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100% Effective Natural Hormone Treatment
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!

A Cars HVAC System

By Kevin Schappell

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Not only do we depend on our cars to get us where we want to go, we also depend on them to get us there without discomfort. We expect the heater to keep us warm when it's cold outside, and the air conditioning system to keep us cool when it's hot.

We get heat from the heater core, sort of a secondary radiator, which is part of the car's cooling system. We get air conditioning from the car's elaborate air conditioning system.

Despite its relatively small size, the cooling system has to deal with an enormous amount of heat to protect the engine from friction and the heat of combustion. The cooling system has to remove about 6,000 BTU of heat per minute. This is a lot more heat than we need to heat a large home in cold weather. It's good to know that some of this heat can be put to the useful purpose of keeping us warm. Air conditioning makes driving much more comfortable in hot weather. Your car's air conditioner cleans and dehumidifies (removes excess moisture), the outside air entering your car. It also has the task of keeping the air at the temperature you select. These are all big jobs. How do our cars keep our "riding environment" the way we like it?

Most people think the air conditioning system's job is to add "cold" air to the interior of the car. Actually, there is no such thing as "cold," just an absence of heat, or less heat than our bodies are comfortable with. The job of the air conditioning system is really to "remove" the heat that makes us uncomfortable, and returns the air to the car's interior in a "un-heated" condition. Air conditioning, or cooling, is really a process of removing heat from an object (like air).

A compressor circulates a liquid refrigerant called Refrigerant-12 (we tend to call it "Freon," a trade name, the way we call copy machines "Xerox" machines). The compressor moves the Refrigerant-12 from an evaporator, through a condenser and expansion valve, right back to the evaporator. The evaporator is right in front of a fan that pulls the hot, humid air out of the car's interior. The refrigerant makes the hot air's moisture condense into drops of water, removing the heat from the air. Once the water is removed, the "cool" air is sent back into the car's interior. Aaaaaah! Much better. Newer cars have R-134 as the refrigerant, but work in the same way as R-12.

Sometimes we worry when we catch our car making a water puddle on the ground, but are relieved to discover that it's only water dripping from the air conditioning system's condenser (no color, no smell, and it dries!).

Note: Refrigerant is extremely dangerous. Many special precautions must be taken when it is present.

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It can freeze whatever it contacts (including your eyes), it is heavier than air and can suffocate you, and it produces a poisonous gas when it comes in contact with an open flame.

The above information is directly from the Auto Insight program, which you can buy online from AutoEducation.com.

Common Problems:

·From time to time the A/C system needs to be recharged to bring it back up to maximum efficiency. Sometimes a leak may cause loss of refrigerant and will need to be fixed before refilling. It's difficult to tell if a leak is present without specific test equipment so let it up to a professional.

·Corrosion will cause the heater core (secondary radiator) to leak. This will manifest itself by leaving steam into the passenger compartment and fogging your windows. You will know there is a leak by the sweet smell coming from your vents. Unfortunately changing the heater core is usually not the easier

job in the world, as engineers tend to squeeze them into some pretty tight spaces under the dash.

Kevin Schappell maintains <http://www.carbuyersclub.com> where he gives advice on buying, selling, insurance, and financing. A mechanical engineer and car guy, Kevin has decided to spend his online time helping others learn about automobiles. To learn more about how your car works, Kevin has created <http://www.mycarwizard.com>

Is The Central Air Purifier System Better Than Individual Room Purifiers

By Michelle Winters

If you are trying to be economic, you are best advised to not try to maintain a central HVAC equipment and a whole house air purifier simultaneously. Unless you have money to waste, you had better use those hard earned bucks to get other equipments for improving the quality of the air in your house.

A HVAC (or rather a Heating Ventilating, Air Conditioning) system shares your home's central blower and ductwork. So unless you keep it squeaky clean and dust free it will sprout these irritable elements into the very air you breathe. And, this won't change even if you add a swanky, pricey upstream filter system. Most HVAC air purifiers are fixed before motors and fans in order to save them (the latter that is) from large granular stuff. Their function therefore is not as an air cleanser. In fact they are not even equipped to purify your air; they have a meager 1000 cu. Foot/minute airflow, which is not a good enough speed to really cleanse your air. The air flow at each of its duct is only as high powered as a tiny fan!

The air from your whole house system does not blow quite the same everywhere. It chooses to flow through areas where it receives the least obstruction. Cool air has an affinity towards the lower part of the room, and therefore completely avoids the upper parts, especially the little corners. Wherever there is a little niche or cubbyhole it deposits dust and dirt. So entire house might be getting a number of air changes per hour, ultimately the lower part receives dirty air.

Imagine a flowing river with plunging bank cuts and tiny rapids. Consider what its speed will be if it is

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followed by lazy flats complete with sandbars. This is what your HVAC is like, full with rapid airflow and all, but ultimately not a very efficient air cleanser.

As a part of whole house purification system an HVAC blower has to function all the time. Most HVAC's used at homes are not built to be strong enough to pull in the air through the well shut HEPA filter. Thus it must be ensured that they aren't over run and in the process heated overtly. This is, however, unavoidable incase if your furnace filter is built of fiberglass and is kept unclean.

Another serious problem with HEPA is their habit of creating heavy static backpressure. Thus, they cannot be fixed directly into the regular residential system. To solve this problem therefore, vendors include an expensive bypass vent circuit and much stronger secondary purifiers. Most partial bypass systems are incapable of performing their required functions to the extent necessary. Therefore dirty air easily flows through the main duct.

Before buying and fixing a whole house air purifier make sure the air ducts in your system is cleansed out rigorously.

Given that we are not required to see or hear it regularly, we tend to bypass all thoughts of our air conditioning systems completely from our minds. Let's be objective, obviously a whole house air cleaner is preferable to a portable air cleaner. Consider, suppose your portable air cleaner suddenly starts malfunctioning then you take it to your vendor asap. This doesn't come in the way of your house's heating or cooling which continues despite the air being unclean. On the other hand a minor glitch which you probably look beyond in case of a whole house system becomes a reason for you to run to your vendor in case of a portable system.

If you want to improve the quality of the air in your house reasonably try and get rid of all toxic sources. Make sure your ventilation is channelized plausibly and circulation is truly possible. Regularly clean your HVAC system, and don't leave out any pan duct or coil. Keep replacing your furnace filters with the latest ones. Also, try and use premium chemical-capable portable room air-purifiers in your bedrooms.

If you still have money to spare spend it on getting a central vacuum system for your entire house. This will spit out all the dirty air in your house right outside. Else get yourself a quality sealed HEPA filter vacuum cleaner. With additional money where available, consider installing a central vacuum system for the whole house, which exhausts 100% of all dirty air outside. Or choose a quality sealed HEPA filter vacuum cleaner.

Michelle Winters is a home owner and contributing author. See more articles at



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