

New Bosch Coil Design for BMWs – Where’s the “Snap?”

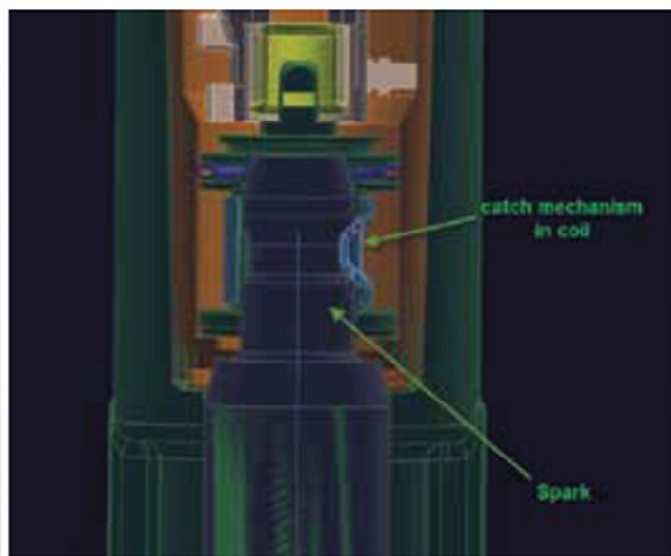
Newly-redesigned Bosch coils for BMWs, part numbers 0 221 504 464/00124 and 0 221 504 407/00044 have had a number of technicians and field installers wondering what happened to the “snap”.

At the center of the concern over the new design connector is that the “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.

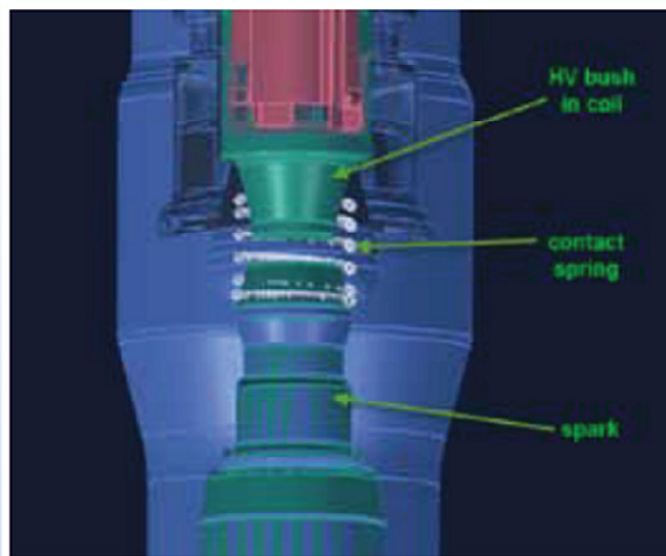
Some technicians believe that the coil was held in place by a connection between the contact bolt of the spark plug and contact inside the coil, and that this “snap” must always be heard. In reality the ignition coil is held in 2 places: 1) by the rubber boot that slips over the ceramic part of the spark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



Old design coil with catch mechanism producing “snap”



New design coil with HV bush in coil and contact spring