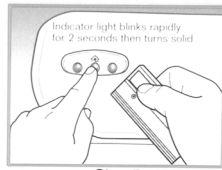
Step 1



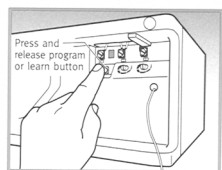
Step 2



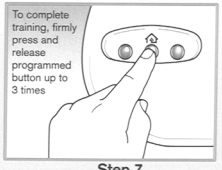
Step 3 - 4



Step 5




Step 6



Step 7

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Attachment II: Customer HomeLink® Programming Card (mirror type)



NISSAN INTEGRATED HOMELINK® TRANSCEIVER

(If so equipped)

Warning: Garage doors, electric gates, entry doors, etc., will be activated during programming. To avoid injury, make sure that people and objects are clear of all doors or gates during programming. Your vehicle's engine should be turned off while programming the HomeLink® Transceiver. Refer to your Owner's Manual for complete details.

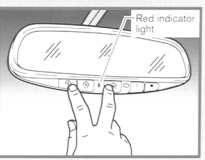
HOW TO PROGRAM YOUR NISSAN INTEGRATED HOMELINK® TRANSCEIVER
To program your HomeLink® Transceiver to operate a garage door, gate, or entry door opener, home or office lighting, you need to be at the same location as the device. **Note:** Garage door openers (manufactured after 1996) have "rolling code protection". To program a garage door opener equipped with "rolling code protection", you will need to use a ladder to get up to the garage door opener motor to be able to access the "smart or learn" program button.

- To begin, press and hold the 2 outer HomeLink® buttons (to clear the memory) until the indicator light blinks slowly (after 20 seconds). Release both buttons.
- Position the end of the hand-held transmitter 1-3 inches away from the HomeLink® surface.
- Using both hands, simultaneously press and hold both the HomeLink® button you want to program and the hand-held transmitter button. **DO NOT** release the buttons until step 4 has been completed.
- Hold down both buttons until the indicator light on the HomeLink® flashes, changing from a "slow blink" to a "rapidly flashing blink". This could take up to 90- seconds. When the indicator light flashes rapidly, both buttons may be released. The rapidly flashing light indicates successful programming. To activate the garage door or other programmed device, press and hold the programmed HomeLink® button - releasing when the device begins to activate.

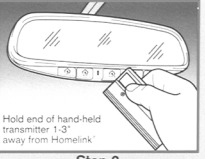
- If the indicator light on the HomeLink® blinks rapidly for two seconds and then turns solid, HomeLink® has picked up a "rolling code" garage door opener signal. You will need to proceed with the next steps to train the HomeLink® to complete the programming which may require a ladder and another person for convenience.
- Press and release the "smart" or "learn" program button located on the garage door opener's motor to activate the "training mode". This button is usually located near the antenna wire that hangs down from the motor. If the wire originates from under a light lens, you will need to remove the lens to access the program button.
- Quickly within 30 seconds of pressing and releasing the garage door opener program button, firmly press and release HomeLink® button you've just programmed. Press and release the HomeLink® button up to three times to complete the training.
- Your HomeLink® button should now be programmed. (To program the remaining HomeLink® buttons for additional door or gate openers, follow steps 2-8 only.

Note: Do not repeat step one unless you want to "clear" all previously programmed HomeLink® buttons).


If you have any questions or are having difficulty programming your HomeLink® buttons, please refer to the HomeLink® web site at: www.homelink.com or call 1-800-NISSAN-1.



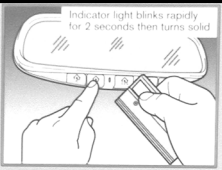
Step 1



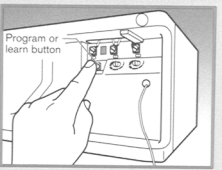
Step 2



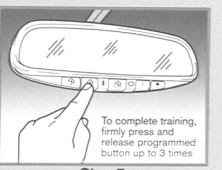
Step 3 - 4



Step 5



Step 6



Step 7

NHL-4

Attachment III: HomeLink® LED Codes

Constant Light	HomeLink® is in transmit mode (this can be either a learned signal or a default code.)	
Slow Blink	HomeLink® is in program mode.	
Fast Blink	One of two possibilities:	<ul style="list-style-type: none">• HomeLink® has just programmed• Codes have just been cleared
Double Blink	Indicates that hand-held transmitter has “timed out” and needs to be reactivated to complete the programming process. (Found in Canadian garage door openers.)	
No Light	One of two possibilities:	<ul style="list-style-type: none">• No power to HomeLink®• HomeLink® has just reloaded the default codes

LED Indicators

Training

Stored Code	A solid light indicates stored code	If you continue to hold button, in 20 seconds unit will proceed to program mode (indicated by slow blink).	Fast blink indicates successful program
Clear channel		If a slow blink appears, channel is clear and is in programming mode.	Fast blink indicates successful program
Clearing Codes	Hold down outside buttons, solid light will appear	Continue to hold buttons and in 20 seconds unit will proceed to fast blink. Release buttons.	
Reloading Default Codes	Hold down outside buttons, solid light will appear	Continue to hold buttons and in 20 seconds unit will proceed to fast blink. Continue to hold buttons.	Release buttons when light no longer appears.

Attachment IV: HomeLink® Common Q & A

Q: What is the Nissan Integrated HomeLink® Transmitter?

- A. It's an attractive, integrated replacement for up to three of your customer's current hand held transmitters including garage door openers, gates, and security systems. It can also be used with an aftermarket accessory lighting package that will allow the customer to activate the lights in their house from the comfort of their new Nissan.

Q: Who should program the system?

- A. Programming is easy. By merely pushing two buttons, the unit can be programmed in about a minute. Although programming is easy enough for the customers to do it themselves, we recommend that you program the customer's hand-held transmitters as part of the vehicle delivery process.

Q: Will the HomeLink® Transmitter program to every Garage Door Opener Transmitter?

- A. The HomeLink® Transmitter will program to most transmitters, including Stanley, Chamberlain, Genie, and most other brands. There are a few exceptions (an estimated 2-3%) when the transmitter does not operate within the legally allowed frequency range for Garage Door Opener transmitters (286 MHz - 399 MHz). These are mostly very old openers.

Q: What should be done if the customer's unit doesn't program?

- A. Reference the troubleshooting section of Attachment I to this bulletin. If the unit still doesn't program after several attempts, help is available from the HomeLink® hotline at 1-800-355-3515.

Q: Once the customer has a HomeLink® Transmitter, do they still need to keep their original hand-held transmitter?

- A. Yes. Although they no longer need to carry the old transmitter in their car, they should still keep the transmitter. When they sell or trade in their vehicle, they will need the original transmitter to re-program their new HomeLink® transmitter. (If the customer has misplaced their hand-held transmitter, they can usually purchase additional hand-held transmitters from the manufacturer of their Garage Door Opener).

Q: How can the customer turn on home lights?

- A. In order to activate their home lights, the customer will need an accessory HomeLink® Lighting package. The package is specifically designed to work with the HomeLink® Transmitter and is easily installed with no wiring. The package is available directly from HomeLink® (1-800-355-3515). Special dealer programs are also available.