

FINAL YEAR PROJECT REPORT

EMISSION OF EXHAUST SYSTEM (EXHAUST POLLUTANT)

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ABSTRACT

Pollution is a well-known thing that can destroy the environment. Therefore, this project, which is more to vehicle exhaust emission, will tell what, how the pollution create by this system.

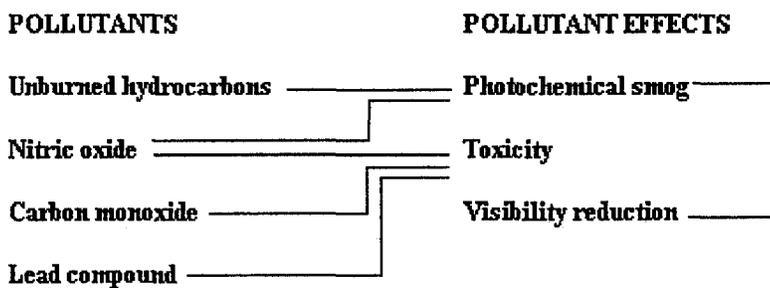
First, the pollutant and the formation of pollutant are studied. Research was made to get information about emission system and pollutant. Furthermore, gases are studied. In addition, studied was made at PUSPAKOM. At PUSPAKOM we got to know how to detect and read the emission of the exhaust system and what are the cause of the emission if not in the specific level and what are the specific level. Furthermore, what are the adjustment must be done is recognized.

Then, types of vehicle are explained and how is the engine works or operates and what are the products of emission. Finally, minimizing the pollution create by vehicles so that it will be environmentally friendly.

INTRODUCTION

There are three sources of emittants from most of automotive vehicles. Emittants from the crankcase on all new vehicles have been led back to the carburetor and burned in the combustion chamber, starting in 1961 in California and in 1964 nationwide. Fuel evaporation controls were put on all new cars in 1970. These fuel evaporation controls were store and then, later during subsequent engine operation, burn in the combustion chamber most of the fuel vapors from the fuel tank and carburetor. Thus the primary emittant source from the automotive vehicles is in the exhaust.

SPARK IGNITION GASOLINE ENGINE



Pollutants and their harmful effect

The primary energy source for our automotive vehicles is crude oil from underground, which typically contains varying amounts of sulfur. Much but not all the sulfur is removed during refining of automotive fuels. Thus, except for a limited number of engines, the final fuel is hydrocarbons with only a small amount of sulfur. If for the moment we neglect the sulfur and assume perfect and complete combustion only water and carbon dioxide would appear in the exhaust.

Automotive vehicle emissions which are usually considered to be pollutants are exhaust, crankcase vents and evaporation loss from the carburetor vents and fuel tank vents, and the basis on which they are considered pollutants. Other emissions such as hydrogen, for