Replacing the Crankshaft Position Sensor (CPS)

By onehundred80, September 2011

This is a close up photo of the sensor; it is seen from the driver side (left side) at the rear of the engine.Removal of the Engine Cover makes the work a little easier.

It is best to replace the sensor when the engine is cool, as the exhaust pipe gets very hot in this area.

The first step is to remove the connector; this is done by pushing the latch that is just under the wire at the top of the connector. Pinch the top of the latch towards the opposite face between your thumb and forefinger, with the forefinger on top. Pull the connecter out of the CPS at the same time. This may be the hardest step in the whole process as the force required to pinch the latch is quite considerable and with your arm is down the back of the engine while leaning over the fender it is not exactly too easy.

The view of the underside of the connecter, the latch can be seen on the top face in this view close to the wire.

The connecter is shown rotated 180 degrees out of its normal position.

A close up photo of the CPS with the connecter removed. The wire is retained in the clip at the top of the picture

A photo of the ¼” socket ratchet, 5” extension (flexible one shown) and an E8 Torx socket located on the #8 Torx screw which holds the CPS to the housing. You really will find it hard to see the screw as it is hidden under the sloping CPS.

When the screw comes out, do not drop it, it may fall on the ground but it is just as likely to disappear.

With the screw out, pull the CPS out of its hole, clean around the hole, insert the new CPS and attach with the screw, tightening securely.

A photo of the ¼” socket ratchet

5” extension (flexible one shown)

E8 Torx socket

The new CPS **Brand**: BOSCH
Bosch Item Number: 0 261 210 170
Mercedes Benz #: 003 153 27 28 - Also Replaces 003 153 28 28
https://www.germanautosupply.com/sto...sensor-82.html
Cost $45.50 with free shipping to the US, $32 to Canada.

I keep these items in my trunk just in case the CPS fails while I’m on the road. I never expect to have to use them, as something else will fail instead.