

عنوان مقاله:

Determine the Useful Life of Catalytic Converter and Standard Revision of Technical Inspection Centers

محل انتشار:

مجله علم مهندسی خودرو، دوره 11، شماره 3 (سال: 1400)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Ali Akbar Majidi-Jirandehi - *Department of Mechanical Engineering, Payame Noor University (PNU), P.O. Box. 19395-3697, Tehran, Iran*

Moslem Mohammadi Soleymani - *Department of Mechanical Engineering, Payame Noor University (PNU), P.O. Box. 19395-3697, Tehran, Iran*

Hossein Dehghani - *Department of Mechanical Engineering, Shahid Bahonar University, Kerman, Iran*

خلاصه مقاله:

Today, many car manufacturers can achieve emission standards through catalytic converters. The goals of this research was in tow sections. Initially, the amount of pollutants was measured to determine the role of the catalytic converters in the reduction of pollutants for ۳ types of vehicles and in ۵۰ cases, in the two stages before and after the catalytic converter. Then, to achieve the useful life of the catalytic converter, out of ۷۵۰ test vehicle emissions were tested. Data analysis was done by SPSS software, which shows that catalytic converters can reduce up to ۸۰% of exhaust emissions. This is independent of the type of vehicle. The useful life of the catalytic converters is up to ۳۶ months, so they should be replaced at least every three years. Also, the pollutant standards of the technical examination centers are reviewed. For this purpose, the pollutants have been measured in ۲۲۰۰ vehicles. Due to the huge difference in technology, cars are divided into two main categories of carburetor and injector and are analyzed statistically. Eventually, for each group of these vehicles, the values of HC, CO and O₂ are obtained

کلمات کلیدی:

Catalytic Converters, Pollutants, Pollution standard, Technical Inspection

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1865285>

