



IMPROVEMENT OF BODY WELDING ACCURACY PERCENTAGE

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MAY 2010

“I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidate of any degree.”



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ACKNOWLEDGEMENT

Alhamdulillah, I have been blessed in the ability and accessibility given to me in completing this thesis. I would like to express my sincere gratitude and appreciation to my supervisor, Puan Azianti Ismail, and my site-supervisor, En Mazreel Mohamad (Production Engineering Engineer) for their generous guidance, help, encouragement and patience in the duration of the thesis preparation until its completion. Also, thank you to my beloved family encouraging and support me to fulfill the thesis. To my friend Rahmat, Adzly , Fazliana, Shahrizal, En. Hasmizan Hamid (Engineering Ast. Head of Department), En. Shahrul Fadzley (Welding Shop Ast. Head of Department) and everyone who involved and the extreme generosity they have shown me through their help and unconditional care for me. Thank you once again.

ABSTRACT

This project is about the improvement of body welding accuracy percentage of Toyota IMV Hilux. In automotive industry, it is important to get fine and good fitting in assembly part process such as assemble interior trim panel, dashboard, seat, engine and others to follow tolerance and standard require for quality purpose. Therefore, this improvement project is to reach good body welding accuracy percentage in Welding Shop before entering Assembly Shop. Four M elements method: Man, Method, Machine, and Material have applied during the study and observation body welding accuracy percentage problem. Three major problems have been highlighted which are welding process, welding jig accuracy and welding jig total preventive maintenance (TPM). Body measurement by co-ordinate measuring machine (CMM), welding jig measurement by portable measuring machine (Vectoron), welding panel/part color map measurement by scanning machine (Perspectoron), design and drawing by Autocad software, kaizen welding standard operation process (SOP) and setup Total Preventive Maintenance (TPM) Welding Jig Team have been covered to improving body welding accuracy percentage. High body accuracy percentage achievement is important to avoid problem of trim panel assemble in assembly shop or assembly line. The benefit from this project is to eliminate problem regarding jig and body fitting that means to achieve or reduce complete vehicle defect production unit (CV DPU). The most important things of this project are to give better services to increase quality, manufacturer productivity and also to decrease production cost.

TABLE OF CONTENTS

	CONTENTS	PAGE
	ACKNOWLEDGEMENT	
	ABSTRACT	ii
	TABLE OF CONTENTS	iii
CHAPTER I	INTRODUCTION	
	1.0 Background	1
	1.1 Problem Statement	2
	1.2 Objective	2
	1.3 Scope of Work	3
	1.4 Significance of Project	3
	1.5 Project Methodology	4
CHAPTER II	LITERATURE REVIEW	
	2.0 Toyota Production System, TPS	5
	2.1 Total Preventive Maintenance, TPM	5
	2.2 Total Quality Management, TQM	6
	2.3 Spot Welding	6
	2.4 Autocad, CMM and Vectoron	6
	2.5 Jig and Fixtures	7