



Memorandum

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Subject: Test Request: Evaluation of Engine Cooling Fan Failure Date: March 7, 2007

From: Kathleen C. DeMeter, Director *Richard Boyd for* Reply to: NVS-212jfa
Office of Defects Investigation Attn of: EA07-001

To: Michael Monk, Director
Vehicle Research and Test Center

This memorandum requests the Vehicle Research and Test Center (VRTC) to conduct the testing and evaluation as described below.

BACKGROUND: The Office of Defects Investigation (ODI) is conducting an Engineering Analysis (EA07-001) concerning engine cooling fan failure in model year (MY) 2002 Kia Sportage vehicles. ODI has received 10 consumer reports regarding fan blade cracking in the subject vehicles. Six of the reports indicated that the blades of the fan separated causing damage to other engine compartment components. Moreover, ODI conducted a field inspection of three, non-complaint, vehicles offered for sale at local car dealers. The inspection revealed severely cracked fans on all three vehicles.

ALLEGED DEFECT¹: Separation of the fan, fan blades, or pieces thereof, from the engine cooling fan.

OBJECTIVES: The objective of this test program is to evaluate the consequences of blade separation in the subject vehicles. This would include the risk of potential injury to persons working in or otherwise inspecting the engine compartment, as well as, damage to other under-hood components and/or systems.

TEST SAMPLE FANS: ODI will provide VRTC with two sample fans. These fans were obtained from two of the vehicles in the field inspections noted above. The original version of the fan (defective fan) is out of production and is no longer available. Therefore, VRTC will need to obtain an appropriate number of additional test fans (to be determined) by field inspections as well. ODI will also try to locate additional samples.

¹ Alleged defect as described in PE06-042 Information Request letter to Kia.

RECOMMENDED APPROACH: VRTC should prepare a test plan designed to meet the above test objective. A flexible approach may be taken, but the ODI investigator, Mr. John Abbott, should be kept informed of all major developments that might require substantial changes to the original test plan. John can be reached on (202) 366-5221.

REPORTS: A test report shall be provided upon completion of testing.

SCHEDULE: We would like to have the testing completed by April 11, 2007.