

SUMMARY

This thesis project is aimed to all students and teachers of Engineering in Automotive Maintenance, the purpose is to provide the practical knowledge that we such us the authors of this project have, which we want to share and contributing to the construction of practical knowledge of a system Electronic fuel injection and how to make effective diagnosis using the techniques and tools available in the automotive mechanical workshops of the Tecnica del Norte University.

For the realization of this project was acquired a vehicle from 1997 Chevrolet Esteem which have the injection system in perfect condition, then we determined the location of the sensors and actuators to determine the materials and tools needed to build a board same fault simulation is built on a sheet of acrylic and located on the bonnet of the vehicle with switches that are connected to the output signal cables from the sensors and actuators to be interrupted which generate a fault code that is manually diagnosed or with an auto scan, then of generate an anomaly in the electronic injection system we work with a guide designed to effectively diagnose and solve automotive failures, additionally included in the draft a technical manual for this model vehicle, which shows competently the steps to perform after the diagnosis, an effective repair in a practical way to strengthen the knowledge of students in this career contributing to the academic quality that the Tecnica del Norte University must offer their students.