

## **BERU IgnitionCoil– Retro fitment of 90 degree angled coils to 2002-2009 model**

**EME Part #** BMW-SCoil855  
**EME Part #** BMW-SCoil856

**BMW #** 12 31 7 715 855, 12 13 8 520 173  
**BMW #** 12 31 7 715 856, 12 13 8 520 174

These BERU coils have a slightly different angle rotation on the electrical terminal connector plug , but will fit the 2002-2009 models with only minor modification to the plastic coil cover.

1) Remove the old coils left and right using normal procedures. To assist removal, use a coil removal tool as available from EME Part # BMW-Scoil248 Tool, or BMW coil removal tool 12 13 7 673 248.

The new Beru 90 degree ignition coil will fit straight into the sparkplug cavity, but note the connector is angled slightly differently from the original position angle.

The coil wiring harness is long enough to accommodate connecting to the new connector position, but is made much easier if the nylon cable tie (ziptie) is cut near the bottom of the harness to provide more coil harness cable connector length from the throttle body to the new angle position.

2) The plastic cover that fits over the lower coils need to be slightly trimmed to clear the new connector angle This can be done with snips, scissors or a rotary cutting tool (Dremel, etc) .

Trim this area on the plastic coil cover



### Trimmed area on right coil cover



3) Re-installation is the same as with original coil, however it must be noted that the trimmed plastic Lower coil covers have to compress the newer type rubber grommets that are part of the new BERU 90 degree coils.

Upon remounting the plastic coil covers, replace all the nylon zip ties that were cut at the bottom of the throttle bodies.

### General Installation Tips:

Due to operating time, heat and aging, the spark plug connector becomes brittle.

As a result, the terminal connection becomes loose in the sealing are of the spark plug, which may cause misfiring, etc...

1) Switch off the IGNITION. Wait for 15 minutes before removing the spark plug coil. This prevents voltage peaks that may damage or destroy the Engine Electronic Control Unit .

2) Remove the defective coil.

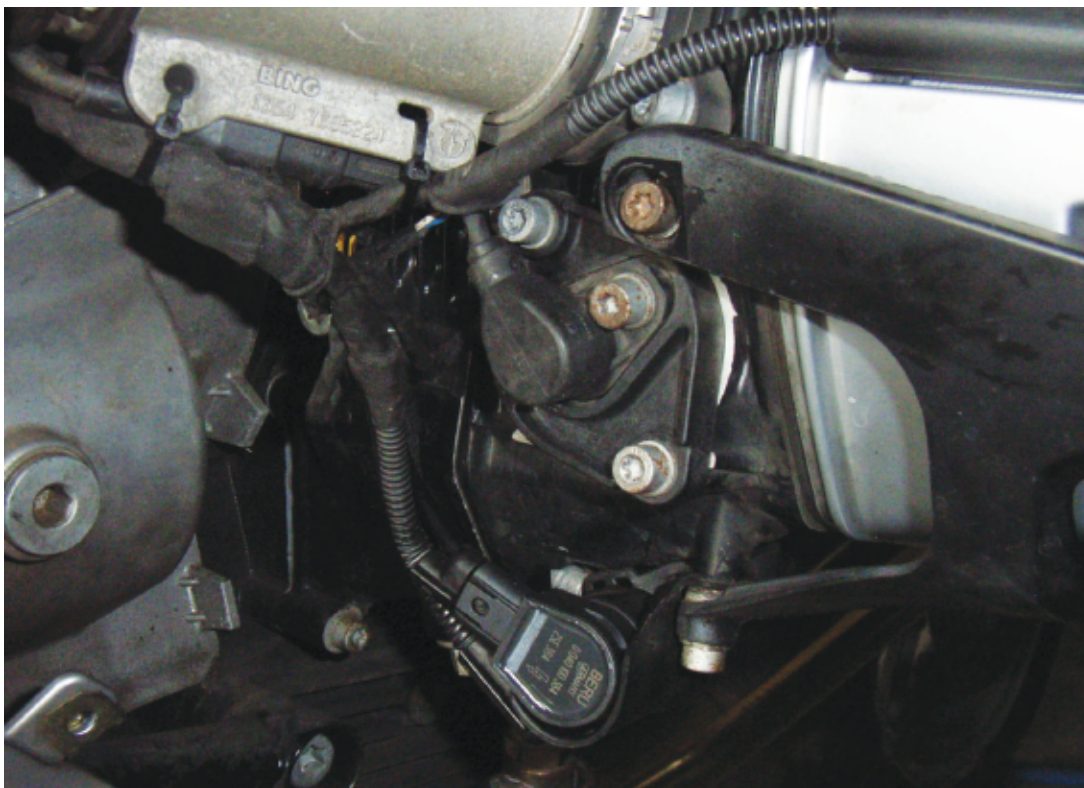
3) Apply a thin film a dielectric grease to the neck of the spark plug, or the inner part of the rubber sealing boot.

4) Re-attach the spark plug coil to the spark plug.

5) Check the primary connector contacts for oxidation and clean if required. Apply dielectric grease for improved continuity and future oxidation prevention.



**Right side coil cover and coil installed**



**Left side coil cover and coil installed**

