



Troubleshooting Precautions

General Operation

Refer to the Acura Navigation System Owner's Manual for the navigation system operating procedures.

Anti-theft Feature

The navigation system has a coded theft protection circuit. Be sure to get the customer's four-digit security code number before;

- disconnecting the battery
- disconnecting the navigation unit connector
- removing the BACK-UP/RADIO (7.5 A) fuse from the under-hood fuse/relay box

After service, reconnect power to the navigation unit, and turn the ignition switch ON (II). Enter the 4-digit security code, then select "Done". When replacing the navigation unit, be sure to give the customer the new anti-theft security code.

Symptom Diagnosis

Certain circumstances and system limitations will produce occasional vehicle positioning errors. Some customers may think this indicates a problem with the navigation system when, in fact, the system is normal. Keep the following items in mind when interviewing customers about navigation system symptoms.

Self-Inertial Navigation Limitations

The limitations of the self-inertial portion of the navigation system (the yaw rate sensor and the vehicle speed sensor) can cause some discrepancies between the actual vehicle position and the indicated vehicle position. If there is a large discrepancy, and the system is receiving GPS signals, the system will adjust the indicated vehicle position to the GPS vehicle position. However, if GPS signals cannot be received, you must tune the vehicle position manually.

The following circumstances may cause vehicle positioning errors until the system can adjust to the GPS.

- Moving the vehicle with the engine stopped, such as by ferry or tow truck, or if the vehicle is spun on a turn table.
- Tire slippage, changes in tire rolling diameters, and some driving situations may cause discrepancies in travel distances. Examples of this include:
 - Continuous tire slippage on a slippery surface.
 - Driving with snow chains mounted.
 - Abnormal tire pressures.
 - Different diameter tires.
 - Frequent lanes changes across a wide highway.
 - Continuous driving on a straight or gently curving highway.
- Tolerances in the system and map accuracy sometimes limit how precisely the vehicle position is indicated. Examples of this include:
 - Driving on roads not shown on the map (map matching is not possible).
 - Driving on a road that winds in one direction, such as a loop bridge, an interchange, or a spiral parking garage.
 - Driving on a road with a series of sharp hair-pin turns.
 - Driving on one of two close parallel roads.
 - After making many 90 degree turns.

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Troubleshooting Precautions (cont'd)

Global Positioning System (GPS) Limitations

The GPS cannot detect the vehicle position in these instances:

- For the first 5 to 10 minutes after reconnecting the battery.
- When the satellite signals are blocked by tall building, mountains, tunnels, large trees, or large trucks.
- When the GPS antenna is blocked by something on the package shelf.
- When there is no satellite signal output. (Signal output is sometimes stopped for satellite servicing.)
- When the satellite signals are blocked by the operation of some electronic aftermarket accessories.

The precision of the GPS is reduced in these instances:

- When only two satellite signals can be received. (Three satellite signals are required for accurate positioning.)
- When the satellite control center purposely lowers the signal precision.

LCD Display Unit Limitations

- In cold temperatures, the display may stay dark for the first 2 or 3 minutes until it warms up.
- When the display is too hot because of direct summer sunlight, it will remain dark until the temperature drops.
- When the humidity is high and the interior temperature is low, the display may appear cloudy. The display will clear after some use.
- Fingerprints on the touch panel may sometimes be noticeable because of the panel's low-reflection coating. When cleaning the panel, wipe it gently with a soft cloth. To avoid scratching the panel, do not rub too hard.
- The touch panel is an infrared system, so there is no need to press hard. If a touch switch does not function immediately, shift your finger slightly on the switch, and touch it again.

Symptom Duplication

- When the symptom can be duplicated, follow the self-diagnostic procedures (picture diagnosis mode) and the appropriate troubleshooting procedures.
- When the symptom does not reappear or only reappears intermittently, ask the customer about the conditions when the symptom occurred.
 - Try to establish if outside interference may have been the cause.
 - Try to duplicate the symptom under the same conditions the customer was experiencing.
 - Vibration, temperature extremes, and moisture (dew, humidity) may be factors that are difficult to duplicate.

Service Precautions

- Before disconnecting the battery, make sure you have the anti-theft codes for the radio and the navigation system, and write down the frequencies for the radio's preset buttons.
- After servicing, park the vehicle in an area where the GPS satellite signals will be unobstructed, and check the satellite mark on the display.
- When the battery is disconnected, the clock is reset to "0:00." The clock will reset to the correct time after the system receives the GPS satellite signals.
- After reconnecting the battery, you have to wait to get an initial signal from a satellite. This takes about 10 minutes.

Troubleshooting Guide

NOTE: Circles (○) in the table indicate which parts to inspect.

'96 - 99 models:

PROBLEM SYMPTOM	RELATED UNIT, OTHER PROBLEM ITEMS						DIAGNOSIS METHOD						Refer to troubleshooting page
	NAVIGATION UNIT	DISPLAY UNIT	GPS ANTENNA	HARD DISK	AUDIO UNIT	HARNESS	UNIT CHECK	MONITOR CHECK	TIRE-CALIBRATE	SYSTEM LINKS	YAW RATE SENSOR	ELECTRIC CONTINUITY IN HARNESS	
No picture is shown on the display	○	○				○						○	23-398
The picture is missing a color or tone	○					○		○				○	23-400
Display unit buttons do not work		○				○	○	○		○		○	23-401
Satellite mark in the GPS mark is not indicated	○		○				○			○			23-402
Audio driving instructions can't be heard	○				○	○				○		○	23-403

'00 - 01 models:

PROBLEM SYMPTOM	RELATED UNIT, OTHER PROBLEM ITEMS						DIAGNOSIS METHOD						Refer to troubleshooting page
	NAVIGATION UNIT	DISPLAY UNIT	GPS ANTENNA	DVD-ROM	AUDIO UNIT	HARNESS	UNIT CHECK	MONITOR CHECK	TIRE-CALIBRATE	SYSTEM LINKS	YAW RATE SENSOR	ELECTRIC CONTINUITY IN HARNESS	
No picture is shown on the display	○	○				○						○	23-404
The picture is missing a color or tone	○					○		○				○	23-406
Display unit buttons do not work		○				○	○	○		○		○	23-407
Satellite mark in the GPS mark is not indicated	○		○				○			○			23-408
Audio driving instructions can't be heard	○				○	○				○		○	23-409