ABSTRACT


The main purpose of this research is to create diagnostics with dyno LPS ZW 500 based on tractor T 25A. In order to compare the impact of five dissimilar winter diesel fuels on engine parameters, fuels are bought from different suppliers from Tartu. Fuel parameters are also tested on a similar engine at EMU motor testing laboratory.

The research work is divided into six chapters. The first chapter gives an overview of testing technology and testing classification. It also includes the purpose of the thesis. In the second chapter, there are theoretical foundations of testing wheeled tractors. The third chapter explains the choice of the testing object and the environmental conditions. The fourth chapter discusses the results of the research work. The fifth chapter introduces the safety requirements for testing with dyno LPS ZW 500. The constructive side of the research is presented in the sixth chapter. The constructive part deals with the design of accelerator linkage.

Key words: Dyno, LPZ ZW 500, tractor T 25A, diagnostics technology, winter diesel, fuel, fuel consumption and power, characteristics.