

PROTOTYPE DESIGN COLLECTION

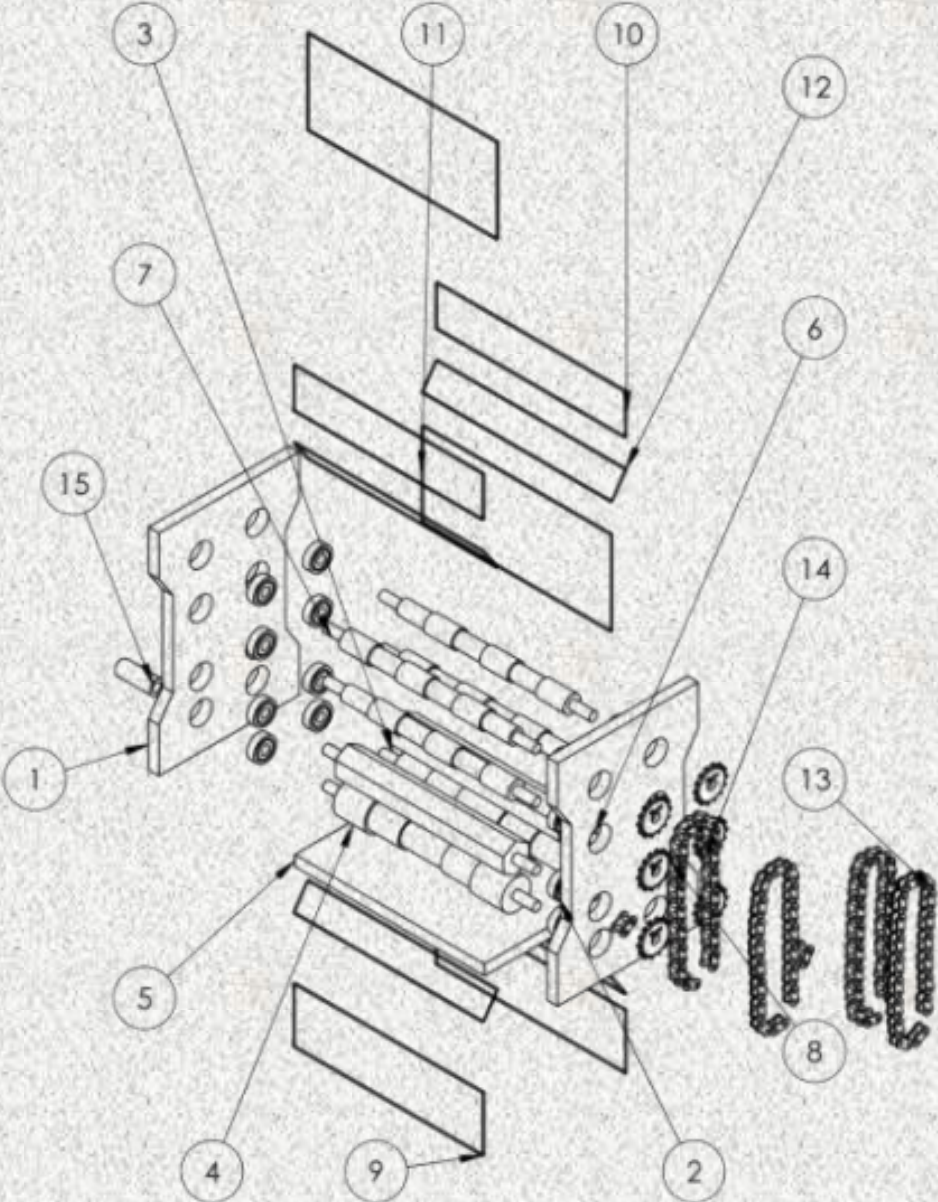
SERIES 4



Universiti Teknologi MARA
Pasir Gudang Campus

Prototype Design Collection

Series 4



Ahmad Najmie Rusli

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FOREWORD

This digital book on Prototype Design Collection Series 4 (PDC Series 4) is published as a reference design for mechanical engineering students. The designs presented experience a few phases of analysis before fabrication of prototype. Each project summarises the project description, prototype, figures, and design parameter. The design products vary in tools or equipment for household, workshop, entrepreneur, etc. Suggested material and detail of prototype dimension are also mentioned in this book.

It is hoped that this book will assist the students to have more ideas on innovation design products in the future.

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CHAPTER 49

Design and Fabrication of Go-kart Front Suspension System

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PROJECT DESCRIPTION

The suspension system is a crucial component of an automotive vehicle, ensuring smooth rides by absorbing shocks while maintaining handling performance and keeping all tires in contact with the road. This project focuses on developing a functional front suspension for a go-kart, selecting the most suitable type to integrate into its frame. Through mock-ups and testing of different suspension types, an optimal choice will be determined. Comprehensive research and evaluation will contribute to enhancing the go-kart's overall performance and ride quality.

Keywords: *Design and fabrication, Front Suspension*

PROTOTYPE



DESIGN PARAMETER

