DEKRA Automobil GmbH, Stuttgarter Str. 13, 70469 Stuttgart

Premium Vertriebs GmbH Eduard Hartl Rieslingweg 23

74354 Besigheim

DEKRA Automobil GmbH Niederlassung Stuttgart Stuttgarter Str. 13 70469 Stuttgart-Feuerbach

Telefon: 0711/32019-0 Telefax: 0711/3201947

Gutachten - Nr.: 202/2175/1806587436

vom 29.07.2008 Debitoren-Nr.:

GUTACHTEN



DEKRA Automobil GmbH Handwerkstraße 15 D-70565 Stuttgart Telefon (0711)7861-0 Telefax (0711)7861-2240 Sitz Stuttgart, Amtsgericht Stuttgart, HRB-Nr.21039 Ust.-ID-Nr. DE 811297 970 // Steuer-Nr. 99015/01322 Dresdner Bank AG Stuttgart (BLZ 600 800 00) Kto.-Nr. 901 005 100 Landesbank Baden-Württemberg (BLZ 600 501 01) Kto.-Nr.2 019 525

Vorsitzender des Aufsichtrates: Prof. Dr.-Ing. Gerhard Zeidler Geschäftsführer: Dipl-Ing. (FH) Clemens Klinke (Vorsitzender) Dipl-Ing. (FH) Werner von Hebel Dipl.-Kfm. Wolfgang Linsenmaier

1806587436.DOC

DEKRA Automobil GmbH Niederlassung Stuttgart Stuttgarter Straße 13 70469 Stuttgart-Feuerbach

> Expertise No. 202 / 2175 / 1806587436

Dated July 29th, 2008

Translation into English language. You can read the original German text on the German internet page.

EXPERTISE

- Subject: Test of Puncture-Kit Premium-Seal AIO-Motor-truck (According to the manufacturer: Made in Germany
- Inspection at: Forwarding agency Felger, 71634 Ludwigsburg

on July 22nd, 2008

Order placed by: Premium Vertriebs GmbH

on July 17th, 2008

1. Preamble

According to the order dtd. July 17th, 2008 by Mr. Hartl, Premium Vertriebs GmbH, the puncture-kit "PREMIUM-SEAL AIO for Motor-trucks" is supposed to be tested and an expertise has to be issued.

In the expertise DEKRA has to comment on the utilization and usability of the puncture-kit.

This inspection took place at forwarding agency Felger in 71634 Ludwigsburg (Tammer Feld). During this inspection Mr. Hartl and Mr. Felger (temporarily) have been present.

Basis for the preparation of the expertise is the made testing and the instruction manual which is belonging to the sealant (for Neoman-vehicles, Starliner).

The photos which have been taken during the inspection by the undersigned are attached to the original expertise.

1. Expert explanation

2.1 Data of the vehicle

07

2.1 Tested puncture-kit

A puncture-kit with the stated identification PREMIUM SEAL AIO – motor-truck has been tested. 1300 ml have been filled into the tyre.

2.2 Performance of the test

During the made road test there was an outside air temperature of 14°C. The road surface was moist and it was partially raining.

At the beginning of the test the good as new tyre had been punctured with a 10 mm thick "testing nail" in the second tread groove from the inside. For this the tool has been overrun with the tyre resp. the motor truck (see photos 1 to 3). Furthermore the bolt has been removed and the air has been let off the tyre (see photos 3 and 4).

During the subsequent filling-in of the sealant, the damaged spot was at the top of the tyre and the valve at the bottom of the tyre. The valve remover was attached, with it the valve core was unscrewed and then the filling bottle as well as one compressed air hose have been connected. The source of the compressed air was the main power supply of the motor-truck (see photos 5 to 7).

The sealant has been filled in. The time for the filling-in was about 16 seconds. Afterwards the filling-in bottle has been removed and the filling-in of the tyre was continued. As the damaged spot was at the highest point of the tyre compressed air was leaking. After a filling-in time of 6,15 minutes a tyre inflation pressure of 8.0 bar has been reached. The valve core was screwed in and the valve remover was disconnected.

To get the sealant to the damaged spot, the motor-truck drove approx. 15 meter back and forth. When testing with a special spray for scanning leakages it has been proved, that there was no defect in respect to liquid tightness. The sealant had waterproofed the damaged spot (see photos 10 and 11).

Again the tyre-pressure has been checked (8,0 bar) and afterwards a road test took place. The test started at the feeder road to the motorway beginning at Tammer Feld to motorway connector Ludwigsburg-Nord. The turning point was at the motorway connector Leonberg-Ost and then back again. After 17 km an intermediate checking (parking place Engelberg) proved that the tyre pressure was 8,55 bar. When returning resp. after a driven distance of 45 km the tyre pressure was 8,8 bar (by means of the warming up of the tyre). When checking with a special spray for scanning leakages there was no defect in respect to liquid tightness. The tyre resp. the defective part has been leakproof.

During the road-test neither an unbalance nor a vibration at the steering-wheel could be recognized. The tyre was not balanced. Caused by the traffic a speed of 60 to 85 km/h has been maintained on the motorway.

3. Result and Evaluation

The leakage at the tyre – with a diameter of the mandrel of 10 mm – could be successfully sealed with the sealant PREMIUM-SEAL AIO for motor-trucks.

During the road-tests – mainly on the highway – no appearance of unbalance or vibrations have been perceptible.

During the complete time of testing and also at the end the tyre was completely leak-proof. The inspection of the damaged part has been made with a special spray for scanning leakages.

The required time for filling-in the sealant, the time for filling-in the air-pressure into the tyre and the handling of the puncture-kit can be considered positively.

Provided that the tyre has not been damaged by a lesser pressure the use of the tested puncture-kit is considered to be convincing according to the specialist.

4. Summary

This expertise has been issued fair-minded and according to the best of one's knowledge.

202/2175 wsw

The authorized expert:

Dipl.-Ing. (FH)

Kurt Schuhmacher

Enclosures:

11 photos