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<i>Ihre Zeichen</i>	<i>Ihre Nachricht vom</i>	<i>Unsere Zeichen</i>	<i>Durchwahl</i>	<i>Telefax</i>	<i>Datum</i>
<i>Your Reference</i>	<i>Your Message of</i>	<i>Our Reference</i>	<i>Extension</i>	<i>Fax</i>	<i>Date</i>
2(12.9.2014)	19.09.2014	ED 14.052	- 0	-147	21.10.2014

Examination report : ED 14.052 5 x PFR7B / 4853
Subject your claim no. 2(12.9.2014)

Dear Mr. Simonen,

as requested, we have checked the claimed spark plugs you sent us with following results:

The ground electrode of the spark plug No. 1 is melted and all spark plugs have been installed with more than 40 Nm which can be judged doubtlessly by gasket thickness of 0.9 mm – 1.1 mm (Recommendation 25 - 30 Nm).

Over torque causes internal deformation with significantly reduced heat dissipation. Together with high vibrations this can lead into electrode breakage or melting. Further reasons for melted electrodes are abnormal combustion (glow ignition or knocking), caused by faulty ignition system, bad fuel quality, incorrect valve clearance, malfunction of sensor system or problems of lubrication.

The spark plug No. 1 itself has no production or material fault (verified by opening it), it shows only the impact of abnormal combustion with incorrect high temperatures (melting point of the electrodes are 1250 degree Celsius, max. allowed electrode temperature is 850 – 900 degree Celsius). The reason for the overheating is independent of the mileage of the car and cannot be judged by us.

The too high tightening torque of the spark plugs No. 2, 3 and 4 may already have damaged the internal structure of them, so we do not recommend the further use.

Because of this we cannot accept this claim. Please find enclosed the complained spark plugs.

Yours sincerely,
NGK SPARK PLUG EUROPE GMBH


Florian Kneer
Product Management Assistant