



2003-2004 Infiniti G35 Sedan Crankshaft Position Sensor Replacement

Use this repair guide to replace the crankshaft position sensor on a 2003-2004 Infiniti G35 Sedan.

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INTRODUCTION

This guide will walk you through the process of replacing a malfunctioning crankshaft position sensor. The reason you would be replacing your crankshaft position sensor is because your car's "check engine" light is on and your car is running poorly. Again you can't conclude you have a malfunctioning crankshaft position sensor until you use a device to read the car's computer system.



TOOLS:

- [Wheel Chocks](#) (1)
- [Jack Stands](#) (1)
- [Hydraulic Floor Jack](#) (1)
- [Flashlight](#) (1)
- [Penetrating Lubricant](#) (1)
- [10mm Wrench](#) (1)



PARTS:

- [Crankshaft Position Sensor](#) (1)

Step 1 — How to Jack Up a Car (or Truck)



⚠ WARNING: Be sure to follow each step carefully. Failure to do so may result in serious injury or death.

- To begin, park your vehicle on a firm, level surface such as concrete or asphalt.
 - ⚠ Never try to raise your vehicle on soft or uneven terrain. If the ground shifts or the jack changes position unexpectedly, you could be seriously injured or killed.
- Make sure the transmission is in Park (or first gear if you have a manual gearbox) and that the parking brake is engaged.
- Switch the ignition **off** and remove the key.

Step 2



- Chock the wheel or wheels opposite from where you will put the jack, to prevent the vehicle from rolling unexpectedly. For example:
 - If you will be jacking up the front right wheel, put the chock behind the rear left wheel.
 - If you will be jacking up the left side of the vehicle, put one chock ahead of the front right wheel and another behind the rear right wheel.

Step 3



- Grab your floor jack and make sure the pressure relief valve is closed. (Usually, you close the valve by twisting the jack lever clockwise.)
 - ⚠ Don't use your vehicle's emergency jack for routine repairs. The emergency jack is for *emergencies*, such as when you need to change a flat tire. A hydraulic floor jack of the sort pictured here is sturdier, more durable, and better suited to general maintenance and repair.
 - ⚠ If your jack leaks fluid or shows other signs of disrepair, stop working and repair or replace your jack before you proceed.

Step 4



⚠ **Locate a secure jack point** in the part of the vehicle that you want to raise.

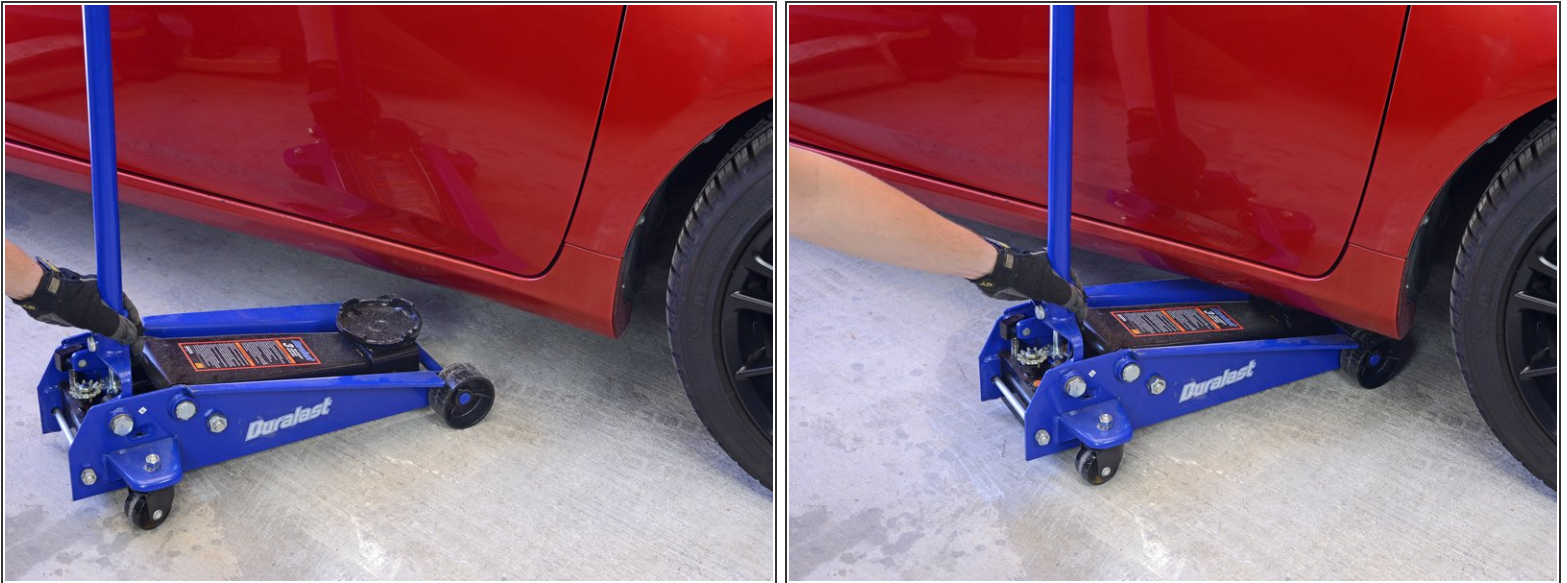
i A secure jack point is either:

- An area designed specifically to make contact with the jack, or
- An area that you know can safely support the full weight of the vehicle, without slipping off the jack.

i Check your owner's manual for the locations of your vehicle's jack points. There is typically one near each wheel. There may be an additional jack point between the front wheels, and another between the rear wheels. **If you're not sure, get some help.**

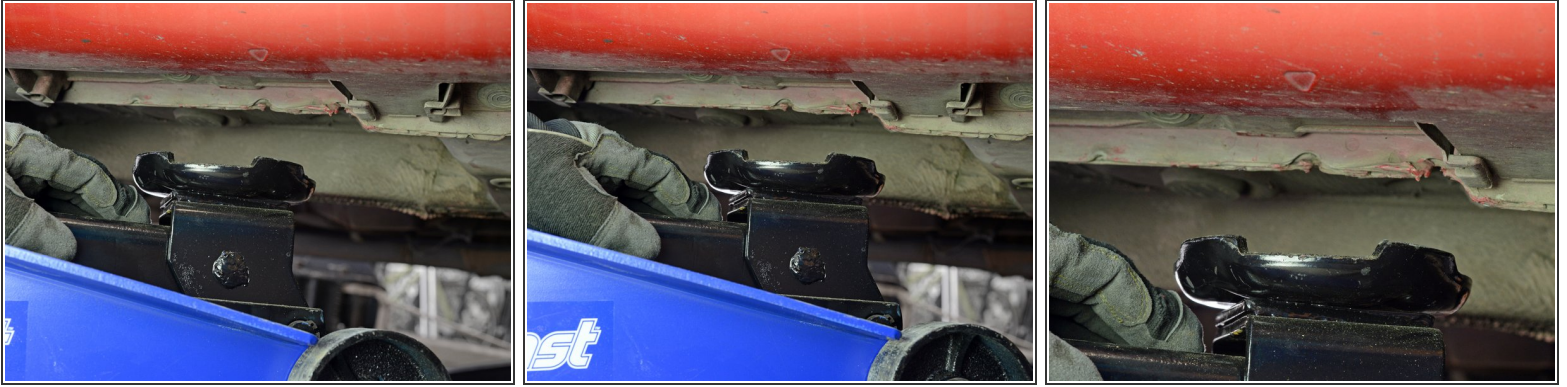
- Do **not** put the jack under a body panel, as shown in this photo. Apart from the obvious damage to the vehicle, this incorrect procedure can injure or kill you. The jack should make contact with a sturdy, unpainted area of the vehicle's frame.

Step 5



- Slide the jack under your vehicle in the area of the jack point that you have chosen.
 - To raise one of the front wheels, position the jack just behind the wheel.
 - To raise one of the rear wheels, position the jack just in front of the wheel.
- ⓘ You can also raise both front (or both rear) wheels simultaneously, [using a jack point midway between the front \(or rear\) wheels](#). Some vehicles have a dedicated jack point for this; in other cases you'll need to position the jack beneath the front or rear subframe.
- ⚠ Be sure to place the jack under the subframe *exactly midway* between the front (or rear) wheels.
- ⚠ **Do not** place the jack under the oil pan, radiator, steering rack, or other non-structural components.
- ⓘ When raising both rear wheels, you may be able to use the rear differential as a jack point. However, this is not always the case and may damage some vehicles—so consult your vehicle's documentation if you aren't sure.

Step 6



- Looking under the vehicle, adjust the position of the jack so that it will make secure contact with the jack point when raised.
- ⓘ In this example, a small arrow in the body panel points to the area of the frame where the jack should make contact.
- ⚠ Keep in mind that the angle of the vehicle will change as it is raised. Position your jack in such a way that it won't slip off the jack point.

Step 7



- Pump the jack handle down and back up repeatedly to begin raising your vehicle.
 - ⚠ It's best to watch the jack where it makes contact with the vehicle to make sure it stays seated properly as you raise it.
- If this isn't practical, pause after raising the vehicle an inch or two and take a quick look to verify that the jack has made good contact with the jack point.
- If necessary, lower the jack back down by slightly opening the release valve. Then close the release valve, and reposition the jack so that it makes better contact with the jack point.
- Continue raising your vehicle until it reaches the desired height—high enough to allow you to put your jack stand(s) in place.

Step 8



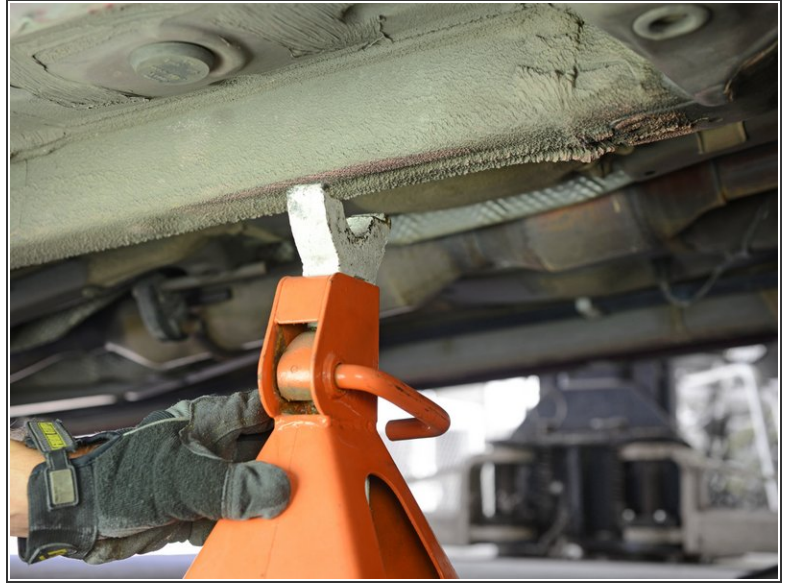
- Slide your jack stand(s) into place near the jack, beneath a secure area of the vehicle's frame.
 - If you are raising both front or both rear wheels, place your jack stands to either side of the jack, near the wheels.
- ⚠ The purpose of the jack is to raise the vehicle, but the jack stand holds the vehicle in place. Be sure to place it in a safe spot that you know can support the weight of the vehicle, without it slipping off the jack stand.

Step 9



- Slowly open the jack's release valve, lowering the vehicle until it comes to rest on the jack stand.
 - ⓘ Once the full weight of the vehicle is supported on the jack stand(s), you can either remove the jack, or leave it in position for later.
- ⚠ If you don't need to use the jack elsewhere, it's a good idea to leave it in place as added insurance.

Step 10



- When you've finished servicing your vehicle, use the jack to raise it back up an inch or so, and remove the jack stand(s).


Step 11



- Slowly open the jack's release valve to lower the vehicle safely back to the ground.
- Remove the jack.

Step 12 — Remove Bolt on Crankshaft Position Sensor



 Make sure the car has not been used in a couple hours. If it has been used recently its parts will still be hot.

- Lay under the car and locate the crank shaft position sensor. The sensor is located between the engine and the transmission near the front driver's side wheel. It is directly behind the rack and pinion.
- Use the 10mm wrench or socket wrench to loosen the 10mm Hex Head bolt attaching the crankshaft position sensor to the car. If the bolt is rusted use a penetrating lubricant to remove the rust.

Step 13 — Remove Crankshaft Position Sensor



- i** Note the correct position of the sensor so you will be able to insert the new sensor later on.
- After you have removed the 10mm Hex Head bolt on the sensor, pull the sensor out of place with some force. (The sensor should pop right out)
 - Unplug the sensor from the wiring harness by squeezing the release clip and pulling firmly on the sensor.

To reassemble your device, follow these instructions in reverse order.