Record Nr. UNISOBSOBE00058615 Autore Ben-Ami, Issachar Titolo Culte des saints et pèlerinages judéo-musulmans au Maroc / Issachar Ben-Ami Pubbl/distr/stampa Paris: Maisonneuve & Larose, 1990 Descrizione fisica 260 p.; 24 cm Collana Judaisme en terre d'Islam; 5 Lingua di pubblicazione Francese **Formato** Materiale a stampa Livello bibliografico Monografia Record Nr. UNINA9910734093103321 Autore Nguyen-Schafer Hung **Titolo** Aero and vibroacoustics of automotive turbochargers / / Hung Nguyen-Schafer Pubbl/distr/stampa New York, : Springer, 2013 **ISBN** 3-642-35070-4 1-299-19787-6 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xv, 136 pages): illustrations (some color) Gale eBooks Collana Disciplina 620 620.2 621.4361 621.8/2 Soggetti Automobiles - Motors - Superchargers Lingua di pubblicazione Inglese

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## Sommario/riassunto

Subsynchronous Constant Tone -- Eigenfrequency Modifications to Reduce Constant Tone Level.

Aero and Vibroacoustics of Automotive Turbochargers is a topic involving aspects from the working fields of thermodynamics of turbomachinery, aerodynamics, rotordynamics, and noise propagation computation. In this broadly interdisciplinary subject, thermodynamics of turbomachinery is used to design the turbocharger and to determine its operating conditions. Aerodynamics is needed to study the compressor flow dynamics and flow instabilities of rotating stall and surge, which can produce growling and whining-type noises. Rotordynamics is necessary to study rotor unbalance and self-excited oil-whirl instabilities, which lead to whistling and constant tone-type noises in rotating floating oil-film type bearings. For the special case of turbochargers using ball bearings, some high-order harmonic and wear noises also manifest in the rotor operating range. Lastly, noise propagation computation, based on Lighthill's analogy, is required to investigate airborne noises produced by turbochargers in passenger vehicles. The content of this book is intended for advanced undergraduates, graduates in mechanical engineering, research scientists and practicing engineers who want to better understand the interactions between these working fields and the resulting impact on the interesting topic of Aero and Vibroacoustics of Automotive Turbochargers.