



TESTER MACHINE FOR TORSION BAR SAMPLE

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ABSTRACT

The project of 'Tester Machine for Torsion Bar Sample' has been carried out by the final year student of Bachelor Engineering (Hons) Mechanical under supervision of Prof. IR Iskandar B. Abdullah. The purpose of this project is to understanding the concept of the linkage mechanism and also how to design and fabricate the portable size of the tester machine. The project has started with collecting and gathering information process through several sources like books, internet and also by referring to the available machine whether in the market and also referring to other high level institution. This is the first designing of the testing machine has been designed. This is because; every testing machine in current markets just tests the maximum torque only. My testing machine is to find the life cycle of torsion bar in actual condition. The developing of the drawing of the actual design has been done by CATIA V5R10 software. The process of the fabrication of the tester machine has been done at the mechanical workshop and several processes are applied like machining, drilling, welding and many more. Several aspects like aspect of cost and choosing the right material to use has been considered in term to reduce the cost and also to make sure the machine can be used in a long time of period.

CHAPTER 1

INTRODUCTION

1.0 Introduction

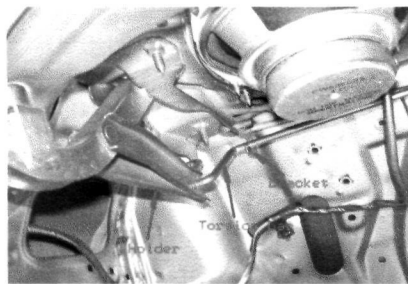


Figure 1-1: Fitting of torsion bar in car boot

This project of fabrication of Tester machine for Proton Wira's torsion bar sample has been proposed by En. Rosdi Meor B. Endut to me as my final project topic. En. Rosdi Meor B. Endut is a Chief Executive Officer (CEO) for ESOCORP Sdn. Bhd. ESOCORP Sdn. Bhd is one company was supply the torsion bar to Proton Manufacturing. The torsion bar is one mechanism to open and close the car boot. The type of car is using the torsion bar such as Proton Saga, Proton Wira and Proton Waja. The company's quality inspection for torsion bars is torque test only. Therefore, they want to add the testing specification with test the life cycle of torsion bar sample was their produced.