

Technology Forecast

Routine Maintenance Made Easy

Hook up the equipment. Push a button. This two-step process could soon be the one to follow for routine air conditioning (AC) maintenance. A computer-operated machine would recover old AC refrigerant and recharge the system with new.

Here's how it would work. The computer would read a vehicle identification number (VIN) bar code that identifies the production year, make, and model. This information would then be used to indicate what type and amount of refrigerant is required with the particular car or truck.

The computer would even be able to determine whether the vehicle is a minivan or conversion van with an auxiliary air conditioner that needs additional refrigerant. Similarly, it would prevent too much refrigerant from being added.

There are other benefits to this setup. Before the equipment adds refrigerant, the computer would pressure-test the air conditioning system for leaks. It would tell the technician approximately how large the leak is and where to look for it. Any needed repairs could then quickly be made.

Another advantage to this computer-aided equipment is that it would offer Internet access for system updates. When vehicle manufacturers make improvements to their air conditioning systems, the new software could automatically be downloaded and installed.

Action Activity

Visit a local vehicle maintenance and repair facility to find out about special requirements for maintaining AC systems. What technician training or licensing is required? How must refrigerant be handled? How are AC systems currently tested and recharged? What are the benefits of a computer-operated system for AC maintenance? Present your findings to the class.