

Navigation System

Symptom Troubleshooting (cont'd)

GPS icon is white

Diagnostic Test: Navigation System Link

NOTE:

- Make sure the vehicle is parked outside and away from buildings.
- Refer to GPS information (see page [23-46](#)) for real-time satellite reception display.

Before assuming that a GPS antenna reception complaint is hardware related, be aware of the following:

- The GPS signal is extremely weak (about one billionth the strength of a radio broadcast signal received by a radio antenna)
 - If the rear window has been tinted with metallic tint, this can seriously degrade or block GPS reception.
 - Loose items on the rear shelf can block satellite antenna reception.
 - Aftermarket devices like Lo-Jack, remote starters or other electronic devices located near the navigation unit or GPS antenna can potentially interfere with the operation of the navigation and On-Star systems.
1. Check for electronic aftermarket accessories (possibly hidden) mounted near the GPS antenna or the navigation unit.

Are there any electronic accessories?

YES—Disable the accessories and recheck, ■

NO—Go to step 2.

2. Go into the Diagnostic mode and use the "Navi System Link" diagnostic (see page [23-40](#)) to check the GPS antenna.

Is "GPS Ant" icon red?

YES—Use the "Navi ECU" diagnostic under Unit Check (see page [23-43](#)) to check for a kinked, crushed, or disconnected GPS antenna wire. If icon is still red, replace the GPS antenna. ■

NO—Check that nothing is blocking the GPS antenna located under the rear shelf and recheck. Substitute a known-good navigation unit, and recheck. ■