Vehicle air conditioning system Dr.S.S.Khandare, Automotive consultant

Abstract:

This is paper on study and analysis vehicle air conditioning system. The most of the vehicles are air conditioned especially because of the reason that during day time vehicle travel and solar radiations are received by them. Hence the cooling systems becomes essential for the comfort of the passenger and especially the drivers.

This paper analyses various types of cooling load on the vehicle during the motion of vehicle and highest amount of cooling load consists of the cool down load and normal maintenance load. There are variety of system which can be used for cooling purpose like vapour compression, vapour absorption etc. These system are studies for the vehicle air conditioning system. The various types of refrigerant and their effect on COP of the system is analysed and it is found that R534 provides the highest COP and is suitable for vehicle air conditioning system.