

토크컨버터의 소음저감에 관한 연구 A Study On Noise Reduction of a Torque Converter

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Abstract : This paper presents a case study to reduce noise radiated from a torque converter newly developed for an automatic transmission assembled to a passenger car. It was realized that the torque converter radiated a pure tone noise bothering drivers in the middle of a developing stage. Then, the torque converter was investigated by measuring noise level and noise characteristics with noise measurement instrument. The pure tone noise was dominating the bothering noise and the overall noise including the pure tone noise was much higher than a design standard. Through fluid dynamic analysis for different numbers of impeller blades, there were a proper number of blades to effectively reduce the noise as low as drivers could not recognize the noise in cabin.