

NNG-Jeep GC

Navigation interface for Jeep GC 5" RA2 NTV-KIT581





NTV-DOC219

NNG-JEEP GC Kit Content



- 1. JEEP GC GPS/Interface
- 2. JEEP GC internal Modification PCB
- 3. Audio Switching module
- 4. JEEP GC Plug & Play T-Harness
- 5. TP/LCD Y-Cables
- 6. Rear-LCD Harness
- 7. Optional NAV/OEM switch
- 8. GPS Antenna



Note: This kit is only compatible with HARMAN 5" Jeep Grand Cherokee radios. If your radio does not possess heat sinks (see below), this kit is NOT compatible.



Jeep Grand Cherokee 5" Touch Radio Removal

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 contact 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. INSTALLATION DAMAGE TO THE VEHICLE RADIO HEAD UNIT IS EXPRESSLY NOT COVERED UNDER THE PRODUCT WARRANTY.

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 the product, the seller should inform the end-user of proper use and compliance with the proper instructions and all states and federal laws.

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

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.



Factory Radio / Dash



Pull and remove A/C bezel by hand



Locate and remove 4 screws at corners

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Jeep Grand Cherokee 5" PCB Installation





Remove (2) T-10 screws from left side



Lift and remove the radio housing





Remove (2) T-10 screws from right side



Remove (4) T-8 screws under the board

Carefully pry (3) tabs, (1) at the top and (2) at the bottom, to remove the radio housing from the LCD screen plastic housing

Jeep Grand Cherokee 5" PCB Installation (cont.)



You should see the last board with cables



Locate the (2) ribbon cables as shown





Release the touch ribbon cable by lifting the silver tab away from the cable. Release the LCD ribbon cable by lifting the black clip on top of the cable



Carefully lift the circuit board as shown



Place the NEW circuit board as shown.

* Connect the factory touch ribbon cable to the new board. Route the factory LCD ribbon cable through the slot of the new board, then attach it to the socket. Secure the ribbons with clips and ensure the full insertion of cables as shown.



Flip the factory circuit on top of the new board. Connect the new ribbon cables to the factory board as shown in left image. Then, connect the TP and LCD cables to the new board as shown in the right image. Pay attention to the plugs orientations, metal pins are facing upward.



Route TP and LCD cables to the right side before closing the metal housing carefully. Then use the supplied bracket with cable exit cut-out. (Do not reuse the factory bracket on this side only)

Jeep Grand Cherokee 5" GPS Module Installation



Review the overall wire connections in the figure above



Data Out / LCD Out extension connections (noted the orientation of plugs)

Connect GPS Antenna to GPS Module (best GPS Antenna location is under passenger side A-pillar cover, on top of dash OR inside the center console, above the radio and under the dash cover)

Test system thoroughly before re-assemble of the radio and dash

<u>** You will have to install and use the supplied momentary switch</u> for NAV / RADIO modes switch <u>**</u>

Jeep Grand Cherokee 5" Camera Trigger Wire





Inside the passenger kick panel, you will find the white plug as shown



Release the clips and you will find the reverse

light trigger wire (white / green). Tap the wire and connect to the orange wire from the GPS main harness for reverse signal. <u>(Always test and confirm voltage signal before making any connection)</u>

Test driver side speaker integration function (mute and voice from navigation software)

Jeep Grand Cherokee 5" Center Speaker Connection

** For vehicle with center dash speaker OR if you hear no GPS Audio due to factory external amp, please make the following connection to the center dash speaker directly. You will have to make modification to the audio box wiring harness **



Center dash speaker location



Pry up the speaker/vent trim across the dash

Jeep Grand Cherokee 5" Center Speaker Connection (cont.)



Remove the speaker white plug



Locate the GPS Audio Box 6-pin connector



Red / Gray is SP+ and Black / Gray is SP-



Pin definition of the plug

GPS Audio Box wire definitions

Pink = GPS Audio +

Purple = Radio Audio IN +

Orange = GPS Audio –

White = Radio Audio IN -

See the diagram and instruction below for wiring modification and connections

- 1. Cut and extend (4) wires listed above (DO NOT CUT Yellow and Black wires). Route through dash to the center speaker location.
- 2. Cut center speaker connector from wires. Leave about 1" wires from plug. You will reuse the plug for speaker.
- 3. Cut center speaker Red / Gray SP+ wire and connect to GPS Audio + Purple wire.
- 4. Cut center speaker Black / Gray SP- wire and connect to GPS Audio White wire.
- 5. Connect Red / Gray SP+ from plug to Pink GPS Audio + wire
- 6. Connect Black / Gray SP- from plug to Orange GPS Audio wire
- 7. Re-connect the center speaker and dash trim



Center Dash Speaker connection diagram

Jeep Grand Cherokee 5" NAV Mode Switching

Press the momentary switch for activation of navigation screen



** From backup camera to NAV mode, you might see a flash image of the radio screen before NAV mode, it is a normal operation **

Jeep Grand Cherokee 5" Trouble Shooting

Please follow all the steps in this installation manual, failure to do so might void the product warranty and damage the factory radio

Power

2014 Jeep Grand Cherokee 5" navigation should have (2) led lights on the module box for indication of power and data connections.

<u>Display</u>

No Display

- 1. There are two led lights at the GPS module to indicate data and power. If led lights are OFF and radio is ON, check the power fuse inside the black box from the main harness
- 2. Check all wiring connectors for any loose connection
- 3. Check all wiring shielding for any damage during the installation process
- 4. Check all wiring for any type of damage
- 5. Check PCB ribbon cables for loose, misalignment, or damage

No Touch Response

- 6. Check both Radio mode and NAV mode for touch responses
- 7. Check led lights for power and data indications
- 8. Check 2in1 TP/LCD IN cable for any loose connection, or damage
- 9. Check PCB ribbon cables for loose, misalignment, or damage

No GPS software loaded, touch screen alignment screen occurred

Check map SD card at GPS module, see any sign of missing, loose, pop-out, misalignment, or damage

<u>Sound</u>

- 1. Check all cable for connections to Audio Box for loose, or damage
- 2. Check software volume settings, ensure volume is not muted
- 3. Check connections at radio for loose, damaged wires