

NAV-TV

INTERFACING THE FUTURE

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NNG-Ford V1

Navigation interface for FORD vehicles equipped with 8.4" MyTouch

NTV-KIT558



NTV-DOC218

Compatibility

Year	FORD V1 (KIT558)	FORD V2 (KIT585)
2011+	EDGE	
2012+	EXPLORER	
2013+	FLEX, F-SERIES (all), TAURUS	C-MAX, ESCAPE, FOCUS, FUSION
2015		FIESTA, MUSTANG

INSTALLATION PERFORMED ON FORD EDGE FOR REFERENCE ONLY!

Parts Identification	Page 1
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1. NNG-FORD V1 GPS/Interface
2. NNG-FORD V1 Internal Modification PCB
3. NNG-FORD V1 Plug & Play T-Harness
4. LCD/TP Cables
5. Audio Switch Module
6. Audio I/O Y-Cable
7. Rear-LCD Cable
8. GPS Antenna
9. OEM/NAV Toggle Switch



STOP – Install At Your Own Risk

YOU MUST READ THESE WARNINGS AND NOTICE BEFORE PRODUCT HANDLING AND INSTALLATION!

PRODUCT AND VEHICLE APPLICATION WARRANTY DISCLAIMER

WARNING! The Navigation Electronic Components are sensitive to Electro-Static Discharge (ESD). DO NOT HANDLE THE NAVIGATION ELECTRONIC COMPONENTS WITHOUT PROPER ESD GROUNDING DURING INSTALLATION. FAILURE TO USE PROPER ESD PROTECTION WHEN HANDLING THE NAVIGATION COMPONENTS WILL VOID THE PRODUCT WARRANTY.

WARNING! Installation of this Navigation Electronics product in the vehicle radio head unit must be performed by a professional technician that is experienced with proper work methods, ESD handling requirements, and knowledgeable of specific procedures for radio disassembly, Navigation Electronics installation, and re-assembly of the vehicle Radio Head Unit as well as proper handling requirements of all components involved. FAILURE TO FOLLOW PROPER DISASSEMBLY, INSTALLATION, AND REASSEMBLY PROCEDURES AND PROPER COMPONENT HANDLING REQUIREMENTS MAY RESULT IN IRREVERSIBLE DAMAGE TO THE VEHICLE RADIO HEAD UNIT AND/OR THE NAVIGATION ELECTRONICS AND WILL VOID THE PRODUCT WARRANTY!

WARRANTY DISCLAIMER NOTICE! Radio removal, disassembly, installation of Navigation Electronics, and Radio re-assembly/re-installation is the responsibility of the installer. It is recommended that you contract a professional installer that is experienced with proper work methods involving electronics and knowledgeable of specific procedures for radio disassembly, Navigation Electronics installation, and re-assembly/re-installation of the Radio Head Unit in the vehicle.

WARNING

To avoid dangerous distractions that may lead to an accident, the driver should never operate the system while the vehicle is in motion. Before installing this product, the seller should inform the end-user of proper use and compliance with the proper instructions and all state and federal laws.

Vehicle Preparation

Before beginning your installation, familiarize yourself with the installation instructions and the SoftTouch Navigation system components.

To ensure your safety, **(A)** apply the emergency brake and **(B)** read this entire manual before beginning.



CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation, to avoid unintended air bag deployment. Note and record any anti-theft radio codes prior to disconnecting.

Default Programming Switch (Dip Switch) Settings



Default Programming Switch Settings

1 – Off 2 – Off 3 – On 4 – Off 5 – On 6 – On 7 – Off 8 – On

Factory or Aftermarket Camera Settings

To use an aftermarket camera – Place switch #1 in **OFF** position.

To use the vehicle’s factory camera – Place switch #1 in **ON** position.



Dash Disassembly (Escape)

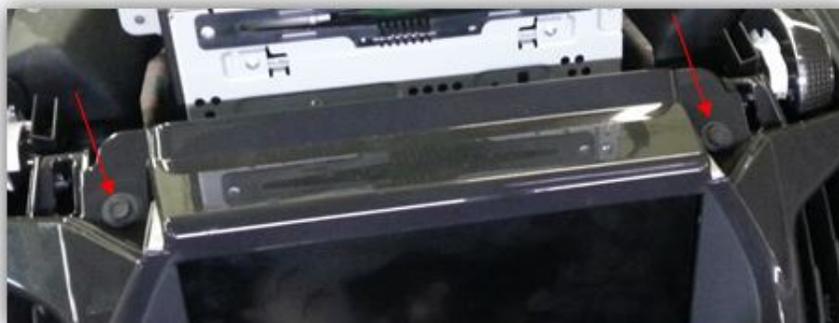
1. Begin by removing the dash that surrounds the CD slot. Pry up carefully with a plastic tool like shown:



2. Disconnect the CD slot LED harness connected to this dash piece and set aside:



3. Remove (2x) 7mm screws securing the vents/LCD surround:



4. Gently pry the LCD surround with a plastic tool to access the LCD screen. Disconnect the radio control harness and set aside:



5. You should now have access to the LCD screen. Remove (4x) 7mm screws, disconnect all harnesses and bring the screen assembly to a clean, soft bench to prepare for disassembly:



V1 LCD Modification Process*

***WARNING: The following process is fairly involved. It requires disconnecting and adding ribbon cables inside the LCD housing. If any ribbon cable is not seated firmly or squarely (perfectly straight), it may result in improper functionality or a damaged screen.**

***Note: Kits V1 and V2 are identical except for the screen disassembly and modification process. The following instructions are for the FV1. Following this V1 process is the V2 LCD modification process.**

1. To begin, place the LCD assembly face down on a soft surface (ESD mat would be best) so as not to scratch the screen. Remove (4x) Phillips head screws:



2. Separate the two halves of the assembly by pulling straight up after the screws have been removed. Set the back half of this LCD assembly aside. *Note that the center connector is keyed and the halves can only be replaced in one direction:*



3. On the LCD panel housing, mark across the brackets and the housing to make replacing later a breeze:



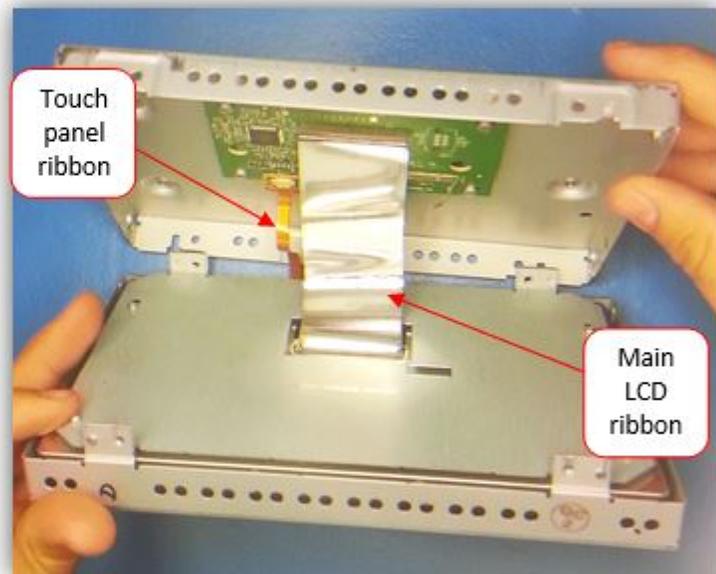
4. On each side (left and right) of the LCD housing, remove (2x) Torx T20 screws:



5. Next, remove (2x) Torx T10 screws on the top and bottom of the LCD housing:



6. Now separate the metal housing from the LCD panel. Lifting the opposite side of the touch panel ribbon will give you easy access to remove the ribbon connectors:



7. Disconnect the main LCD ribbon cable and the touch panel ribbon cable **from the circuit board side** by unlocking the connectors with a small flathead screwdriver. Set the LCD panel aside for now, the modification process happens with the circuit board shown here:



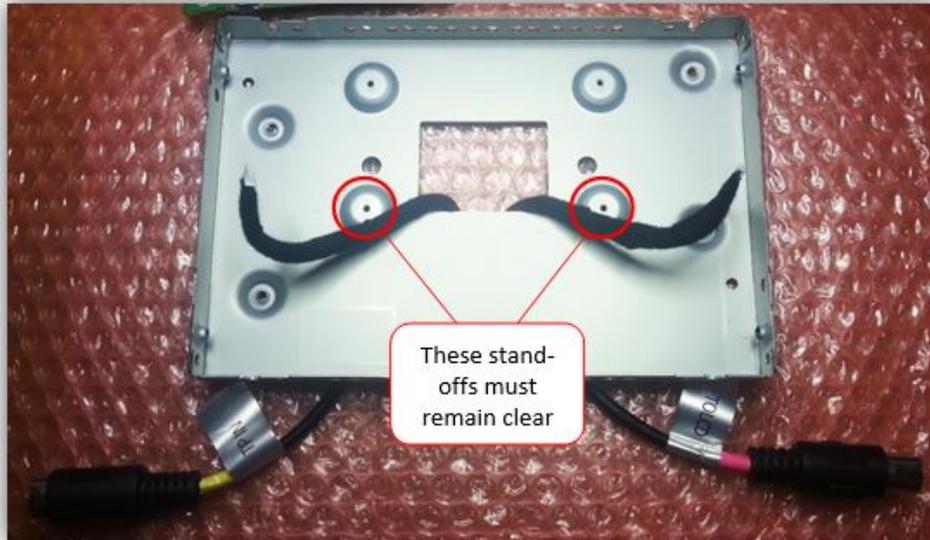
8. The LCD panel is not needed for the modification. The ribbons should still be attached to this monitor at this point.



9. Remove (4x) Torx T10 screws that secure the circuit board to the metal:

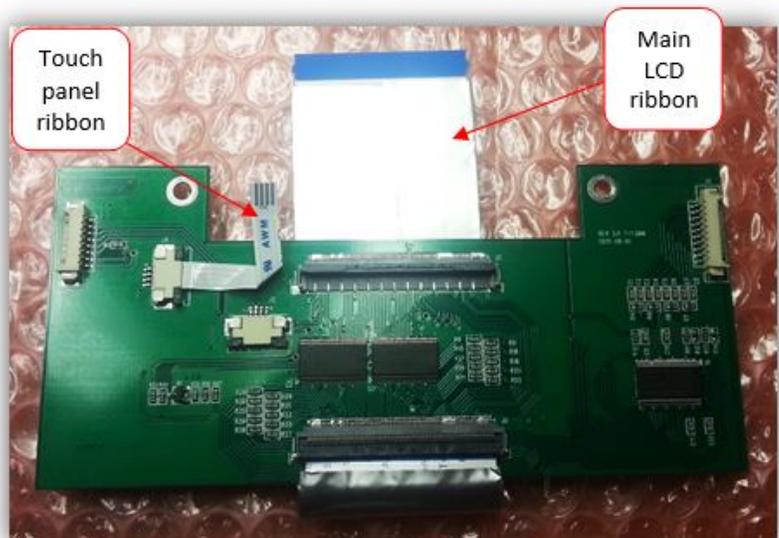


11. Run the harnesses from step 9 through the center square access hole like shown*:



***Note: Avoid crushing the harnesses with the circuit board when replacing!**

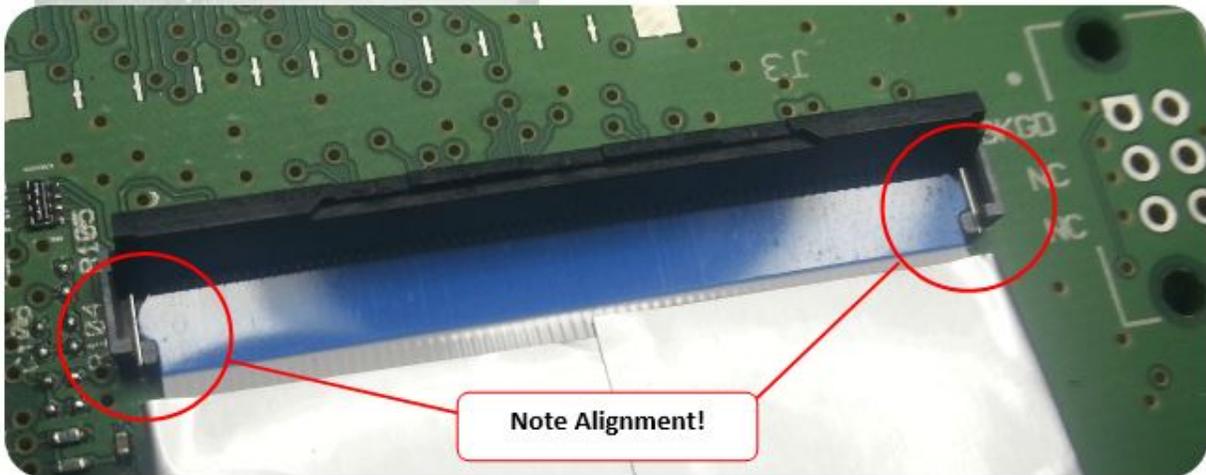
12. From the NNG-Ford kit, gather the sub-board with ribbons attached. Fold the main, bigger ribbon underneath the board like shown here. Be certain the Touch Panel Ribbon is oriented like shown here. You should see blue on both ends of this ribbon with this orientation.



12. Replace the factory circuit board to the metal chassis with the **top two screws only**. Connect the free end of the ribbon from step 11 to the main connector on the factory circuit board like shown:

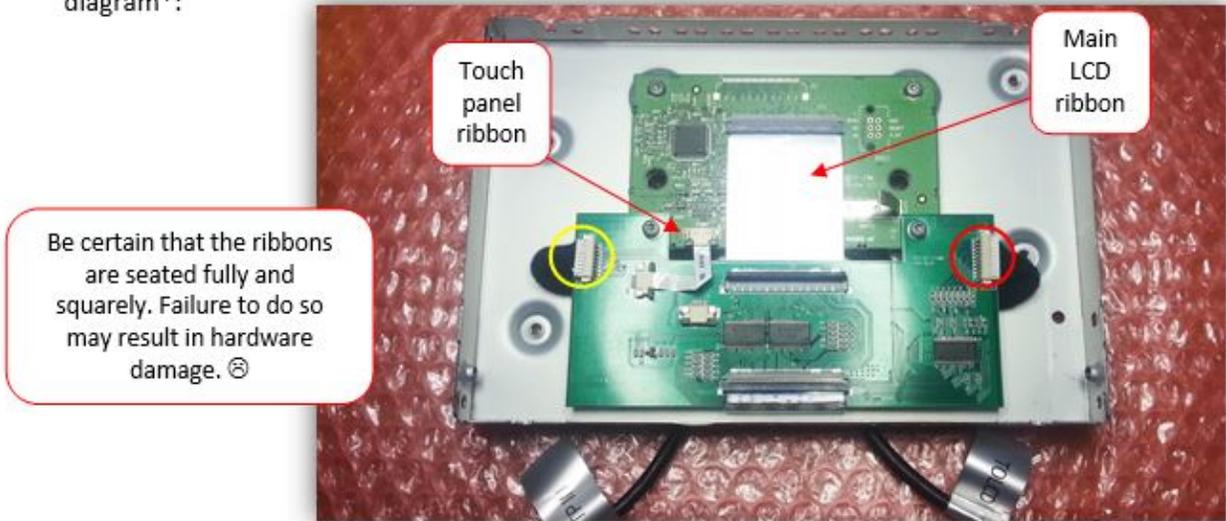


Main Ribbon

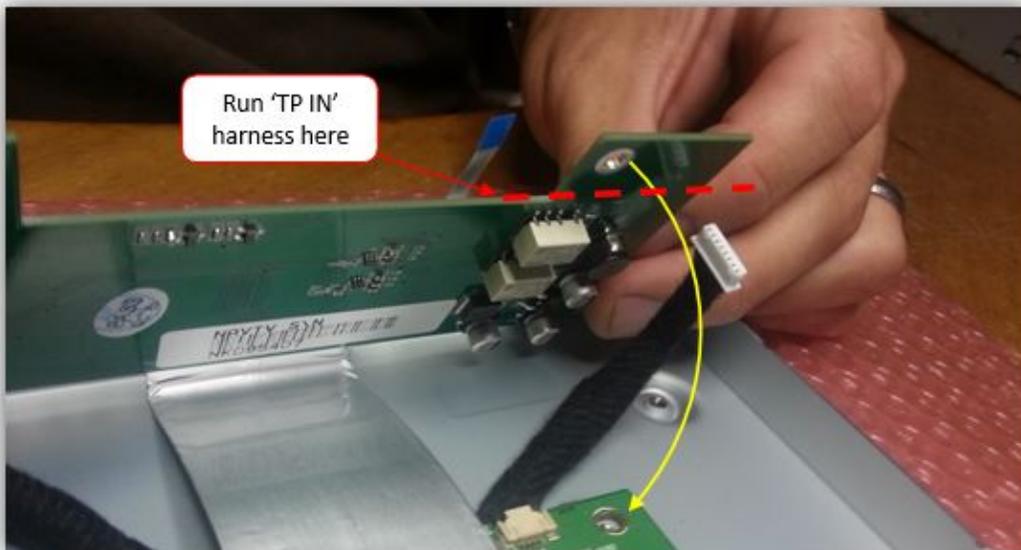


Note Alignment!

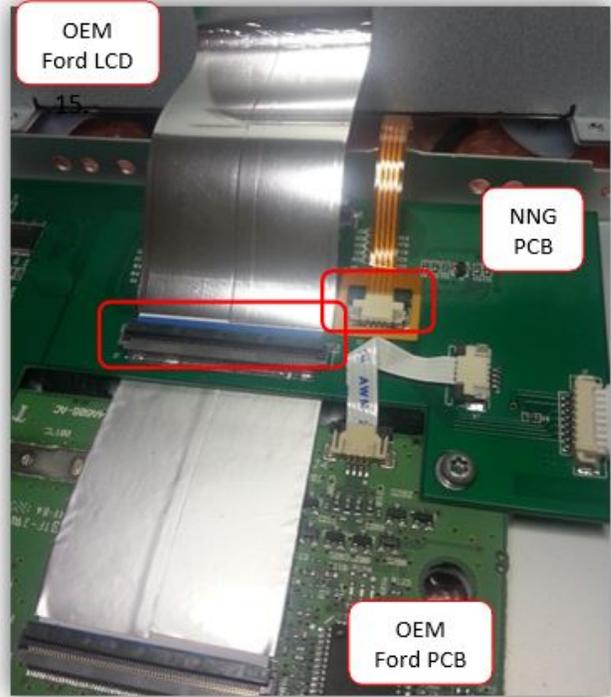
13. Fold the NTV sub board forward so that the two holes line up **on top of** the factory screw holes in the metal chassis. Replace the Torx T10 screws, and connect the white connectors to the sub board. Connect the 4-pin touch panel ribbon to the factory connector. When complete it will look like this diagram*:



***Note:** The 'TP IN' harness must be run between the relay and the screw hole as shown below. There should be almost no resistance when replacing the remaining two Torx T10 screws.

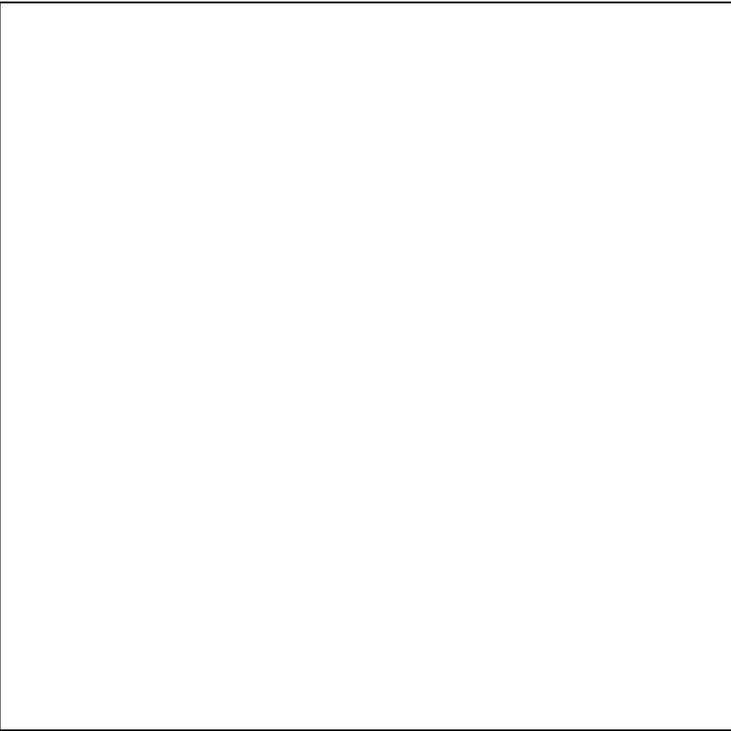


14. Gather the LCD panel and reconnect the factory ribbons to the NTX54 sub board connectors like shown below. Be certain the ribbons are connected fully and squarely!



15. When reconnecting the modified screen into the vehicle, it may take up to 2 minutes for the system to boot and settle.

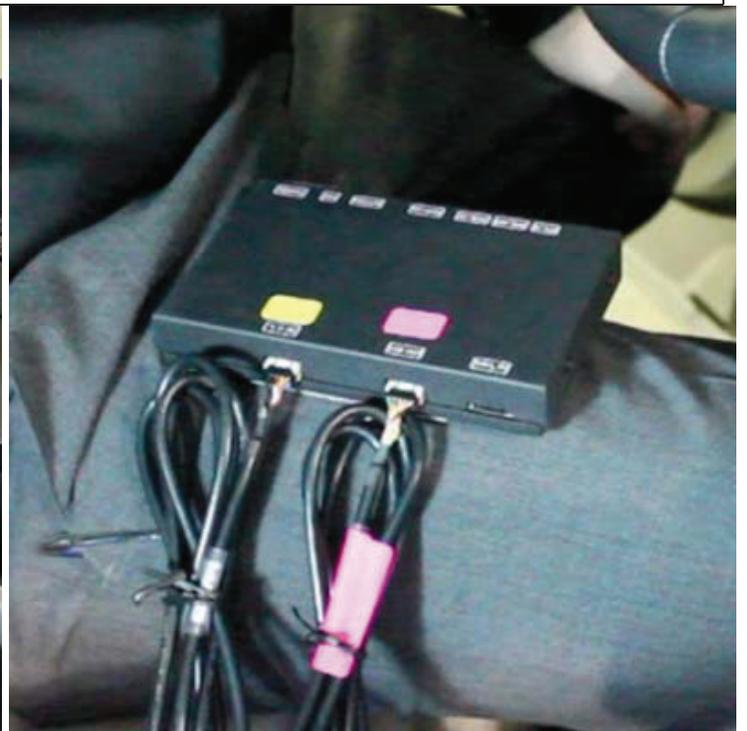




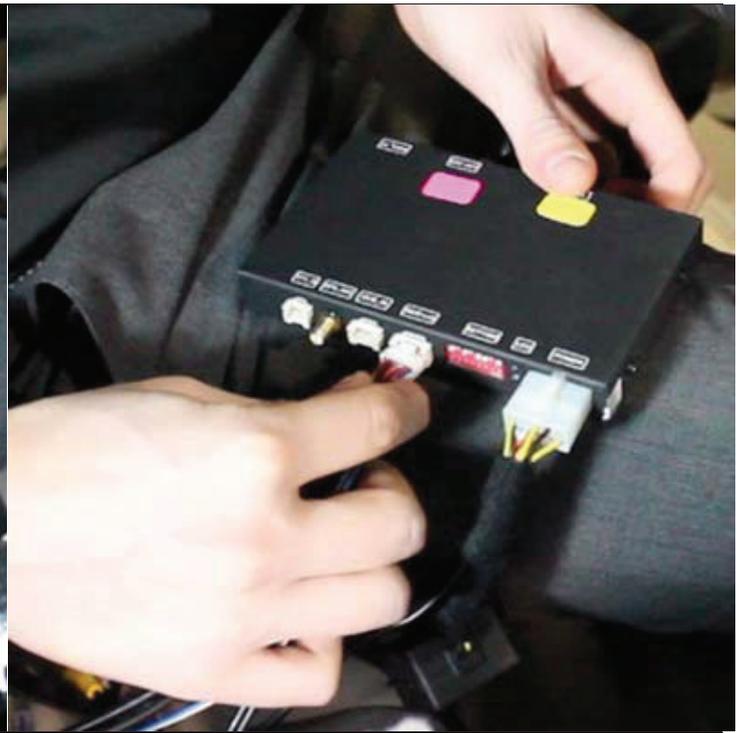
Mount the GPS antenna to the top-rear of the vehicle allowing it to attach using its magnetic base.



Route the GPS antenna extensions harness to the front of the vehicle above the headliner, down the passenger-side A-pillar, and behind the glovebox.

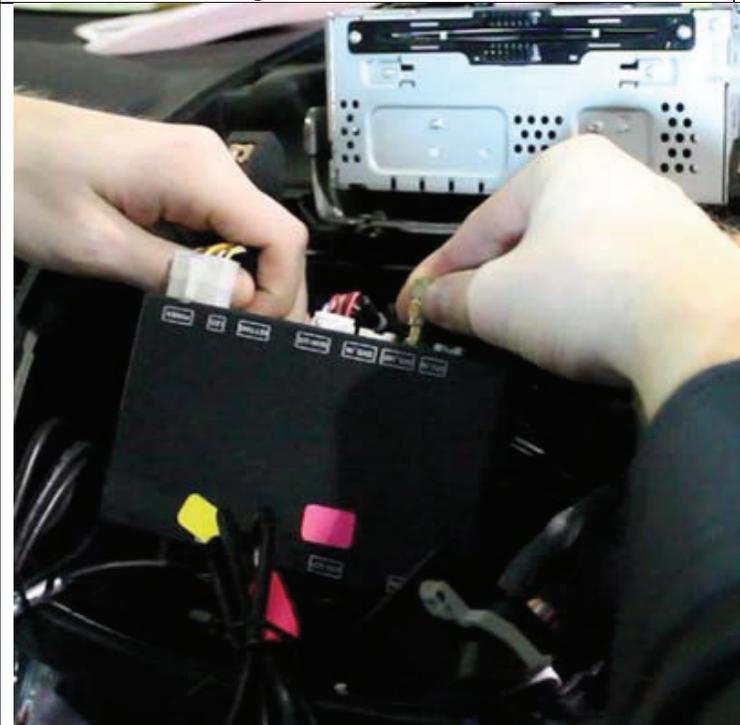


Connect the TP-IN and LCD-IN harness to the PINK and YELLOW ports on the navigation control module.



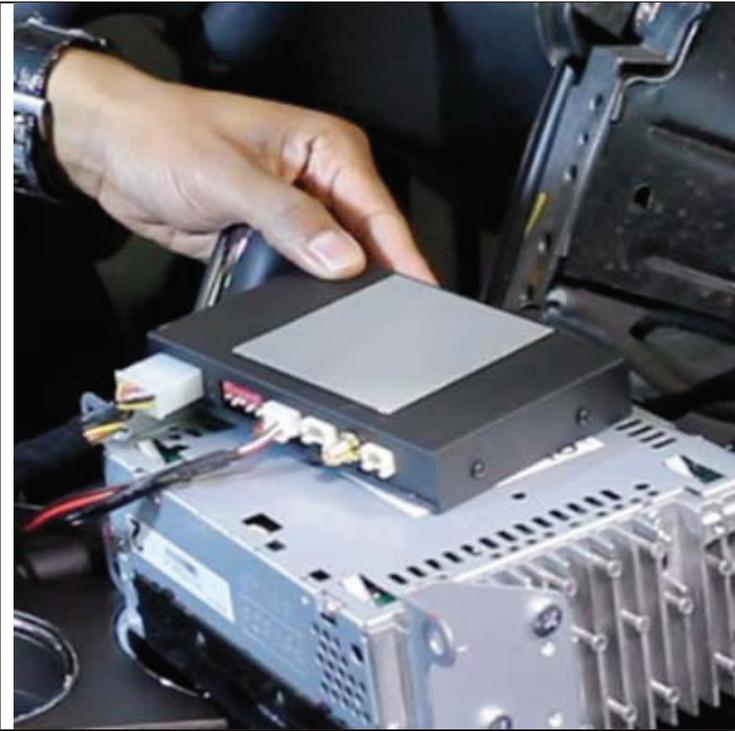
Connect the power harness from the vehicle interface harness to the navigation control module.

Connect the speaker interface harness to the navigation control module.



Find the threaded end of the GPS antenna and connect it to the navigation control module.

Connect the vehicle interface harness to the factory wiring harness on the car. (**Note:** the large factory harness includes a locking retainer clip.)



Apply double sided tape (or equivalent) to the bottom side of the navigation control module.

Attach the navigation control module to the dashboard in the open cavity below the factory CD player.



Attach the vehicle interface harness to the backside of the touch screen unit.

Connect the TP-IN and LCD-IN harnesses previously routed through the backside of the touch screen unit's casing to the TP-IN and LCD-IN harnesses from the navigation interface module.



Replace the touch screen unit and factory CD player. Make sure no wires are pinched in the process.

If indoors, start the vehicle and move it outside so that the GPS antenna has a clear view of the sky. Press the mute/call decline button to switch from the factory interface to the iGo Navigation interface.

Reassembly

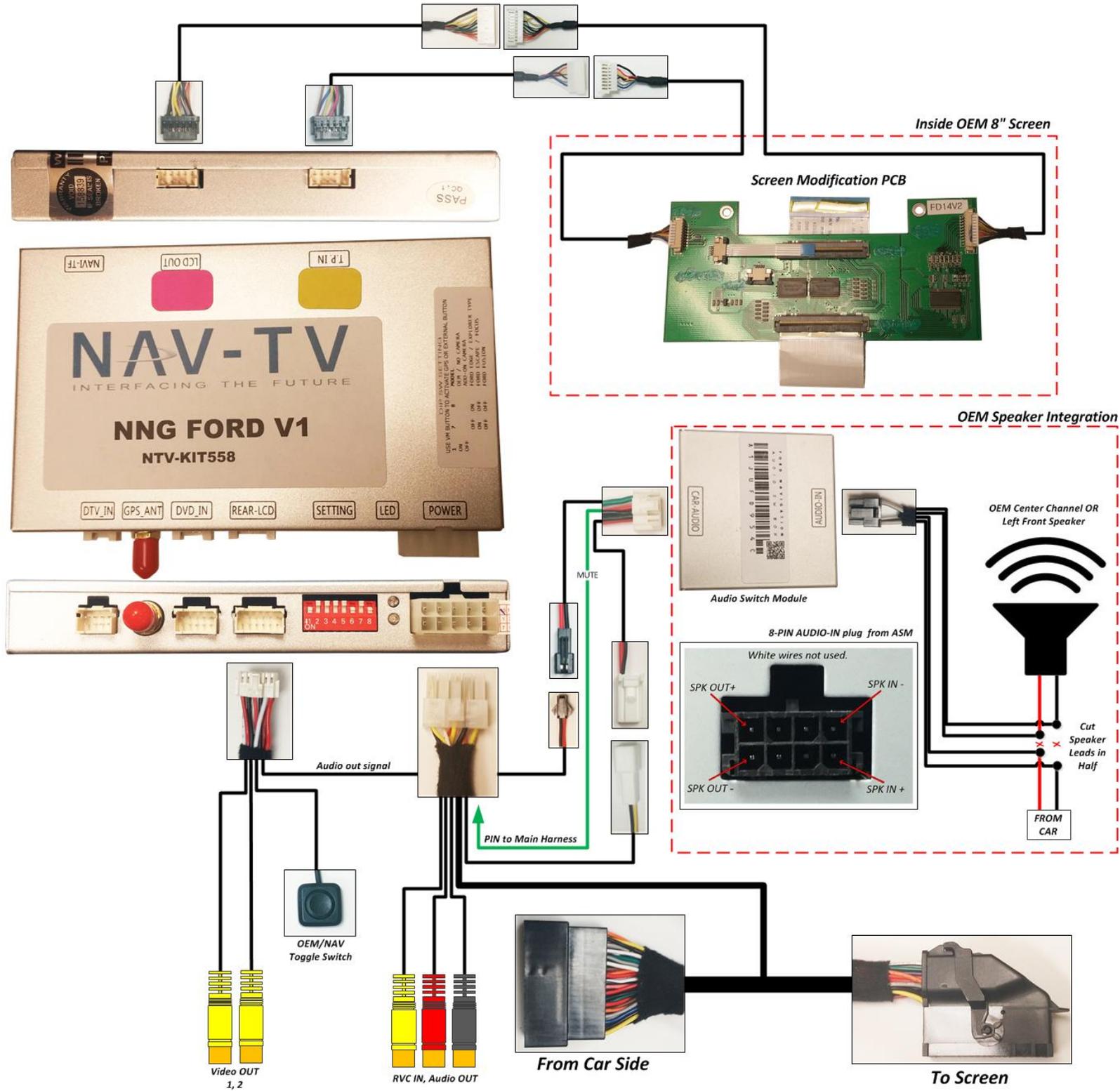
1. Reinstall all trim pieces taking special care to ensure harnesses and wiring connections are properly secured.
2. Make sure no harnesses are bent or pinched by trim pieces.
3. Reconnect all disconnected bulbs and check for function.

Installation Tips

- Confirm proper cable extension connector orientation and always verify proper ends are routed in correct direction.
- It is a good idea to dry-fit all pieces in this kit before permanently attaching them to ensure proper orientation and operation before beginning installation for familiarization with components.
- Always treat any metal exposed during installation with a rust preventative compound to prevent system failure due to rust and/or corrosion.
- Always seal any holes drilled with the provided sealing putty to prevent water infiltration through unprotected areas.
- Confirm integrity of mechanical and electrical connections before moving to next installation sequence.

Installation Notes

NNG-FORD V1 Wiring Diagram



Ford Audio Integration

Components for audio integration:

1. GPS Audio Box
2. Wiring (FD-AUDSPK-02)
3. Wiring (AUD-6PIN-01)
4. Main Harness (same harness used in main install)
5. Rear-LCD (connected to GPS box from main install)

Steps:

1. Connect both FD-AUDSPK-02 and AUD-6PIN-01 to GPS Audio Box
2. Connect white, 2-PIN power plug to power from main Interface harness 2-PIN power
3. Insert green wire with pin to Main Harness (See figure 1)

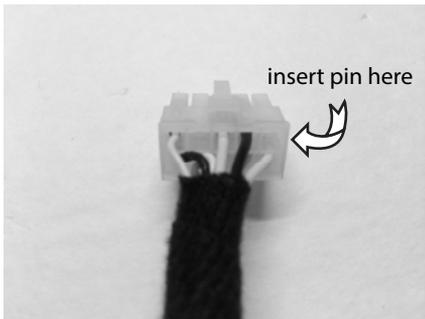


Figure 1

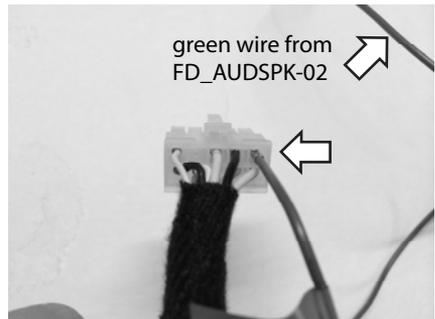
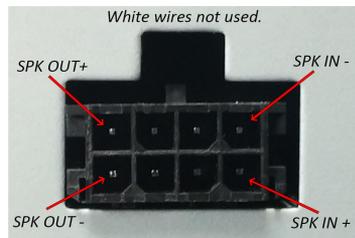


Figure 1a

4. Connect 2-pin speaker plug to Rear-LCD speaker plug
5. Locate the dash center speaker. *Note: If this car is not equipped with a center dash speaker, locate the Front-LEFT driver speaker leads, heading into driver's front door. Wire colors are typically White and White/Brown. Test wires before using!*
6. AUD-6PIN-01 has 6 wires, split to 2 black connectors. The WHITE wires are NOT used.
 - a. Cut the pair of signal leads from the OEM center channel speaker in HALF.
 - b. The FEMALE 4-PIN black plug is sound OUTPUT to Speaker (connect + and -). Gray/Black: - and Gray: +.
 - c. The MALE 4-PIN black plug is sound INPUT from Car (connect + and -). Gray/Black: - and Gray: +.

8-PIN black audio I/O pinout from Audio Box:



**** Normally, radio audio will by-pass audio box. When GPS talks, audio box will mute factory audio output and provide GPS audio to the dash speaker. ****

WEAK /NO GPS SIGNAL?

Tips to Improve GPS Antenna Signal if vehicle equipped Metallized Windshield*

“GPS MONITOR Tools”

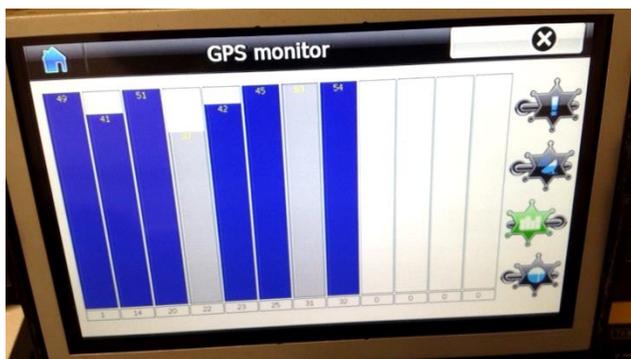
Exit IGO MAP by press SHUT DOWN BUTTON



Console> SETUP

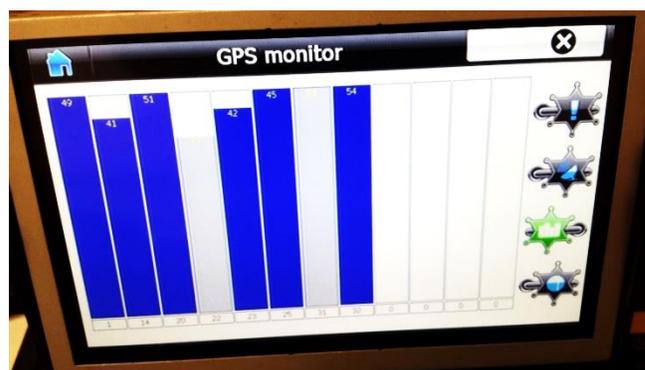


GPS MONITOR



Locate the Antenna with minimum 5 bars in dark blue or Gray bar

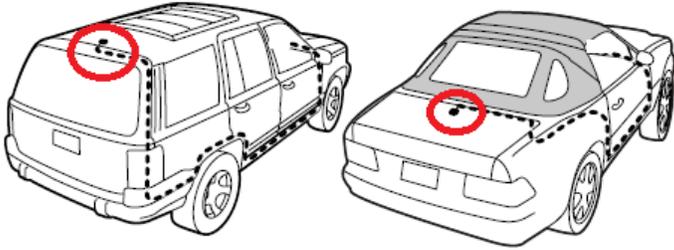
(Always suggest mounting the GPS antenna on the roof)



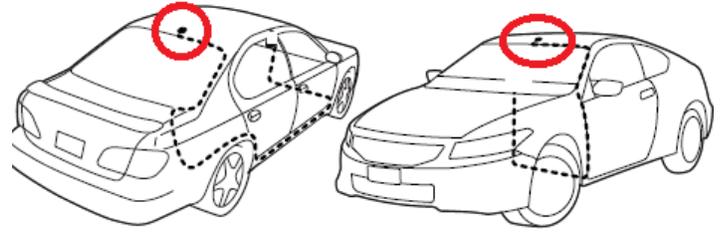
Press “!” icon to reset GPS signal and change the Antenna position

PROPER GPS ANTENNA POSITION

if vehicle equipped *Metallized Windshield



SUV/Coupe



Sedan



TRUCK (Shown as Tundra)

Alternatively, installer might choose to mount Antenna inside the headliner or inside vehicle using GPS monitor tools (see instruction). However, stay away from the windshield.

* Windshields with metal particles can interfere with radio waves, dash-mount satellite radio receivers, and GPS receivers may be affected external transmitters and receivers may be required.

If you see an 'OUT OF MEMORY' error when switching to NAV mode:

1. Access the map micro SD (or standard size SD) card from the module and remove it
2. Use an SD card adapter for the PC to load the content
3. Access the map software from the PC from adapter
4. Look for the main folder "NAVI" from the SD card
5. Inside the "NAVI" folder, you should find a folder "SAVE"
6. **Delete the "SAVE" folder from the SD card**
7. Check to ensure the "SAVE" folder is successfully deleted
8. Insert the cleaned SD card back to the module
9. Turn on the system and check all functions. You should see it start with initial setup steps.

Touch Screen Calibration:

1. Turn off Ignition. Access NAV interface and remove SD card.
2. Turn on Ignition, WAIT for white screen with crosshair.
3. Calibrate the touch screen for NAV by pressing the center of each cross hair as they appear. You may have to hold each crosshair for a solid second.
4. Once you get to 'OK' and press, shut system down and re-insert SD card NAV interface.
5. Power on and test.