

## **GENUINE PARTS**

## SATELLITE RADIO INSTALLATION INSTRUCTIONS

1. DESCRIPTION: SATELLITE RADIO SYSTEM
2. PART NUMBERS: XM tuner kit 999U9-NV003

 XM antenna kit
 999U9-VR000

 Sirius tuner kit
 999U9-NV004

 Sirius antenna kit
 999U9-VR002

 Tuner Bracket kit
 999U9-VR001

 \* SAT harness for iPod systems
 999U7-VS001

3. MODEL APPLICATION: FRONTIER (2005) & XTERRA (2005)

### 4. TUNER KIT CONTENTS:

No.	Parts	Qty	Parts View				
1	Tuner	1					
2	Black Tape	2					
3	Velcro Tape (hook)	2					
4	Velcro Tape (loop)	2					
5	Double-Stick Foam Pad	1					
6	L Bracket	2					
7	M4 Machine Screw	4					
8	5mm Tapping Screw	4					
9	Ground Cable	1					
10	6mm Tapping Screw	1					
11	Sponge Tape	14	0, 0, 0 Q				
12	Edge Protector	1					
	Clear Tape	4					
	Corrugated Tube	1					
		4	(6) (7)				
16	Butyl Gum	2					
17	Cable Clamp	4	₩ ¥				

# **⚠** CAUTION

- This can be a difficult and time consuming installation that may require the skill of the master technician who is familiar with electronics installation. Contact your regional DTS for additional information on installation support.
- Tuner unit, antenna, and antenna splitter must be same brand, XM or Sirius.
- This is a universal installation kit so all parts may not be used.
- Re-installation of satellite radio antenna to be performed by an authorized dealer only.
- XM antenna templates should be printed at a 1:1 ratio. Templates should be checked after printing using the given dimensions to ensure accuracy.
- Cut off the excess material of the cable ties as flush with the head as possible. Face head of cable tie away from sheet metal and other objects.
- In the event the satellite radio antenna or antenna splitter (Sirius only) needs to be replaced, or re-installed order the appropriate Satellite Antenna Kit.

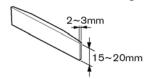
Sirius antenna kit 999U9-VR008-S1 Sirius splitter kit 999U9-VQ005 XM complete antenna kit 999U9-VR007-S1 XM outer antenna only 999U9-VR006-S1

\* NOTE: Only necessary for vehicles with iPod Gateway Module installed. Refer to the vehicle specific iPod Installation Instructions on ASIST.NET for further information.

4.17.06 **284-9798-25-G4** 

### 5. TOOL & MATERIAL REQUIRED:

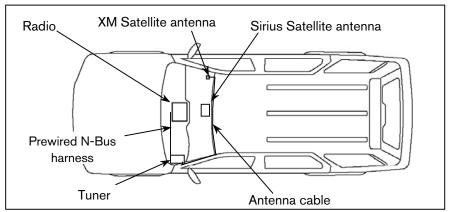
- 1. Phillips screwdriver (#2)
- 2. Clip remover
- 3. 50/50-alcohol/water solution
- 4. Electrical tape
- 5. Masking tape
  - PGFstick for antenna cable routing



- 3/8" driver w/ 7mm, 10mm normal & 13mm deep socket
- 7. PGF stick
- 8. Plastic Pry Bar (P/N J-46534 or equivalent)



### 6. INSTALLATION OUTLINE:



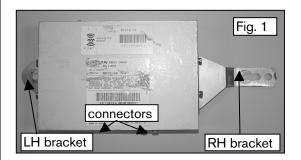
### 7. VEHICLE PREPARATION:

- (1) Apply parking brake.
- (2) Record the customer radio presets.

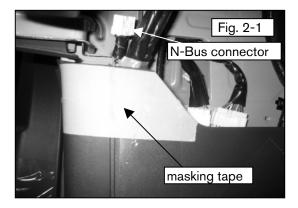
	1	2	3	4	5	6	7		
AM									
AM2									
FM1									
FM2 FM3									
FM3									
ESN number located on tuner box:									

- (3) Make sure that the shift lever is engaged in the "P" position.
- (4) If equipped, move the adjustable accelerator/brake pedals to the front most position.
- (5) Turn the ignition switch OFF.
- (6) Open engine hood.
- (7) Disconnect the battery negative terminal to prevent short circuits during installation.

## 8. TUNER INSTALLATION:



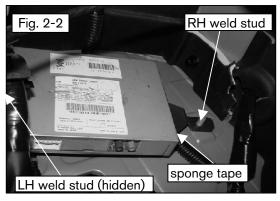
(1) Attach two (2) brackets to tuner with four (4) M4 screws. Fig. 1



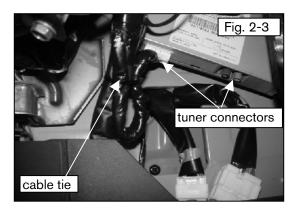
(2) Apply masking tape to plastic panel under tuner mounting location. Fig. 2-1



Care should be taken to ensure other wiring in area is undisturbed.



(3) Mount tuner assembly in location above driver side kick panel. Install assembly over the front weld stud first (RH), then slide tuner (slotted hole will allow moving the tuner around) over rear weld stud (LH). Use a 13mm deep socket wrench to tighten both brackets down with M8 nuts (12.7Nm). Remove tear tape holding prewired N-Bus. Connect the N-Bus to the tuner. Fig. 2-1 & 2-2

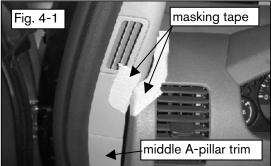


(4) Use one (1) cable tie to secure the excess N-Bus harness to the main harness nearby. Fig. 2-3

#### 9. ANTENNA INSTALLATION:









- (1) Detach driver side A-pillar assist grip using #2 phillips screwdriver. Fig. 3-1
- (2) Detach weather stripping from the driver side Apillar using a PGF stick. Fig. 3-2

## **A** CAUTION

Do not tear the weather strip.

- (3) Apply masking tape to A-pillar and front of dash to protect them when removing A-pillar. Remove middle A-pillar trim. Remove the driver side Apillar finisher by releasing the clips. Fig 4-1 & 4-2
- (4) Clean windshield with 50/50 alcohol/water solution on the upper corner passenger side (inside/outside) where both parts of the antenna are to be mounted (for XM), and on the inside center mounting location above rearview mirror (right of center for E/C rear view mirror) where the antenna is to be mounted (for Sirius).

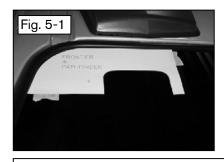
# **A** CAUTION

In case of ambient temperatures below 20 degrees C (68 degrees F), it is required to warm the mounting tape and mounting surface with a heater to a minimum of 20 degrees C (68 degrees F).

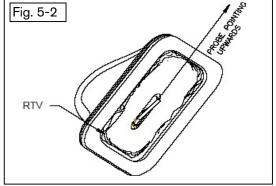
# **↑** CAUTION

Do not touch or contaminate the cleaned glass or adhesive tape on the antenna to prevent reduction of adhesive strength.

## 9-1. XM ANTENNA INSTALLATION (Skip to Section 9-2 for SIRIUS Installations):



(5) Secure outer antenna template to windshield with masking tape. Apply a 1/8" diameter bead of RTV to inside of adhesive tape. Fig. 5-1 & 5-2



(6) With the probe pointing upwards place outer antenna housing squarely, but lightly on windshield. DO NOT apply one side first and then roll the rest down. Push corners down first, then work to the sides. Apply equal pressure downward along all portions of the housing for at least 20 seconds. Inspect for 100% wet-out along the outside of the tape from inside of vehicle with flashlight. Fig. 6



(7) Line up inner template with outer template and outer antenna. Secure inner antenna template to windshield with masking tape. Fig 7



(8) Unwrap the antenna cable. Place inner antenna housing squarely into position. DO NOT apply one side first and then roll the rest down. Apply equal pressure along all portions of the housing for at least 20 seconds. If inner template is interfering with the installation it can be removed, and the outer antenna housing can be used as a visual alignment tool. Fig. 8







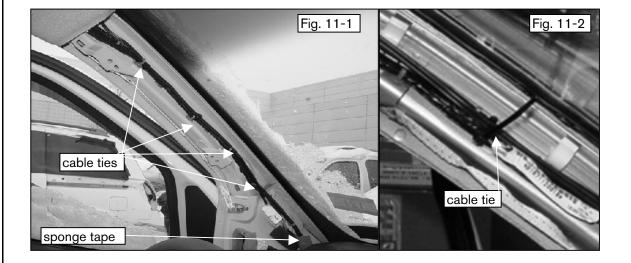
## **A** CAUTION

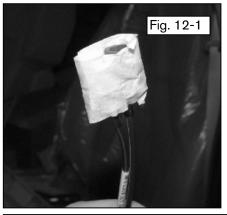
Keep vehicle inside at least one hour after applying adhesive tape. Avoid works imposing pressure on the adhered area including car wash within 48 hours.

- (9) Use a plastic pry tool to push the antenna cable into the headliner. While feeding wire into headliner wrap six (6) pieces of sponge tape lengthwise and evenly spaced across the length of wire being fed into the headliner. Ensure that two (2) pieces of sponge tape is placed on the antenna cable in the area of the dome lamp housing. Fig 9 & 10
- (10) Route antenna cable from the headliner down the driver side A-pillar.
- (11) Cable tie the antenna cable in four (4) locations to the existing wiring near the harness clip points. Place one (1) piece of sponge tape over the antenna cable and existing wiring near the bottom of the A-pillar. Fig. 11-1 & 11-2

# **↑** CAUTION

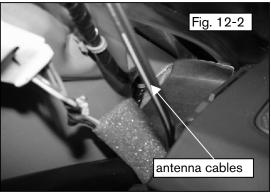
Do not secure the antenna harness to the windshield washer fluid supply line or the sunroof drain line.





(12) Temporarily tape the antenna connectors together to assist in routing. Route antenna cable down through left side of dash towards tuner location. Fig. 12-1 & 12-2

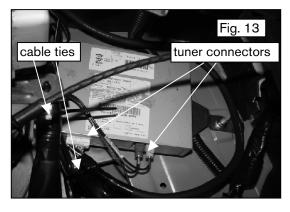
(13) Leaving enough length for the tuner connection neatly bundle excess antenna cable.



## **A** CAUTION

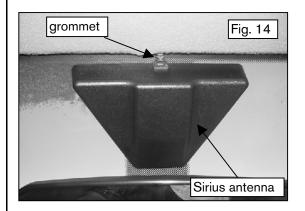
Do not kink antenna cable.

(14) Secure the bundled antenna cable to the main harness with two (2) cable ties. Fig 13

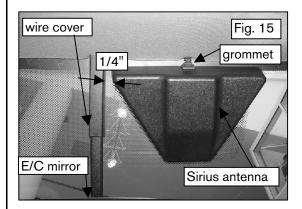


(15) Connect the antenna cable connector to the tuner. Fig 13

#### 9-2. SIRIUS ANTENNA INSTALLATION:



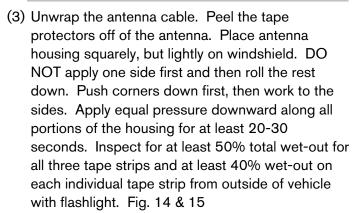
(1) The Sirius antenna will be installed as flush as possible with the headliner. If there is grommet on the antenna tuck it under headliner as much as possible. Center the antenna above the rearview mirror. For installations of Sirius antenna in a vehicle with an E/C (Electrochromatic) mirror the antenna will be installed 1/4" to the RH side of the wire cover. Fig. 14 & 15

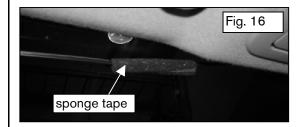


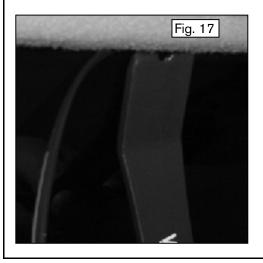
(2) Apply adhesive promoter to inner windshield where antenna is to be mounted. Let the area dry until the promoter is completely evaporated.



Handling of adhesive promoter should be done carefully with gloves and safety glasses.

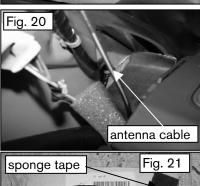




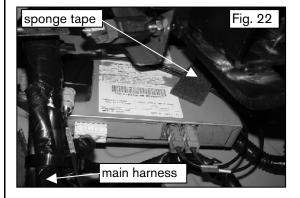


- (4) Use a plastic pry bar to push the antenna cable into the headliner towards the LH A-pillar. While feeding wire into headliner wrap three (3) pieces of sponge tape lengthwise and evenly spaced across the length of wire being fed into the headliner. Fig. 16 & 17
- (5) Route the antenna cable from the headliner down the passenger side A-pillar.









(6) Cable tie the antenna cable in four (4) locations to the existing wiring near the harness clip points. Place one (1) piece of sponge tape over the antenna cable and existing wiring near the bottom of the A-pillar. Fig. 18 & 19

## **↑** CAUTION

Do not secure the antenna harness to the windshield washer fluid supply line or the sunroof drain line.

- (7) Route antenna cable down through left side of dash towards tuner location. Fig. 20
- (8) With tuner still installed clean tuner chassis with 50/50 water/alcohol solution where splitter is to be mounted. Fig 21

## NOTE

Ensure that the tuner surface is thoroughly cleaned before proceeding.

- (9) Connect splitter terminals to corresponding tuner terminals. Peel tape protector from splitter an attach to tuner. Secure splitter wire slack with one
   (1) piece of sponge tape. Fig. 21 & 22
- (10) Route antenna cable to splitter location. Connect antenna cable to splitter terminal. Secure excess antenna cable to main harness with two (2) cable ties. Fig. 22

### 10. OPERATION CHECK:

- (1) Connect the battery negative terminal.
- (2) Turn vehicle ignition switch to the "ACC" position.
- (3) If equipped, unplug the customers iPod to switch to SAT mode.
- (4) Turn radio on then select satellite radio mode. Acquiring (Sirius) or Loading (XM) will display for a while. If not, move vehicle to outside with a clear view of the sky and try again.
- (5) Tune to preview channel (XM: channel "1" / Sirius: channel "184") to make sure receiving preview channel correctly.
- (6) Sirius: if audio is heard on channel 184 follow the instructions in step 6a. If audio is not heard on channel 184 follow the instructions in step 6b.
- (6a) Remain on channel 184 and do not push any radio buttons. After 5 minutes the channel up/down button can be pushed to check for service. If audio can be heard on channel 1 then activation was successful.
- (6b) Change to channel 0 and do not push any radio buttons for 10 minutes. After 10 minutes press the up channel button to channel 1. If audio can be heard on channel 1 then activation was successful.
- (7) Plug in customers iPod to perform further audio operation checks.
- (8) Confirm proper audio operation. (AM / FM / TAPE / CD / iPOD).

#### 11. REINSTALLATION OF REMOVED PARTS:

- (1) Re-install all removed vehicle parts referring to the service manual for the vehicle.
- (2) Clean interior of vehicle.
- (3) Remove masking tape from plastic components.

### 12. FINAL INSPECTION:

- (1) Inspect the vehicle interior and exterior for damage.
- (2) Confirm proper operation of vehicle systems.
- (3) Reset radio presets to the recorded settings.
- (4) If equipped reset the sunroof per service manual requirement.

