

## 2006 TSX: TQI of the DVD Navigation System With Voice Recognition

### BACKGROUND

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

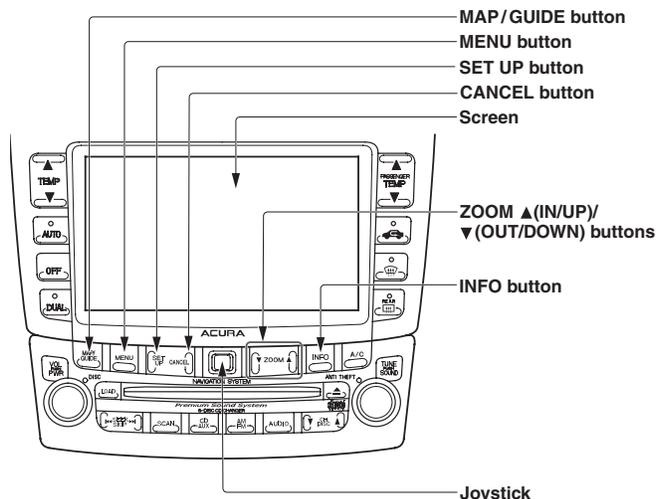
- Navigation System Controls
- Voice Control System
- Navigation System Setup at TQI
- Map Coverage Areas
- Ordering a DVD

For more detailed information on system operation, refer to the navigation system manual. For more information on system troubleshooting, refer to the service manual.

### WARRANTY CLAIM INFORMATION

None; these procedures are considered part of the normal TQI.

### NAVIGATION SYSTEM CONTROLS



**Screen** – All selections and instructions are displayed on the screen. This is a touch-screen display; you can enter information into the system by touching the images or icons with your finger. For example, you can enter a street name on the displayed keyboard by touching the individual letters. Use a soft damp cloth and a mild cleaner intended for eyeglasses or computer screens to clean the screen. Harsh chemicals or cloths may damage the screen.

**MENU button** – Press this button to change the display from the current screen to the “Entering a destination by” screen. When en-route to a destination, press this button to change to the “Change route” screen.

**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 the guidance screen.

**INFO button** – Press this button to display the information menu for selecting Set-Up, Voice Command Help, Calendar, Calculator, and Map Legend.

**AUDIO button** – Press this button to display the audio screen. For more information on audio system features, see the audio section of the owner’s manual.

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

**ZOOM button** – Press this button to change the scale when displaying a map. **ZOOM ▼** allows you to zoom out to see a larger area and **ZOOM ▲** allows you to zoom in for greater detail. When a list is displayed, **ZOOM ▲** and **ZOOM ▼** can be used to page up or page down.

**Joystick/ENT** – 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 on 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.

**SET-UP** – Displays the Set-Up screens to change and update information in the system.

**CLOCK** – Set by the navigation system per information from the satellites (adjust in the set-up mode).

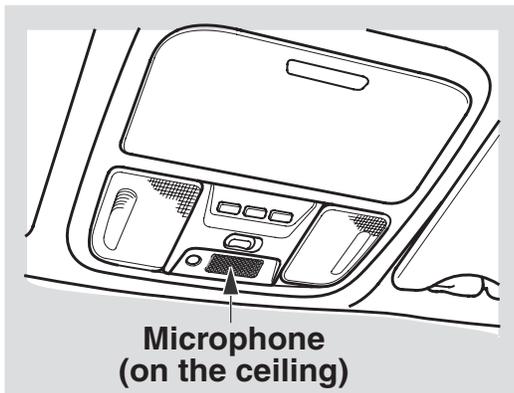
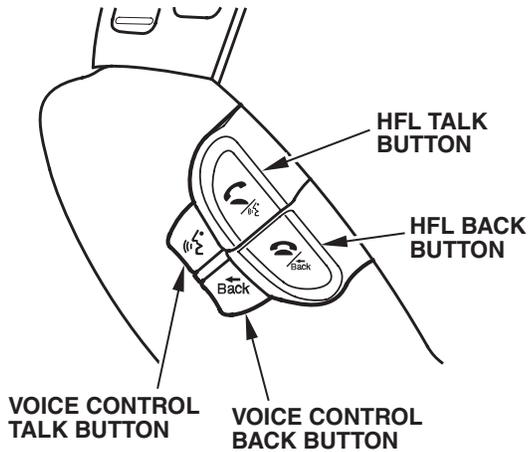
### Voice Control System

Voice recognition is controlled by the TALK and BACK buttons. This is intended as the primary way to give commands to the system. Using the buttons and touching the screen allow the passenger to operate the system and should be considered a secondary method for the driver.

**TALK** – Press and release this button on the steering wheel to activate the voice control system. After pressing and releasing TALK, wait for the beep, then speak the command.

**BACK** – This does the same function as the CANCEL button. Press this button on the steering wheel to return to the previous display. After the previous display appears, the system prompts you for a command, and then beeps. Press and release the TALK button to give the desired command.

**Microphone** – Receives voice commands.



The navigation system communicates through the front audio speakers. When the navigation system is giving guidance instructions, the front speakers are muted, and the audio continues in the rear. When you are using the voice control system to give commands (by pressing the TALK or BACK buttons), all of the speakers are muted. If the HandsFreeLink is in use, the voice control system is unavailable, and an error is displayed on the screen.

The voice command list can be viewed or heard by pressing the INFO button and selecting Voice Command Help. A tutorial is included that explains the operation of the voice control system. Refer to the quick start guide and the navigation system manual for detailed information.

### Improving Recognition

- Make sure the correct screen is displayed for the voice command you are giving. Refer to the navigation system manual.
- Close the windows and the moonroof.
- Set the fan speed to low (1 or 2).

To help the system understand your voice commands, follow these guidelines:

- Adjust the airflow from the vents so that it does not blow against the microphone on the ceiling.
- After pressing the TALK button, wait for the beep, then give a voice command.
- Give a voice command clearly, in a natural speaking voice, without pausing between words.

### NOTE:

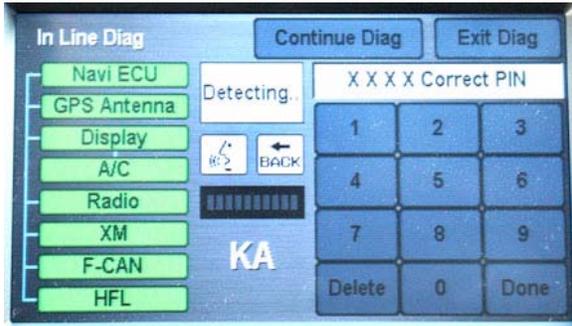
- If the system cannot recognize your voice command, speak louder.
- If the microphone picks up voices other than yours, the system may misinterpret your voice commands.
- If you speak a command with something in your mouth, or with a heavy accent, the system may misinterpret your voice commands.

### NAVIGATION SYSTEM SETUP AT TQI

The navigation system is basically ready to use when the vehicle is delivered to the dealership. Since the system interfaces with other systems in the vehicle, it is important to ensure that all of the systems are initialized so they will work properly for the customer. To initialize the system, follow this procedure.

1. Perform the normal TQI of the vehicle, including the audio system. The navigation system voice will not function if the anti-theft code for the audio system has not been entered.
2. Make sure the XM radio dealer demo account has been set up (XM stations, 7, 9, and 122 can be received).

3. You could possibly see the “Inline” navigation diagnostic screen below. If not go to step 4. If so, then do this:
  - Press and hold the Menu, Map/Guide, and Cancel buttons at the same time until the “Select diagnosis” screen comes up. Then release the buttons.
  - Press and hold the Map/Guide button for at least 15 seconds.
  - Select “Complete” on the display, then select “Return” twice to exit the diagnostic mode.



4. Start the engine, and move the vehicle outside, away from buildings and power lines. Then enter the security code for the navigation system

NOTE: There are two code stickers and a plastic code card located in a small plastic bag in the glove box.

- Attach one of the stickers to the code card, put it in the plastic bag, and return it to the glove box.
- Attach the other sticker to the PDI repair order, or put it in the plastic bag, and return it to the glove box for the customer.

NOTE: Never attach a sticker to the side of the glove box or other location where both the serial number and code are easily visible. This defeats the purpose of the anti-theft protection.

If the card is lost, the audio serial number can easily be obtained without removing the audio unit. To get the code, do this:

- Press and hold the Menu, Map, and Cancel buttons at the same time.
- At the diagnosis menu, select **Unit Check**, then **Navi ECU**. The system runs a brief diagnostic, then the serial number is displayed at the bottom of the screen.
- Use the navigation **Anti-theft code inquiry** option in the Interactive Network (iN) to look up the 4-digit navigation anti-theft code.
- If the code does not work, call the warranty department at **(310) 783-3240**.

5. The following instructions appear on the screen to indicate the system is initializing (determining its location from the GPS satellites). Follow the on-screen instructions.

NOTE: The average initialization takes about 10 minutes, but it can take as long as 45 minutes. If initialization completes within 10 minutes, the display changes 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

6. If the system *does not* initialize within 10 minutes, a second screen, shown below, appears. The system is still performing the initialization but will not automatically exit to the globe screen when initialization is complete. Do not immediately follow the instructions on the screen. 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.

7. When initialization is complete, the disclaimer screen appears. Touch “OK.”

NOTE: Do not enter a destination yet. In order for the navigation system to calculate a route, it must align the current location to a mapped road (map matching). This will occur when you start driving.

8. Drive the vehicle at least a half mile from your dealership, then find a safe place to park.
  - Make sure the vehicle position (VP) icon moves smoothly as you drive, and does not jerk from one point to another. Also make sure the icon points in the direction the vehicle is traveling; it does not “dog track” or spin.
  - Make sure the VP icon smoothly follows the vehicles maneuvers as you make turns.
  - After driving a few hundred feet, the name of the road you are driving on should appear on the bottom of the screen.
9. With the map screen displayed, press and release the TALK button.
10. When you hear the beep, say “find the nearest Acura dealer.” The system should display a list of Acura dealers.
11. Use the joystick to select your dealership by highlighting it, then pushing in on the joystick.
12. On the “Calculate Route to” screen, select “OK.”
13. The system then calculates a route and displays it as a blue line. If you are in a rural area with unverified roads, you may see a blue vector line pointing in the direction of your destination, or a blue/pink dotted line.
14. Follow the voice guidance back to your dealership. The voice guidance should work even with the audio system turned off.
15. With the map screen displayed, check the system interaction with the audio system. Press and release the TALK button. After the beep, say “XM channel 7.” The audio display should change to XM channel 7.
16. With the map screen displayed, check the system interaction with the climate control system. Press and release the TALK button. After the beep, say “temperature 68 degrees.” The climate control system display should change to 68 degrees.
17. The time shown by the system should be correct; the system gets it from the GPS satellites. Depending on the location of your dealership, you may have to adjust the time settings.
  - If you live in a state or the part of the state that does not use Daylight Savings Time, select Setup. Select “More,” then select “Clock Adjustment.” Set “Auto Daylight Savings Time” to OFF.
  - If your dealership is located near a time zone boundary, set “Auto Time Zone by GPS” to OFF. The clock then keeps the “home” time if the customer routinely drives across the time zone boundary.

18. Turn the headlights on and off to verify that the display dims with the headlights on. If not, verify the dash brightness is not on max. Then select Setup, and set the display mode to AUTO.
19. Select Setup, or use the voice control system and say “Setup.” Then verify these settings by touch or with the joystick:
  - Volume is set to the midrange.
  - Brightness is set so the display can be seen in bright sunlight.
20. In Setup, select “More,” then “Personal Information,” then “Previous Destinations.” Follow the screen prompts to delete all previous destinations except your dealership.
21. 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 can scratch or damage the screen.

### System Limitations

These issues could arise during the TQI, or after installing replacement parts to repair the system. Refer to the navigation system manual or the quick start guide for basic operation.

To minimize distractions, always use the voice control system to operate the navigation system while driving. 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 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 cold, heat, or shock, or from recalculating a route too many times. Rebooting does not necessarily indicate a need for service.

- The GPS antenna receives location information from orbiting satellites. Anything that blocks or interferes with the signal will affect accuracy. The GPS signal can be blocked or interfered with (vehicle position shown incorrectly on the map) by:
  - Aftermarket metallic window tinting above or to the sides of the GPS antenna.
  - Aftermarket vehicle theft location systems mounted near the navigation control unit or display.
  - Radar detectors, cell phones, or other aftermarket electronic accessories placed near the navigation control unit or display.
  - Outside electrical interference from overhead power lines or broadcast sources.
  - Tall trees or buildings near or over the vehicle. They can cause the system to show the vehicle on an adjacent street. This should automatically correct itself when the obstruction is gone.
- In some cases, a city name, road name, or address range may be incorrect or missing from the system. The possible causes are:
  - The city name may be listed under a larger metropolitan area, or as an “unincorporated” area. Try selecting the street name first. If it is a smaller city in a rural area, only the main road may be shown.
  - If the street name cannot be found, is shown incorrectly on the map, or is not drawn correctly, it may be because it is a new road, or it is in an “unverified” area.
- If the location of your dealership is shown incorrectly or needs to be changed, report it to your service manager or DPSM. The reporting form is on ISIS.
- If the DVD door in the control unit is opened or the DVD removed, the system will reboot. A DVD with a white label is used for this system. It cannot be interchanged with a DVD from a different vehicle that has a different-colored label.

## MAP COVERAGE AREAS

The map database covers the 48 contiguous U.S. states and parts of Canada. The map coverage for the U.S. has accurately mapped (verified) metropolitan areas, and less accurate (unverified) rural coverage. In Canada, the database covers major metropolitan areas and major roads connecting those metropolitan areas. Coverage extends to about 100 miles from the U.S. border. A DVD that provides coverage of northern Canada is available (see **ORDERING A DVD**).

## 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, 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 on the route to alert you when entering unverified areas.

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

## Detailed Coverage

Many cities and metropolitan areas are fully mapped. Detailed map coverage includes:

- 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 owner’s manual for the current model year or the Acura web site, [www.Acura.com](http://www.Acura.com). Go to the “Acura Store” section and select the “Ordering a Navigation DVD” 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 owner’s manual for more information.

## ORDERING A DVD

Replacement DVDs can be ordered online at [www.Acura.com](http://www.Acura.com). Go to the “Acura Store” section, then select the “Ordering a Navigation DVD” link. You can also call 888-549-3798.

Updated DVDs, with expanded coverage, are made available periodically, usually in the fall. Use the above procedure to order updated DVDs (white label only).