# 자동차 부품의 최적 해체경로 생성 시스템의 개발

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# The Development of Optimum Disassembly Sequence Generation of Automobile Parts

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**Key Words:** Disassembly Sequence(해체경로), Optimization(최적화), Recycling(리사이클링)

**Abstract :** This paper represents a study on disassembly sequence generation for automobile parts. This is particularly useful because adequate end-of-life disassembly becomes crucial as take-back obligations are imposed for environmental reasons. Therefore in this paper a method is suggested to automatically derive all the feasible subassemblies and feasible actions between them from the assembly modeling files. As a result, in consideration of the all parts and subassemblies the optimum disassembly sequence is generated. And the optimum disassembly sequence for a certain part or subassembly can be also generated.



# 리사이클링을 위한 부품의 해체순서 결정 소프트웨어 개발

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# The Development of Disassembly Sequence Generator of Parts for Recycling

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**Key Words:** Design for Disassembly(해체를 고려한 설계), Disassembly(해체), Recycling(리사이클링)

**Abstract :** Today recycling has been one of the most important issues in industry as it is required to save the limited amount of natural resources and to keep the environment green. In spite of many efforts to increase recycling rate in industry, however, the practical solutions are very limited. The difficulties are caused by the existence of many parts made of diverse materials and their inevitably complicated assembly structures to satisfy different needs. This paper represents a study on the disassembly sequence generator system for parts recycling. With disassembly costs and revenues, the optimum disassembly sequence can be found with a linear programming.