

ABSTRACT

An interior vehicle noise quality optimization can only be performed in optimizing the NVH of the different vehicle noise sources with the knowledge and / or modification of the chassis transmission paths. The necessary NVH and sound optimization of the different vehicle noise sources is quite straight forward, however the exact evaluation of the chassis airborne and structure vibration transfer characteristics is much more complex.

Most of the benefits and drawbacks of current available transfer path analysis (TPA) procedures have been reported and discussed last year at JSAE (20075399). Based on further findings and the results published in 20075399, in this publication some TPA optimization strategies will be presented, to increase the accuracy and efficiency of TPA procedures.

Key Words: Passenger car, chassis, acoustic, research