

Frequently Asked Questions

- **How many years has Bosch specialized in Ignition systems and coils?**

For over 100 years Bosch has specialized in the development and perfection of ignition systems and components. This builds on our unique wealth of experience and understanding of the complete engine management system with all its components. Thus, from the earliest phases of development we can configure every detail of all subsystems to work well together, for example the combination of injection and ignition. All important vehicle manufacturers trust Bosch ignition coils, and work with us from the early development stages.

- **Should my BMW ignition coil snap?**

If you've tried to install one of the newly-redesigned Bosch coils for BMWs, part numbers **0 221 504 464/00124** and **0 221 504 470/00044**, you may have wondered why the part did not "snap" into place.

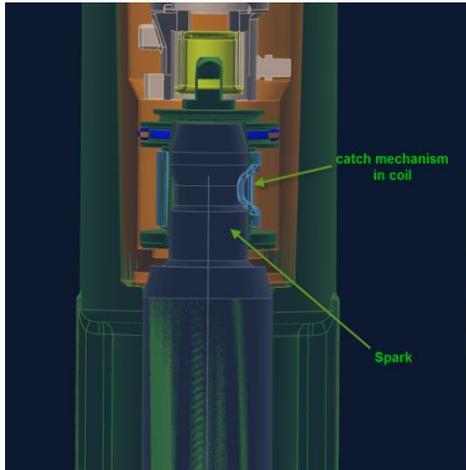
With the newly-designed coil, the customary "snap" previously heard with the old design – giving an indication that the coil had been properly installed – is no longer present. The absence of that sound has raised some concern of a design fault that could cause the unit to fail prematurely causing engine misfire or other issues. Rest assured that this is not the case.

Some technicians thought that the coil was held in place by a connection between the contact bolt of the spark plug and contact inside the coil, and that this "snap" must always be heard. In reality the ignition coil is held in 2 places: 1) by the rubber boot that slips over the ceramic part of the spark plug, and 2) by the sealing lips at the upper end of the coil.

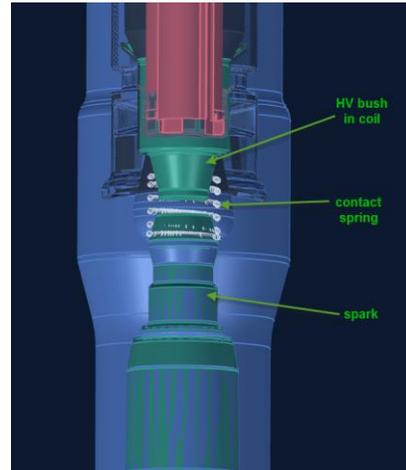
With the newly-designed coil, the customary "snap" is no longer heard nor is it an indication that the coil has been properly installed. This new design does, however, provide better coil performance at the spark plug connection point, which was the area that concerned some technicians. In other words, the original design actually gripped the spark plug tip and felt more secure; whereas the new design uses a contact spring on the spark plug tip and this design may not feel like the connector is gripping the spark plug – but in reality it does the job just as well or better than the old design.

Aesthetically the change of the collar/housing around the coil body from a metallic to a plastic housing, and the spark plug connector are obvious improvements for the appearance of this coil body and provides improvements in fit, form and function as intended by BMW. Bosch and BMW have also used this newer connector design in hundreds of thousands of OE BMW coils in recent years with no performance problems or other issues.

Frequently Asked Questions



Old design coil with catch mechanism producing "snap"



New design coil with HV bush in coil and contact spring

- **What are some of the trouble signs of a bad ignition coil?**

The following symptoms could indicate a bad ignition coil:

- Poor radio reception
- Engine misfiring
- Increased fuel consumption
- Increased loading on other ignition system components
- Poor starting behaviour, especially under cold/humid weather
- Deterioration of emission levels
- Interference of the engine electronics
- Damage of the catalyser (unburned fuel will be burned inside the catalyser)

- **How can you tell if you have a bad ignition coil?**

A bad ignition coil may be indicated by:

- Cracks or damaged sealing lips between the connector/plug
- Corroded connectors
- Parting area breakdown on the plug insulator (evidence of burning/ scorching on the insulator between the plug connector and plug hexagon)
- Porous, cracked or scorched ignition cables
- Pressed out cast mass