by Kevin D. Murray, CPP, CISM, CFE, CDPSE





Corporations, high-profile individuals and government agencies routinely inspect their vehicles¹ for bugs and GPS tracking devices. These bug sweeps for electronic surveillance devices are typically conducted by professional TSCM services², or in-house specialists³. Professional TSCM inspections, though costly, are actually cheap insurance given the high stakes these groups face.

The average person seeking privacy and security in their own vehicles often find hiring a <u>competent TSCM service</u>⁴ is out of their financial reach. Fortunately, there are alternative solutions.

The types of bug and vehicle tracking devices used for personal surveillance are inexpensive and commonly available. They are usually planted by amateurs who don't have much in the way of spycraft abilities. This makes detecting these devices easier.

Over the years we have found most people are capable of handling the inspection process themselves. The following inspection suggestions will give you an excellent chance of discovering these surveillance devices... economically.

The DIY Bug & GPS Tracker Inspection

Conducting your own inspection may not be as quick and effective as a professional sweep, but it is the cheapest way to begin.

Start by educating yourself. What type of device would be used to surveil you? What might this device look like? The most likely possibilities include...

 A <u>GSM bug</u>⁵ (or cell phone) hidden under the seat or dashboard for eavesdropping.

¹ Limos, aircraft and yachts.

² https://counterespionage.com/what-is-tscm/vehicle-tscm/

³ https://counterespionage.com/in-house-tscm-outsourced-tscm-bug-sweeps/

⁴ https://counterespionage.com/competent-tscm-consultant/

⁵ https://counterespionage.com/gsm-bug-whats/

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- A <u>GPS tracking device</u>⁶ possibly in the trunk under the rear window, or attached with magnets under the vehicle.
- A <u>voice recorder</u>⁷ hidden somewhere near the driver's seat.

Conduct a quick internet search using these keyword phrases. Use the search engine's "images" tab. This will help you identify the devices you are most likely to find.

Searching <u>amazon.com</u> and <u>ebay.com</u> will also show you what is currently being sold, the capabilities, and suggestions for how they can be secreted on your vehicle.

Once you have an idea of what you are looking for, grab a flashlight and mirror, and start looking. Be methodical. Search small areas at a time.

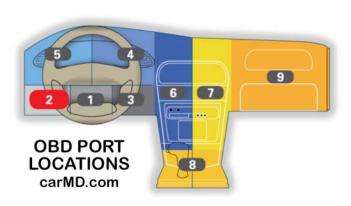
TIP: One of the most popular GPS trackers being sold plugs into a vehicle's OBD port.

The port is usually located near the steering wheel under the dashboard. The most likely positions are numbered in order. Enter your vehicle information at <u>carMD.com</u>⁸ to find the exact OBD port location in your vehicle.

If you find something, don't disturb it. Read "I found a bug! Now what should I do?" 9

If you didn't find anything, or you think there is more than one device being used, you might want some additional help.

No one knows your car or truck better than your auto mechanic. Make an appointment.





OBD PLUG-IN GPS TRACKER

⁶ https://counterespionage.com/worlds-smallest-gps-tracker/

⁷ https://counterespionage.com/worlds-smallest-voice-recorder/

⁸ https://www.carmd.com/obd-port-location/

⁹ https://counterespionage.com/found-a-bug/

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Dealership Bug & GPS Tracker Inspections

Contact the service manager at your dealership or service center. Explain your concerns. Ask to rent a bay and a mechanic for an hour. There are several benefits to enlisting the help of a mechanic...

- They have a lift and can inspect the undercarriage easily.
- They have the special tools and expertise to remove moldings, liners and other plastic parts when necessary.
- They have all the wiring diagrams.
- They may not know what a bug or GPS tracking device looks like, but they certainly know if something doesn't belong there.
- Hiring them is much more cost-effective than hiring a professional sweep team, or purchasing your own detection gadgets.

TIP: Avoid buying detection gadgets. Many are ineffective. Or, if used improperly, can provide a false sense of security or concern, and a less full wallet.

Last Minute Bug & GPS Tracker Inspections

Occasionally we are asked by corporate security directors, "Can my executive protection limo drivers conduct impromptu inspections for vehicle bugs and GPS trackers when you are not available."

Here is the quick overview we provide to get them started. Some of the tips here will help you, too...

Last-minute bug and GPS tracker inspections may be accomplished as long as the person doing the inspection is aware of:

- 1. The most common electronic surveillance threats and how they are deployed.
- 2. Proper physical inspection techniques.



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3. The effective use of a near-field radio receiver and some smartphone apps.

We can teach your employees all three.

General Surveillance Threats to Vehicles

1. GPS Trackers

There are several different GPS trackers of which the driver needs to be aware.

- Real-Time position reporting via a cellular connection. This type of device may also transmit audio and video. Installation is usually permanent, using the vehicle's electrical system for power. Attachment may be almost anywhere on the vehicle.
- Non-transmitting position loggers. These are usually attached externally using a magnet so they can be manually retrieved, or swapped out on a regular basis.
- Interrogated position loggers. Installation is usually permanent; using the vehicle's electrical system for power. Attachment can be almost anywhere on the vehicle. Tracking information is retrieved via lowpower radio interrogation from a nearby vehicle or a passing pedestrian.

2. Voice Recorders - Internally installed and battery operated. Manually retrieved, or swapped out on a regular basis.

3. Voice Transmitters - Transmission may be via a direct radio transmission, but more commonly via the cellular phone network (GSM bug). Less common is the store and burst transmission method. Installation is usually permanent, using the vehicle's electrical system for power. The microphone will be in the vehicle. The transmitter can be located almost anywhere.

Simple GPS Tracker Detection Aids

- Near-field Radio Receivers Examples: REI ANDRE¹⁰, JJN Electronics Ltd. PRO-SL811
- Visual inspection. Flashlight and mirror, or 360° camera to smartphone¹² viewing, to aid in inspecting under the body and dashboard.
 - Smartphone Apps.

(Search Apple's App Store or Google Play)

- Magnetometer. Detects magnets used to attach external devices.)
 - Bluetooth Detector. Detects short range voice transmitters and links between devices.

¹² https://www.threesixtycameras.com/waterproof-360-cameras/



Insta360

¹⁰ https://reiusa.net/rf-detection/andre-deluxe-near-field-detection-receiver/

¹¹ https://www.jjndigital.com/products/pro-sl8/

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GPS Tracker & Bug Prevention Tips:

- Keep the vehicle locked and in a secure parking area, preferably one with 24/7 CCTV.
- The vehicle should be equipped with a cell phone app-connected alarm system.
- Equip the vehicle with a front and rear dashcam which records when parked and motion is sensed.

City inspections are more difficult than suburban inspections due to the abundance of extraneous radio-frequency transmissions. Inspecting in an underground parking facility can help mitigate this.

As mentioned previously, a relationship with a dealership is also a good idea. Rent a bay and a tech for an hour. The have a lift, wiring manuals and tools to remove liners, etc. The tech might not know what a bug looks like, but they sure know if something is not supposed to be there.

Kevin D. Murray CPP, CISM, CFE, CDPSE is a business counterespionage consultant and TSCM specialist with over four decades of experience.

Murray Associates¹³ is an independent security consulting firm, providing eavesdropping detection and counterespionage services to business, government and at-risk individuals.

Headquartered in the New York metropolitan area, a Murray Associates team can assist you quickly, anywhere in the United States, and internationally.



¹³ https://counterespionage.com/about-murray-associates/electronic-eavesdropping-detection/