

AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

Should the air conditioning be turned off each time the engine is turned off?

Answer:

On early automobiles, the radio and air conditioning had to be turned off to keep the battery from going dead when the engine was turned off. When the ignition switch was moved from the dash to the steering post, it was no longer necessary. Turn off the ignition switch and all accessories turn off.

The compressor is a pump that uses reed valves and is not designed to pump a liquid. Liquids don't compress. When the compressor is at rest, liquid refrigerant and oil are in the compressor. The first time the unit is turned on after it has not been used for several hours, should be done at engine idle. This will clear the compressor of liquid without damage.

The problem is not when the unit was turned off. It is when the AC is turned on that first time. Once the compressor has been run, the clutch will cycle in and out, which turns the compressor on and off.

This will do no harm. If the system is off and the vehicle is being driven, if the AC is then turned on, the compressor clutch will turn the compressor at the same speed as the engine. It will try to compress a liquid and will, in time, destroy the compressor.

Leave the AC on, if it is being used, when the ignition switch is turned off. Turn the AC off after the vehicle is started again if it is too cool. If later, AC is needed, turn it on at any speed.

Many cars today have installed switches that turn on the compressor when the engine is started and runs for a few seconds, even if the AC is off.

Turning the AC on and off ensures the switches will wear out and it exercises the fingers.