

Hoses rebuilt / restoration

Let's now deal with the Freon hoses. Since the car had a front end collision, two hoses were required to be built - hose connecting condensers and right condenser to drier filter. The rubber element of those two hoses was ruptured from the accident but fortunately the pipes were intact. So, upon showing the hoses to the A/C shop it was very easy for them to manufacture new hoses.

A few words about Freon hoses: Hoses designed for use with R12 are incompatible with R134a since the molecule of R134a is somehow "smaller" than that of R12 so there is a tendency for R134a to "escape" from the rubber hose. However, old R12 hoses which have been used for quite some time do not suffer from this issue since a layer of protection has been created in the internal surface of the hose due to the circulation of mineral oil used in R12 systems. This natural barrier formed, prohibits the permeation of R134a molecule to escape to the atmosphere.

So in my case of new hoses manufacturing, R134a rubber hoses were used.



Here you see the hose running from compressor to left condenser. It survived the accident and portion of the condenser was left over



Newly manufactured hose connecting left and right condenser. Notice the designation for use with R134a



New hose connecting right condenser to drier filter.



The metal pipe from the original hose was preserved and new R134a hose was used. Notice the welding done in order to adopt new hose and old pipe



Close up of the new fitting hydraulically crimped to the hose. It surely looks like new.



Overview of the hoses. Not showed on the photo is hose running from drier filter to evaporator.