



Applies To: 2004–06 TL – ALL 2004–05 TSX – ALL

TL and TSX: TQI of the DVD Navigation System With Voice Recognition (Supersedes 03-013, dated December 21, 2004, to update the information indicated by the black bars)

BACKGROUND

This bulletin provides information for Total Quality Inspection (TQI), including testing, of the navigation system. These topics are covered:

- Navigation System Controls
- Voice Control System Operation
- Navigation System Operation
- Navigation System Setup at TQI
- Map Coverage Areas

For more detailed information on system operation, refer to the Navigation System Manual.

WARRANTY CLAIM INFORMATION

None; these procedures are considered part of normal TQI.

NAVIGATION SYSTEM CONTROLS

Screen – All selections and instructions are displayed on the screen. This touch-screen uses a pressure sensitive/resistance technology to sense where you touch. If the system doesn't accept your selection (nothing happens), try pushing gently against the screen. You can also use the joystick or, in most cases, the voice control system, to make a selection.

NOTE: Do not use anything other than your fingers on the screen. Sharp objects can damage the touchsensitive membrane.

Upper display – This display provides the time and basic audio and climate control settings, even when the navigation system is not being used. The time is set from received GPS signals and is accurate to within a second. This time can be adjusted in Setup. See the owner's manual for information on the audio and climate control portions of the display.



MENU button – Press this button to change the display from the current screen to the main menu. When en route to a destination, press this button to change routing parameters.

MAP/GUIDE button – Press this button to display a map of your current position for casual driving. When en route, press this button to switch between the map and route information.

© 2005 American Honda Motor Co., Inc. - All Rights Reserved

BTB 24994-30059 (0509)

CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

INFO button – Press this button to display the menu for selecting the Trip Computer (TSX only), Voice Command Help, Calendar, or Calculator.

CANCEL button – Press this button to return to the previous screen.

SETUP button – Press this button to display a menu of system options.

ZOOM buttons – Press these buttons to change the scale when displaying a map. ZOOM \checkmark allows you to zoom out to see a larger area and ZOOM \blacktriangle allows you to zoom in for greater detail. When a list is displayed, ZOOM \blacktriangle and ZOOM \checkmark can be used to page up or page down.

Joystick – The joystick moves left, right, up, and down. Use it to highlight menu selections, scroll through lists, or look around in maps. After making a selection in a menu or list, choose the selection by pushing in the joystick. You can also choose a selection by touching it on the screen, and in most instances, you can use the voice control system to make a selection.

VOICE CONTROL SYSTEM OPERATION

The navigation system features a voice control system. This system uses voice recognition to permit handsfree operation of most of the navigation system, audio system, and climate control system functions.



The voice control system consists of the TALK and BACK buttons on the steering wheel, and a microphone on the ceiling. The audio speakers are used for voice prompts.

NOTE: The front speakers are muted when the voice for the navigation system is providing guidance, and all speakers are muted when using the TALK and BACK buttons.

TALK button – Press this button to activate the voice control system to accept voice commands.

BACK button – This button has the same function as the CANCEL button. Press this button to return to the previous display. When the previous display appears, the system prompts you to give a command and sounds a beep. Press the TALK button to issue your next command.

Microphone – Receives voice commands and transmits them to the navigation unit for interpretation.

Using the Voice Control System

The voice control system is activated with the TALK button. To control the navigation system, the audio system, or the climate control system by voice, press and release the TALK button, then pause a moment before you give a voice command. Once the voice control system understands your command, it updates the proper system, and, depending on the next screen, may prompt you for additional commands.

NOTE: To view a complete listing of the voice commands, refer to the Navigation System Manual, or press the INFO button and select Voice Command Help.

Improving Recognition

To achieve optimum voice recognition, follow these guidelines:

- Make sure the correct screen is displayed for the voice command you are giving. Refer to the Quick Start Guide or the Navigation System Manual.
- · Close the windows and the moonroof.
- Set the fan speed to low (1 or 2).
- Adjust the air flow from the vents so that it does not blow against the microphone on the ceiling.
- Pause after pressing the TALK button, then give a voice command.
- Give a voice command clearly in a natural speaking voice without pausing between words.
- If the system cannot recognize your voice command, speak louder.
- If the microphone picks up voices other than yours, the system may not interpret your voice commands correctly.
- If you speak a command with something in your mouth, or your voice is too husky, the system may not interpret your voice commands correctly.

NAVIGATION SYSTEM OPERATION

Selecting a Destination

A destination can be selected by Address, Intersection, Place, Personal Address, Previous Destination, Map Input, or Today's Destinations using the touch-screen, the joystick, or the voice control system. Refer to the Navigation System Manual for detailed information.

Traveling to a Destination

Confirm a selected route – The system display asks you to select one of these route options:

- Direct Route Takes the least amount of time
- · Easy Route Minimizes the number of turns
- Minimize Freeways Avoids freeway travel (when possible)
- Minimize Toll Roads Avoids toll roads (when possible)
- Maximize Freeways Incorporates freeway travel (when possible)

Going off the route – If you leave the route, the system recalculates the route from your current position, and displays a new highlighted route.

Modifying the route – The system can recalculate portions of the route and/or avoid a specific street, and then return you to the current route.

Save current location – This option stores the current location for later use (it does not change or cancel the route instructions currently in progress). A location can be stored anytime the navigation system is in use.

Off-road tracking – This option displays dots ("bread crumbs") on the map if you drive on a road not shown on the navigation screen. These bread crumbs begin to appear approximately $\frac{1}{2}$ mile away from a mapped road, and they allow you to retrace your route back to a mapped road. They will not appear if this feature is turned off during setup.

Personal Addresses

Two users can each store up to 100 destinations (addresses with phone numbers) in the system. A PIN (Personal Identification Number) is optional. Refer to the Navigation System Manual for instructions on how to enter a PIN and use Personal Addresses.

Go Home

This option allows a single button entry to set your home address as a destination. A PIN is optional.

System Limitations

Always verify the audio and visual route information by carefully observing roadway signs, signals, etc. Use your own good judgment, and obey traffic laws while driving. The navigation system has these limitations:

- The GPS (global positioning system) satellites used by the navigation system are operated by the U.S. Department of Defense. For security reasons, certain inaccuracies are built into the GPS. This can cause occasional positioning errors of up to several hundred feet. If the navigation system indicates your position incorrectly, wait several seconds until it corrects itself. The system may also correct itself after you make a turn or cross a road.
- The routes calculated by the system may not always be what you consider to be the most direct ones. Try different routing methods to obtain the best route. Even the direction your vehicle is pointing influences the route calculation.
- Since businesses fail or move to new locations, some information may be inaccurate. Also, route guidance may conflict with actual road conditions such as street closures, construction, and detours.
- Occasionally, the navigation system may "reboot" due to excess heat or shock, or from recalculating a route too many times. Rebooting does not necessarily indicate a need for service.
- GPS reception is affected by outside electrical interference from aftermarket electronic devices placed near the GPS antenna or navigation unit. Aftermarket metallic tinting of windows above the GPS antenna, that is located beneath the package tray, can seriously degrade the GPS signal.

NAVIGATION SYSTEM SETUP AT TQI

The navigation system must be allowed to initialize itself before use. During initialization, the system obtains the orbital information of the GPS satellites. When initialization is complete, the system can "locate" itself and function normally. To initialize the system, follow this procedure:

1. Perform the normal TQI of the vehicle, including the audio system. The AUDIO button and the navigation system voice will not function if the 5-digit anti-theft code for the audio system has not been entered.

- 2. Enter the audio security code. The 5-digit audio security code is on a card usually found in the glove box.
 - TSX:

To enter the security code for the audio system, turn on the system by pressing the VOL/PWR knob. The word "code" appears on the upper display. When the TUNE knob is turned, the word "code" disappears, and a single digit is displayed. Turn the TUNE knob left or right to select each of the five digits of the audio code. When you press the TUNE knob, the system beeps and accepts each digit as it spells out the word "code" on the display. After you enter the fifth digit, the radio starts playing.

NOTE: If the audio system anti-theft code card is lost, obtain the serial number using the instructions found in S/B 03-011, *2004 TSX: TQI and New Model Information*.

• TL:

To enter the security code for the audio system, turn on the system by pressing the VOL/PWR knob. The word "code" appears on the upper display. Enter the 5-digit security code using the radio preset buttons (1–6). As you enter each digit, the word "code is spelled out on the upper display a letter at a time. On the fifth digit, the radio beeps and starts playing.

NOTE: If the audio system anti-theft code card is lost, obtain the serial number using the instructions found in S/B 03-023, 2004 TL: TQI and New Model Information.

- 3. Start the engine, and move the vehicle outside away from buildings and power lines. Then enter the four-digit security code for the navigation system. The code is on the navigation system antitheft code card. When the code has been entered, the navigation system becomes operational.
- 4. The following instructions appear on the screen to indicate the system is initializing. Follow the on-screen instructions.

NOTE: The average initialization takes about 10 minutes, but it can take as long as 45 minutes. When initialization is complete, the system proceeds to the globe screen.

Wait

The system is acquiring its GPS signal. This could take up to 10 minutes.

- Engine must be running
- Vehicle must be parked outside, away from buildings
- Do not move the vehicle at this time

5. If the system does not initialize within 10 minutes, a second screen, shown below, appears. When this screen is displayed, the system is still performing the initialization. The system does not automatically exit to the globe screen when initialization is complete. After 30 minutes, try restarting the vehicle to see if the navigation system completed the initialization. If not, follow the instructions on the screen.

Navigation system is unable to acquire a proper GPS signal.

- Move vehicle to another location
- Turn the ignition switch off
- Disconnect the battery for 30 minutes to clear the GPS receiver's memory
- Reconnect the battery and follow the screen prompts

NOTE: The initialization screen may appear after battery voltage to the navigation control unit has been disconnected for more than 5 minutes. If this occurs, follow the on-screen instructions. If you are still unable to obtain GPS initialization, refer to the service manual for diagnostic information.

6. When initialization is complete, the disclaimer screen appears. Touch "OK."

NOTE: Do not enter a destination yet. For the system to calculate a route, it must align the current location to a mapped road (map matching). This occurs when you start driving.

- 7. Drive the vehicle at least a half mile from your dealership, then find a safe place to park.
- 8. From the MAP screen, press and release the TALK button and say, "Find the nearest Acura dealer."
- 9. Select your dealership from the screen listings, then select "OK" on the next screen.

NOTE: If your dealer location is not correct or needs to be changed, please report it to your District Parts and Service Manager (DPSM). To report any other data base problems, see "Reporting Errors" in the Navigation System Manual.

10. If your dealership is in a detailed coverage area, the map shows a blue highlighted route. Follow the voice guidance back to the dealership. If your dealership is not in a detailed coverage area, you may see a blue dotted "vector line" pointing to your dealership instead of the blue highlighted route. Exercise caution, and use the map to guide you back.

- 11. While in the MAP screen, verify that the voice control system is interfacing properly with the navigation, audio, and climate control systems.
 - Press the TALK button on the steering wheel, and say the commands, "display 1/2 mile scale" and display "current location." Press the BACK button (also on the steering wheel) to return to the map.
 - To check the audio system, press the TALK button and say "radio play," then "radio select AM" or "radio select FM 1."
 - To check the climate control system, press the TALK button and say "temperature up" and then "temperature down." Verify that the temperature displays on the audio-HVAC subdisplay located above the center vents.
- 12. Touch the SETUP button, or use the voice control system and say "setup." Then verify these settings by touch or with the joystick:
 - Volume set to a comfortable level
 - · Display set to AUTO
 - Voice feedback set to ON
- 13. In Setup, touch "Delete Previous Destinations" to bring up the "Select item to delete:" menu. Select and delete any previous destinations except your dealership.

NOTE: If this TQI is being done as part of a warranty repair, then do not delete any client information.

NOTE: Normally the clock in the upper display is set by the GPS and does not need adjustment (this is the factory default). However, the time may need to be adjusted in some situations.

- 14. To adjust the time, go to Setup and touch "Time Zone/Clock," then do this:
 - If you live in a state or part of a state (like Arizona or parts of Indiana) that does not observe Daylight Saving time, then set the "Auto Daylight Saving Time" setting to OFF.
 - If the dealership is located very near a time zone boundary, then set the "Auto Time Zone by GPS" to OFF. This allows the vehicle clock to retain the same time if the customer routinely travels back and forth across the time zone boundary.

NOTE: Even though the time is shown in the upper display as a 12-hour clock, you need to adjust it in Setup screen #2 as a 24-hour clock. For example, if you want to set the time in the upper display to 7:00 p.m., you need to adjust the time in the setup screen to 19:00. Remember to add 12 for any time from 1:00 p.m. to 11:59 a.m.

- 15. *TL only:* The system contains software for both the U.S. and Canada. When delivered, the system should be set up for the U.S. If the navigation disclaimer screen has an "OK" and a "language" button, then the system is not set up properly for U.S. customers. To correct the setup, do this:
 - Enter the Diagnostic mode using the procedure in the service manual.
 - Select "Navi System."
 - Ensure that the "Navi ECU" portion of the diagram reads, "Navi.ECU for U.S."
 - If it reads, "Navi.ECU for Canada," touch the "Chng U.S." button, and than exit the Diagnostic mode.
- 16. Return to the Main menu, then clean the screen with a soft damp cloth. You may use a mild cleaner intended for eyeglasses or computer screens. Harsher chemicals may damage the screen.

NOTE: Do not use shop towels, paper towels, or tissues; they could scratch or damage the screen.

MAP COVERAGE AREAS

The map database is stored on a Digital Versatile Disc (DVD) located in the navigation control unit. The database covers the 48 contiguous U.S. states and Canada.

Map Types

The maps that you view on the screen consist of two types of roads: "verified roads" and "unverified roads."

Verified roads have been driven by the database vendor. Information about the road's average speed, turn restrictions, or whether it is a one-way street are contained in the navigation system. Roads within metropolitan areas (detailed coverage), interstate freeways, and major roads connecting cities are typically "verified." They can be recognized on the screen (daytime setting) as the darker colored roads.

Unverified roads may be found in rural areas. The information about these roads may have inaccuracies. Therefore, they are shown for reference only. They can be recognized on the screen (daytime setting) as a light brown color.

Guidance in unverified areas depends on the setting for "Unverified routing" made during setup. If the setting is OFF, then you will see a dotted blue vector line pointing to your destination when driving in an unverified area. You will have to manually choose roads from the map to get to your destination. If the setting is ON, then you will see a blue/pink route line and receive route guidance. Pop-up cautionary boxes appear while en route to alert you when entering unverified areas.

NOTE: This feature is set to OFF from the factory.

Detailed Coverage

- · Roads with names
- Service roads without names that serve as access to rest areas along motorways
- Main paved roads without names that are within or lead to included polygons (places such as large shopping centers, universities, golf courses, parks, etc.)
- Paved roads without names that are used only by public vehicles
- Ferry connections for automobiles via rail or boat
- · Walkways with names and addresses
- Undefined traffic areas with more than 10,800 square feet
- Ramps, roundabouts, special traffic figures, turn lanes, and U-turn lanes
- · Service roads
- · Pedestrian streets and pedestrian zones

For a list of current detailed coverage areas by country and state/province, refer to the Navigation System Manual for the current model year, or view the current coverage at the DVD order website described in ORDERING A DVD. Select "Purchase Navigation DVD Updates," then click on the "Coverage Maps" link.

Non-Detailed Coverage

Cities and towns in the non-detailed map coverage area may have incomplete mapping. Only major federal, state, and county roads leading to and through these cities and towns are mapped. These "verified" roads are shown in black. All other streets are "unverified" and are shown in light brown. If you see an asterisk (*) next to the city name,

- Streets may be missing completely or shown in the wrong location.
- Street address information may be unavailable, and you may be prompted to use the map to locate your destination.
- Streets may be either named incorrectly or have no name ("unnamed road").

Guidance in unverified areas depends on the setting for "Unverified routing" made during setup. See "Driving to your destination" in the Navigation System Manual for more information.

ORDERING A DVD

Replacement DVDs can be ordered on-line at *www.acura.com.* Select "Acura Store" and click on the "Purchase Navigation DVD Updates" link. You can also order a replacement DVD by calling (888) 549-3798.

Updated DVDs, with possible expanded coverage, are made available periodically, usually in the fall of the year. Use the above procedure to order updated DVDs.