

Design for assembly (DFA) analysis of old bicycle tire inflator

Abstract

This Paper is studied on the assembly problem of old bicycle tire inflator in the early stage of product design. During producing a product, the most important decisions are the final cost of the product. The approach based on Boothroyd Dewhurst methods has been implemented in this study to provide a quantitative measure called the design efficiency based on an analysis of a product. The main focuses of this research are to analyze the current design efficiency of old bicycle tire inflator and improved design efficiency. The product was design by using UNIGRAPHIC NX. The components and manufacturing of the old bicycle tire inflator were undergone alteration with the design for assembly (DFA) and redesigned methods.