

Sartor Bros Engineering (Pty) Ltd.

Motor Engineering Specialists

Reg: 1951/004153/07



Powerkote

High Tech Ceramic Coatings

(Pty) Ltd.

Reg: 2002/015096/07

Approved Applicators & Suppliers of Tech Line Coatings USA

195 Booyens Road
Selby, Johannesburg
South Africa

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P.O. Box 38127
Booyens 2016
South Africa

1 March 2012

Halfway Toyota Fourways,
P.O. Box 1427,
Magaliesig,
2067

Att: Oekie

Re: TOYOTA RAV
Reg. No. WYB782GP
Vin No. JTMB31V706086387

This serves to confirm that the above mentioned vehicle's sub-assembly and cylinder head was sent to us for assessment and the following can be noted.

1. The cylinder bores showing signs of ovality and measurer 0.05mm out of round.
2. Piston number two crown showing signs of water deposits on the anti-thrust side in the valve pockets.
3. Piston number four showing signs of irregular carbon deposits due to elevated combustion temperatures.

Conclusion.

It is of our opinion that the motor has been overheated due to a failure of the water cooling system which in turn caused the internal damage to the cylinder bores. As this application is a disposable motor we therefore strongly suggest that the motor be replaced as no warranty can be giving for any repair work carried out on the above mentioned motor.

Should there be any further technical assistance required regarding the motor we would be glad to assist you in this matter.

Kind regards,

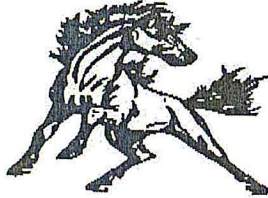
SHAWN SARTOR

Directors G. Sartor, C. Sartor, S. Sartor

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Halfway Toyota Fourways,
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2067

23 April 2012

Att: Clifford.

Re: TOYOTA RAV
Reg. No. WYB782GP
Vin No. JTMBA31V706086387

We refer to a letter dated 1 March 2012 for Orckie's attention regarding the above motor of which we were requested to measure the cylinder bores and make an assessment of the damage that had occurred to the motor. For your convenience we have giving an accurate measurement of all four cylinder bores listed below.

Cylinder bores 1 - 4

Anti thrust to thrust side

Cylinder	Top	Middle	Bottom
1	86.005	86.00	86.00
2	86.01	86.00	86.01
3	86.015	86.01	86.01
4	86.01	86.00	86.00

Front to Rear

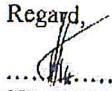
1	85.99	85.99	85.985
2	85.99	86.00	86.00
3	86.00	86.00	86.00
4	85.99	85.99	85.99

Piston measurements are 85.94mm x 1,
85.93mm x 3.

As it can be clearly seen there is definite ovality in the cylinder bores and excessive build up of carbon to the top ring lands to all four pistons which is a clear indication of elevated combustion temperatures which in-turn caused distortion of the cylinder bores which was caused from a malfunctioning cooling system of the motor. As previously stated we recommend that the motor be replaced as this application is a disposable unit and that no warranty can be given to any work carried out to this particular motor.

Should there be any further technical queries regarding the above we would be glad to assist you.

Regards,


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SHAWN SARTOR

Directors G. Sartor, C. Sartor, S. Sartor