

A PROJECT REPORT ON

Exhaust Powered Automobile AC System

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GOVERNMENT POLYTECHNIC, AURANGABAD

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Certificate

This is to certify

Sonukale Kaustubh Ravindra (162355)

the student of Final Year Diploma Programme in Mechanical Engineering from Government Polytechnic, Aurangabad, has successfully completed the Project work entitled

“Exhaust Powered Automobile AC System”

in the partial fulfillment for the award of diploma in MECHANICAL ENGINEERING as prescribed by Government Polytechnic, Aurangabad during the academic year 2017 – 2018.

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Abstract

Exhaust Powered Automobile Air Conditioning System

In the existing automobile Air Conditioning system, the Air Conditioning Compressor is powered by Engine Crankshaft which consumes engine energy resulting in increased load on engine thus increasing fuel consumption.

Our Project aims at decreasing the load on engine. To achieve this, we are going to use engine exhaust power to run a turbine.

The turbine is mounted on Exhaust Manifold. A Pulley is mounted on the turbine shaft. The turbine rotates when the exhaust from the engine strikes the blades. This power is used to run the Air Conditioning Compressor by using a belt-drive.