



SERVICE BULLETIN

Classification: EL03-037	Reference: NTB04-119	Date: October 5, 2004
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NISSAN SATELLITE RADIO DIAGNOSTIC INFORMATION

- APPLIED VEHICLES:** 2003 Murano (Z50) – equipped with XM[®] or SIRIUS[™] Satellite Radio Receiver and Service
- 2003 Pathfinder (R50) – equipped with XM[®] or SIRIUS[™] Satellite Radio Receiver and Service
- All 2004 Nissan Vehicles and later - equipped with XM[®] or SIRIUS[™] Satellite Radio Receiver and Service

IF YOU CONFIRM:

A satellite (SAT) radio related incident has occurred on a Nissan vehicle factory equipped with SAT radio.

ACTIONS:

First, refer to Chart A (page 2) for a list of Nissan vehicles that are pre-wired for SAT radio.

Second, refer to the Service Information section (page 3) in this bulletin.

- The Audio unit, SAT receiver, and Satellite Service may be OK.

Third, refer to the Service Procedure section (page 6) of this bulletin.

- The Service Procedure section contains a Diagnostic Flowchart. It will provide Symptoms and Possible Causes to help you judge the SAT radio condition.

IMPORTANT: The purpose of **ACTIONS** (above) is to give you a quick idea of the work you will be performing. You **MUST** closely follow the entire Service Procedure (starting on page 6) as it contains information that is essential to successfully completing this procedure.

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.

Chart A

(List of Nissan Vehicles Pre-Wired for SAT Radio)

Model	Year	Pre-Wire Start	Accessory Bulletin	Notes
Sentra	2004-	From VIN #730963	NAB/03-036	SAT radio Kit not available before VIN #730963
Altima	2005-	All with Bose 6-CD	NAB/04-011	
Maxima	2004-	From VIN #835089	NAB/03-030	SAT radio kit not available before VIN #835089
Quest	2004-	From VIN #324533	NAB/03-047	SAT radio kit not available before VIN #324533
Murano	2004-	All		
350Z	2004-	All with Bose 6-CD-cassette	NAB/03-039	
Titan	2004-	All with 6-CD	NAB/03-055	
Frontier	2005-	No information yet		
Armada	2004-	All with 6-CD and Bose 6-CD	NAB/03-046	
Xterra	2005-	No information yet.		

NOTE: 2003 and 2004 Pathfinder pre-wiring for satellite radio is port install only. No kits are available.

SERVICE INFORMATION

Vehicles with the hardware to receive SAT Radio can be identified by a special antenna (see Figure 1).



Figure 1

In order for SAT radio to work, the vehicle **must have all of the following:**

- SAT antenna (see Figure 1) and “N-Buss” harness (hidden in the vehicle)
- Either a XM® or SIRIUS™ SAT receiver (hidden in the vehicle)*
- A **current, active and registered** subscription to the appropriate* SAT radio provider

*IMPORTANT NOTES ABOUT SAT:

- The type of SAT receiver the vehicle has, XM® or SIRIUS™, determines which service is available for subscription.
- A subscription registers to the SAT receiver, not to the vehicle’s in-dash Audio (head) unit, harness, etc.
- Each SAT receiver has an Electronic Serial Number (ESN) used to register the subscription.
- For SAT radio, the Audio (head) unit is only a controller/sound amplifier. *SAT radio reception occurs in and by the SAT receiver.*
- The quality of SAT radio reception, just like regular radio, can still be affected by environmental factors like buildings, tunnels, geographic location, etc. (For more information on SAT reception see Nissan TechTalk issue Sept./Oct. 2002)
- Depending on the year and model of the vehicle, the SAT receiver can be located either in the rear of the vehicle or under the dashboard.

PARTS INFORMATION

Model Year →		2003	2004	04,05	2005	04,05	2004	2004	2004	2004
Model →		Pathfinder	350Z	Maxima	Altima	Sentra	Murano	Titan	Armada	Quest
	Description	P/N								
Service Parts										
	XM® - Receiver-Reman*	28051-CR900RX	x	x	x	x	x	x	x	x
	SIRIUS™ Receiver-Reman*	28051-CR910RX	x	x	x	x	x	x	x	x
	Tuner Adhesive Tape Kit	B8250-CR050	x	x	x	x	x	x	x	x
	XM® 35° LPA Kit	999U9-VQ018							x	x
	SIRIUS™ 35° LPA Kit	999U9-VQD19							x	x
	LPA Adhesive Tape Kit	999U9-VQ010	x	x	x	x	x	x		
	HPA Adhesive Tape Kit	B8250-CR001	x	x	x	x	x	x	x	x
	Titan Glass Mount Antenna	999U9-WQ000						x		

*Only remanufactured parts will be covered under warranty. Noncompliance may cause return or rejection of claim.

- XM® and SIRIUS™ Receivers are ordered through Clarion's Direct Exchange Order Department (just like standard Clarion audio units).
- XM® and SIRIUS™ Antennas **cannot** be ordered through Clarion's Direct Exchange Order Department. They have to be ordered through a Nissan PDC, just like any other Nissan part.
- Make sure to order the appropriate antenna splitter kit when updating to the LPA Service Kit.

CLAIMS INFORMATION

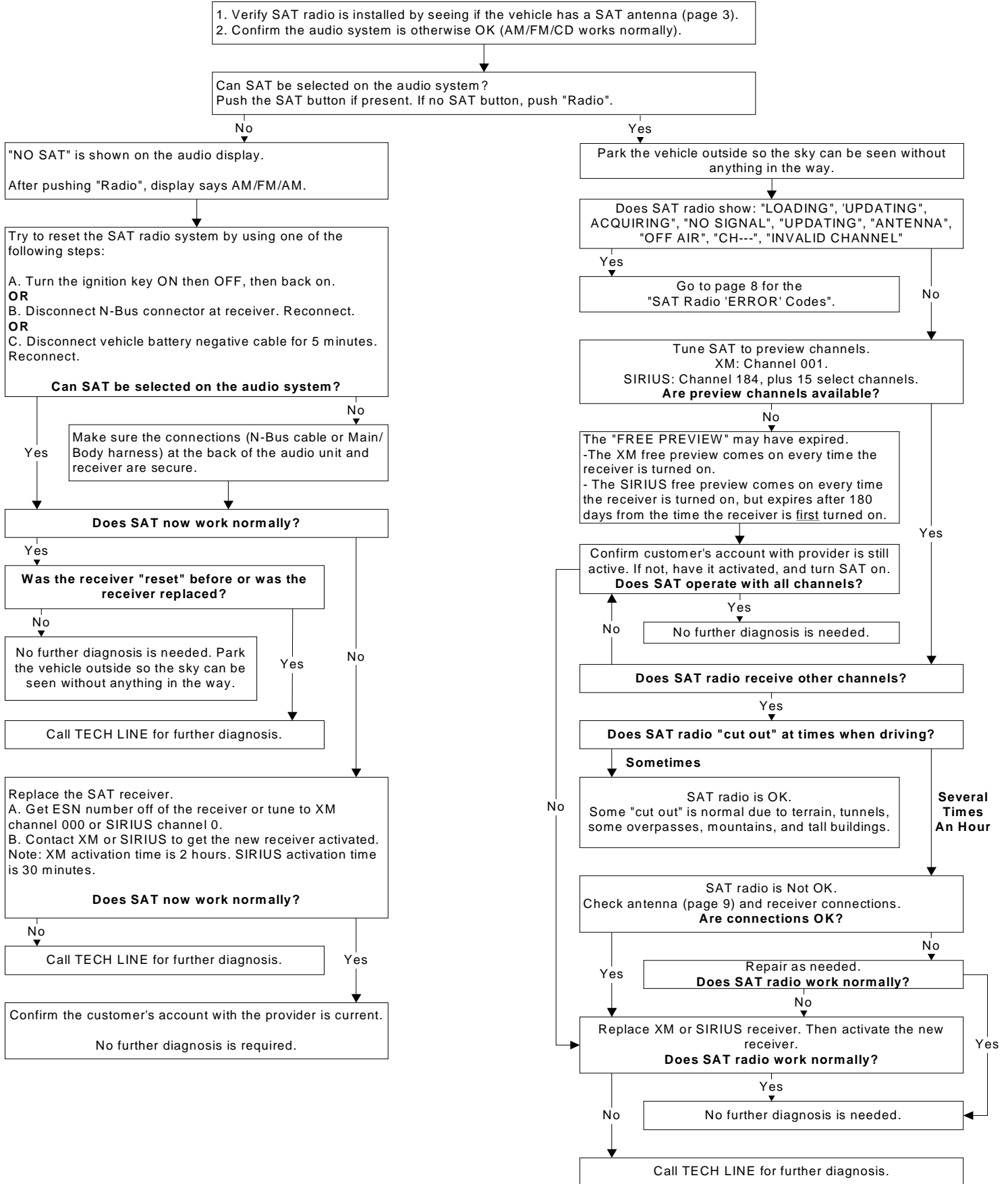
Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Audio Unit and Return To Manufacturer (1)	(1)	(1)			(1)
RPL Receiver Unit and Return to Manufacturer – cannot be used with YE9999	(2)	YE12RA	(4)	(5)	0.2 hrs (A33) 0.2 hrs (A34) 1.0 hrs (TA60) 0.9 hrs (A60) 0.1 hrs (B15) 0.5 hrs (L31) 0.2 hrs (V42) 0.1 hrs (Z33) 0.8 hrs (Z50)
RPL Antenna Assy	(3)	YE14AA	(4)	(5)	1.2 hrs (A33) 1.1 hrs (A34) 0.7 hrs (TA60) 0.8 hrs (A60) 1.0 hrs (B15) 1.6 hrs (L31) 0.7 hrs (V42) 0.7 hrs (Z33) 1.0 hrs (Z50)
Combination: Antenna Resistance Check		YE141A			0.1 hrs (A33) 0.1 hrs (A34) 0.3 hrs (TA60) 0.1 hrs (A60) 0.1 hrs (B15) 0.1 hrs (L31) 0.2 hrs (V42) 0.1 hrs (Z33) 0.4 hrs (Z50)
Satellite Radio System Diagnosis	(6)	YE16AA			0.6 hr (A33) 0.3 hrs (A34) 0.3 hrs (TA60) 0.4 hrs (A60) 0.3 hrs (B15) 0.3 hrs (L31) 0.6 hrs (V42) 0.4 hrs (Z33) 0.3 hrs (Z50)
Satellite Radio System – Straight Time		YE9999			S/T

1. Reference Section “RN” and use Op Code **RN11RA** for the “Return to Manufacturer” of the satellite-radio-enabled audio head unit.
2. Reference the Parts Information table and use the indicated receiver unit P/N as the PFP.
3. Reference the Parts Information table and use the indicated antenna assy P/N as the PFP.
4. As indicated by customer complaint.
5. As indicated by technician diagnosis.
6. Cannot be claimed alone, may only be used in conjunction with component-replacement Op Code.

SERVICE PROCEDURE:

SAT RADIO DIAGNOSTIC FLOW CHART



TUNING TO PREVIEW CHANNEL

1. Determine which Satellite Radio receiver is installed in the vehicle (XM® or SIRIUS™) as follows:
 - a. Turn the audio unit "ON".
 - b. Select SAT function (varies from model to model, consult the Owner's Manual).
 - c. Try to tune in the Preview Channel for the receiver.
 - The Preview Channel for XM® is **Channel 001**. When you turn to Channel 001, the audio display will show "**XM CH - 001**" for a couple of seconds, then it will show "**XM Preview**" (see Figure 2).
 - The Preview Channel for SIRIUS™ is **Channel 184**. When you turn to Channel 184, the audio display will show "**SR CH - 184**".

Special Note For SIRIUS™ Preview Channels:

A **SIRIUS™** receiver will receive the Preview Channel 184 and the 15 select channels for 180 days from the moment the receiver is first turned on. After 180 days the preview channels, will not be available.

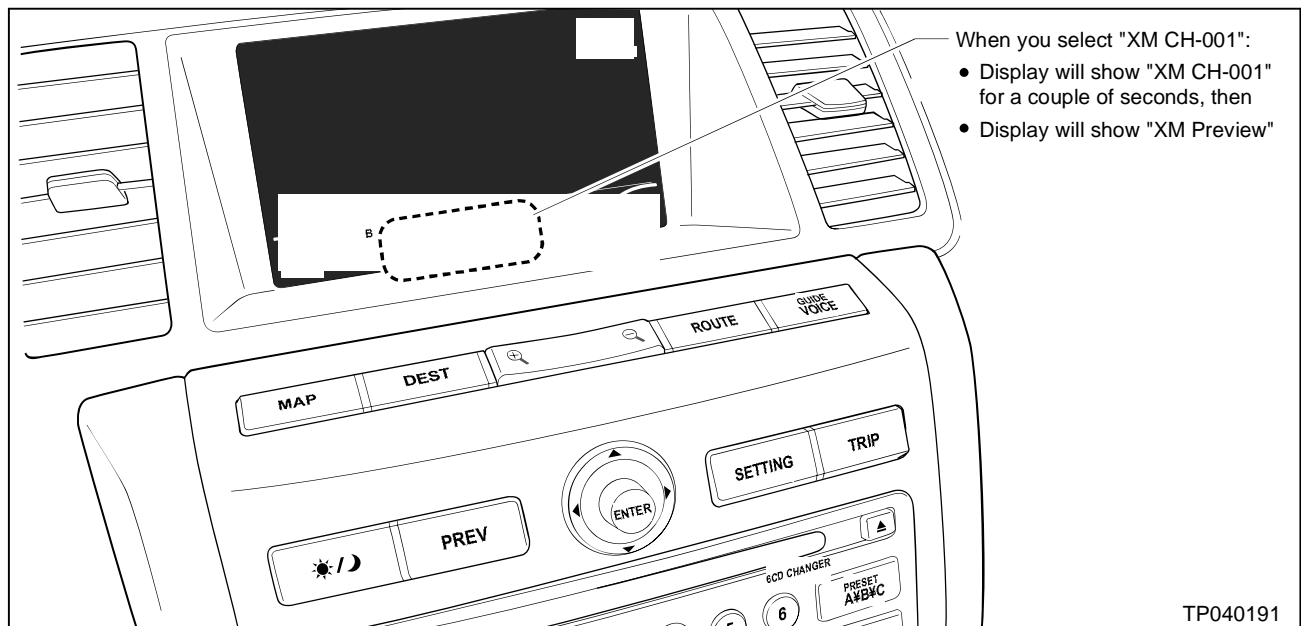


Figure 2

2. Return to the **SAT RADIO DIAGNOSTIC FLOWCHART** on Page 6.

SAT RADIO "ERROR" CODES

RADIO DISPLAY		CAUSE	WHEN CAN IT OCCUR	ACTION
XM	SIRIUS			
NO SAT	NO SAT	No signal between receiver and audio unit	<ul style="list-style-type: none"> Any time after SAT is selected. 	Follow Diagnostic Flow Chart for "No SAT"
NO SIGNAL	NO SIGNAL	No signal / Signal to receiver is blocked	When driving: <ul style="list-style-type: none"> In a tunnel. In an underground parking garage or in a parking lot next to a building. Under a parking garage, freeway underpass or carport. Close to buildings, mountains and cliffs. 	Move vehicle / receiver to open area and recheck. OR Check antenna (page 9) and receiver.
LOADING	ACQUIRING	Waiting for reception confirmation	<ul style="list-style-type: none"> Before and after a NO SIGNAL state (see above). During normal system "initialization" (when system is first turned on). When there is a weak satellite signal or when the channel is changed. 	None needed, normal function.
			<ul style="list-style-type: none"> Stuck on "loading". 	Stuck on "loading" (XM): Check antenna (page 9). If OK, replace the receiver.
UPDATING	CALL 888-539-SIRI	Service not activated / no active subscription	<ul style="list-style-type: none"> When receiver has never been activated. When trying to select a preview channel after de-activation. When receiver is de-activated while listening to a channel. 	Customer needs to activate a subscription
ANTENNA	ANTENNA	Faulty antenna connection	<ul style="list-style-type: none"> Antenna is not connected to receiver (satellite or terrestrial or both). Antenna open or shorted. 	Check antenna (page 9)
OFF AIR	<i>N/A (not applicable)</i>	Out of service hour	<ul style="list-style-type: none"> Broadcasting of selected channel has completed its "on the air" time. When tuned to specific channels which broadcast during the day only (nighttime only specific station). 	Tune to channel during normal broadcast hours
CH--	INVALID CHANNEL	Invalid channel	<ul style="list-style-type: none"> A channel doesn't exist at the selected channel number. When selecting a channel which was set up previously and is now no longer in use. Occurs after turning receiver power "ON" for the first time, before a unit has been activated and the default channel selected. After first time power "ON" if receiver is not in a good receiving location. After "ACC ON", the radio tunes to the last channel but there is no station. 	None needed, normal function.

CHECK ANTENNA

1. Check antenna lead for cuts or wear.
2. Check antenna leads for proper installation (see Figure 3).
3. Perform electrical check of antenna, looking for shorts or opens:

See Figure 3 for a view of the GREEN (terrestrial) and YELLOW (satellite) connectors plugged into an installed satellite receiver.

- a. Unplug both antenna leads (see Figure 4) from the receiver. Check the connector for signs of water entry and/or corrosion.

- b. Check each lead, one at a time (see Figure 5).

- The connector should be clean and dry inside, with no visible corrosion.
- There **should be continuity** from the center conductor to the shield.
- The resistance value between the center conductor and the shield should match a “known good” cable or a new cable.
- Write down your findings on the repair order for future reference.

- c. Return to the **SAT RADIO DIAGNOSTIC FLOWCHART** on page 6.

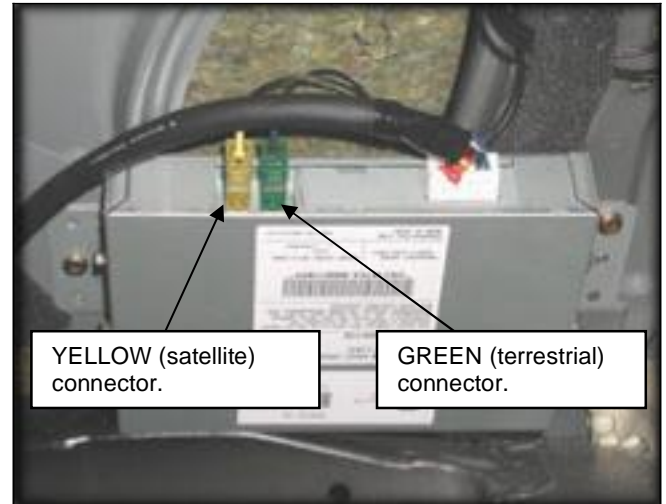


Figure 3

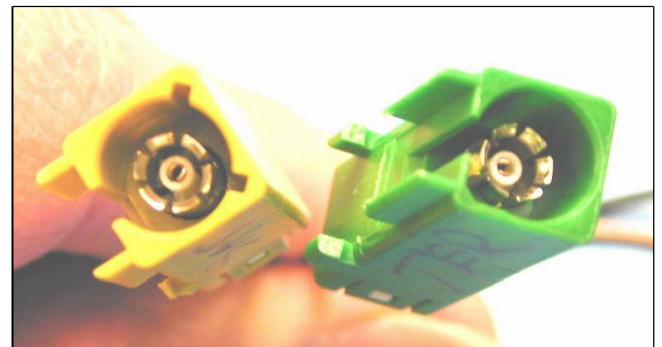


Figure 4

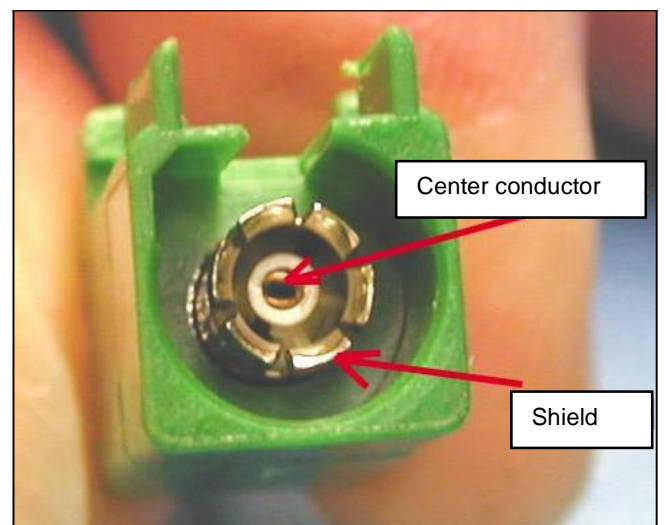


Figure 5

REPLACE THE SAT ANTENNA

NOTE: Installation instructions for all vehicles are available at www.NNAnet.com

A. Remove the existing antenna as follows:

- 1) Disconnect the cable connector from the receiver.

DO NOT CUT THE ANTENNA CABLE!

- 2) Pull up the antenna's tail. Working from the tail to the front of the vehicle, slide a nylon cord or equivalent (example: dental floss, 6 lb. fishing line) between the antenna and the vehicle's roof (see Figure 6).
- 3) Cut through the adhesive pad between the antenna module and vehicle's roof, using a side-to-side cutting motion (see Figure 6).

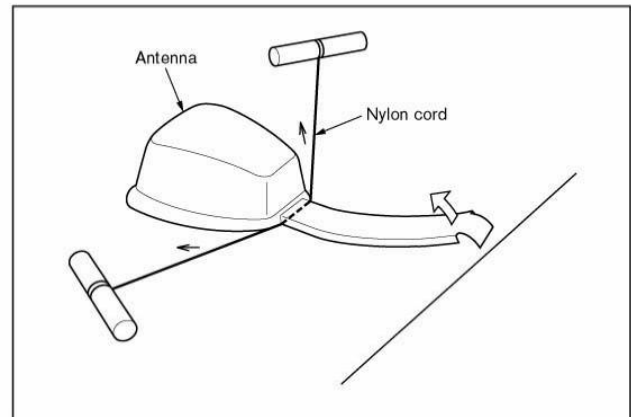


Figure 6

NOTE: There are magnets under the base of the antenna. You may not be able to slide the cord all the way through to the front.

If needed, **Carefully** apply heat with a heat gun to the antenna to soften the existing adhesive-backed tape. Keep the heat gun's nozzle **at least 12 inches away** from the antenna.

CAUTION: Too much heat will damage the vehicle's paint or surrounding parts (rear window molding, window finishers, etc.).

Only an experienced paint technician, who is familiar with paint temperature limitations, should use a heat gun.

Important Points

- **DO NOT** overheat the antenna or roof. Heat the area just enough to soften the adhesive tape for easy removal.
- The heat gun "wattage" should not exceed 1400 watts.
- Do not hold the heat gun nozzle closer than 12 inches from the roof surface. Also, do not hold the heat gun in one position. Keep the nozzle moving from side to side to evenly heat the tape.

- 4) Slowly pull up on the antenna and remove it.

DO NOT CUT THE ANTENNA CABLE!

B. Use a 50/50 alcohol/water solution to clean the area of the roof where the antenna was located of any small pieces of the tape or adhesive.

C. Prepare the new antenna for mounting using the adhesive tape included in the antenna kit. You will also need to use clear butyl gum, and black tape for installation.

- D. Install the replacement antenna. Be sure to handle the antenna wires carefully. Do not bend, kink or push on the wires. Doing so may damage the wires.
- E. Re-connect the cable connector to the receiver.
- F. Turn the ignition key to “OFF” position, wait for 10 seconds, then turn the ignition key to “ACC” position. Wait for the receiver to restart. If the original symptom still exists, **SAT RADIO DIAGNOSTIC FLOWCHART** on Page 6.

GETTING THE SAT RADIO ESN & CONTACTING THE PROVIDER

1. Determine which Satellite Radio receiver is installed in the vehicle (XM® or SIRIUS™):
 - a. Turn the audio unit “ON”.
 - b. Push the SAT button.
 - c. Tune in the Preview Channel for the receiver.
 - The Preview Channel for XM® is **Channel 001**. A **XM®** receiver will display “**XM1 CH - 001**” (see **Figure 2**) on the Audio unit face.
 - The Preview Channel for SIRIUS™ is **Channel 184**. A **SIRIUS™** receiver will display “**SR1 CH - 184**” on the Audio unit face.
2. Now, tune to Channel 0.
 - a. The Audio unit face will first display “RADIO ID”.
 - b. Then, the Audio unit face will display a letter-number (alpha-numeric) code. XM® has an eight character letter-number code, while SIRIUS™ has a twelve character letter-number code. This code is the receiver ESN (electronic serial number).
 - c. Write down the code in the space provided below.

 _ _ _ _ _ _ _ _ _ _
3. Call the applicable service provider.
 - The number for **XM®** is: 1 (800) 852-9696.
 - The number for **SIRIUS™** is: 1 (888) 539-SIRI.
 - a. Identify yourself as a repair station, working with a customer’s receiver.
 - b. Ask them to verify if a current subscription is applied to this receiver.
 - c. Give them the ESN (RADIO ID) you wrote down in step 2c, above.
 - d. While you have them on the phone, return to the **SAT RADIO DIAGNOSTIC FLOWCHART** on page 6. The provider’s answer to the subscription question (3b) will determine the next step.

REPLACEMENT OF THE SAT RECEIVER

The location of the satellite receiver varies from vehicle to vehicle. Some vehicles have the receiver located in the rear. Other vehicles have the receiver located under the dashboard. Figure 7 shows a rear-mounted receiver.

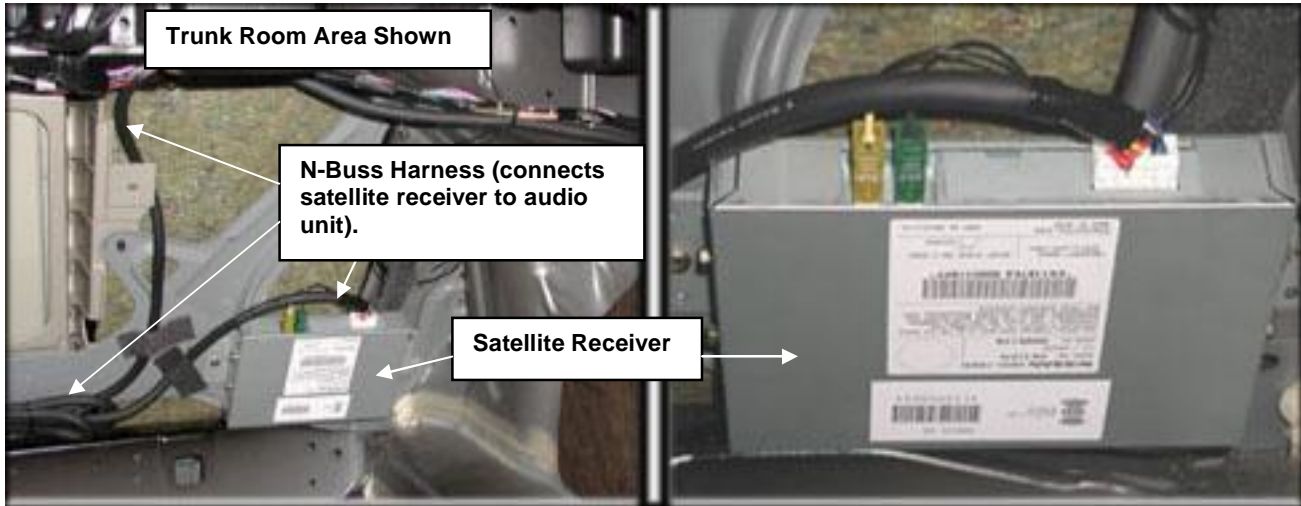


Figure 7

When replacing a receiver, note that vehicle-specific instructions are provided at www.NNAnet.com.

Special Note – SIRIUS™ Receivers ONLY:

A remanufactured **SIRIUS™** receiver may not receive the Preview Channel 184 and the 15 select channels. Reason: The remanufactured receiver was in use for more than 180 days.

To receive the preview channels (or any other specific channels) the remanufactured receiver must be re-activated. Contact **SIRIUS™** to do this.