

DOC'S BLOCKS
AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

What is retrofit and what refrigerant should be used?

Answer:

Air conditioning and retrofit terms came into being when it was determined that refrigerant 12 harmed the ozone. That meant changing from R-12 to some other refrigerant. Retrofit means that a unit is altered one way or another to function differently or with a different chemical than it was designed for. Although there were rules established early on outlining what was to be done to retrofit a system, much has changed sense then.

The refrigerant of choice by the industry is R134a. The government has approved several blend type refrigerants.

Many sources in the industry try to convince others that one refrigerant is better than another. This is not true. All refrigerants are good and one is no better than the other. A refrigerant boils at a specific temperature. There pressures may vary from one compound to another but still perform the same. The only real differences are the oils that are used with each refrigerant and the amount of refrigerant that is put into the system for it to perform. If the engine can carry the load and the compressor will operate with the refrigerant used, that is all that is necessary.

Opinions about which refrigerant is best to use, will vary. The companies producing the blends may state that all that has to be done is remove the R-12 and install their refrigerant. The industry states when changing over to R134a, the oil in the system should be removed, the receiver dryer or accumulator replaced, and a pag or ester oil must be installed. This sounds expensive but it could turn out to be the least expensive. Sometimes when things sound simple, people tend to take to many short cuts.

No refrigerant will work well if the necessary procedures of preparing the system for service were not followed.

No recommendation is implied on which refrigerant to use.