United States
Environmental Protection
Agency

EPA/400/F-92/002 April 1992

⊕EPA

Office of Air And Radiation (ANR-445)

Help Protect The Ozone Layer

Recycle The Refrigerant In Your Car's Air Conditioner Seek Professional Service
 Insist on Recycling or Recovery
 Repair -- Don't Just Refill

Service shops are now required by law to recycle refrigerant. You can help save the ozone layer by getting professional vehicle service at a shop that uses recycling equipment. Please do not ask your mechanic to refill a leaking system. Merely refilling a leaking system is an unnecessary waste of refrigerant. Repair of your leaking vehicle air conditioner conserves CFCs, helps reduce the depletion of the ozone layer and protects the environment for our children

Our Threatened Ozone Layer

The stratospheric ozone layer shields the earth from harmful ultraviolet radiation. Certain man-made chemicals are destroying stratospheric ozone. This loss of ozone in the upper atmosphere may lead to an increase in skin cancer and cataracts and could damage the human immune system. It could also reduce crop yields and harm plant and animal life.

Impact of Air Conditioners

Scientists worldwide have concluded that chemicals called chlorofluorocarbons (CFCs) deplete ozone in the stratosphere. CFCs are used in the manufacturing of many products, such as foam insulation, electronics equipment, and refrigerators. One of the single largest uses of CFCs in the United States is as a refrigerant in automobile air conditioners. Once released, the CFC refrigerant stays in the atmosphere for over 120 years.

CFCs are commonly released into the air when car or truck air conditioners are serviced. When CFCs reach the stratosphere, the molecules break apart. This process releases chlorine, which attacks the ozone layer. A single chlorine atom can destroy over 10,000 ozone molecules.

Protecting the Ozone Layer

Much of the ozone damage caused by mobile airconditioner refrigerants can be prevented if service shops recycle the refrigerant instead of releasing it into the air. Mechanics can use a machine to pull the refrigerant from the air conditioner into a holding tank and filter it. Refrigerant properly treated in this way is clean enough for reuse in automobile air conditioners. Under Section 609 of the 1990 Clean Air Act, motor vehicle air conditioning repair shops can not release refrigerant to the atmosphere.

Ask your service shop operator to show you the seal of approval on the recycling machine. Certification by a qualified testing laboratory, like Underwriters Laboratories (UL), means the recycled refrigerant placed back in your car or truck from a properly maintained and operated recycling machine meets industry standards. These standards resulted from strict tests performed by the automotive industry and the Environmental Protection Agency (EPA). Refrigerant recycled by approved machines does not affect your new car warranty.

How Changes Affect You

The United States and 75 other countries have already agreed to halt production of ozone-depleting chemicals by 2000, and an earlier phase-out is likely. The 1990 Amendments to the Clean Air Act will also ban non-essential uses, mandate recycling, label products made with or containing ozone-depleting compounds, and evaluate the safety of new alternatives. It is also likely that prices of refrigerants or alternative refrigerants will increase.

Recycling of CFC used in motor vehicle air conditioning is required after January 1, 1992 (for shops servicing fewer than 100 vehicles, January 1, 1993). Recycling equipment and operators must be certified. After November 15, 1992 only certified mechanics will be allowed to purchase small cans of CFC. Recycling requires special equipment and may take a little extra time, so some costs of servicing car or truck air conditioners may rise. But by recycling, you will need less new CFC, so replacement refrigerant costs will be reduced while you are helping to protect our environment. The overall cost of servicing your car will depend on local circumstances.

You may be one of those people who has saved money by "doing it yourself" - working on your own car or truck to replenish the refrigerant that leaks out of the air conditioner. One other benefit of professional service is that you will avoid improperly charging your system. Lack of proper service can result in poor cooling and can damage your car or truck air conditioning system. In the long run, recycling may save you money by helping you avoid costly repairs.

Support for Recycling

These groups endorse CFC recycling in mobile air conditioners:

Motor Vehicle Manufacturers Association (MVMA)

Members: Chrysler Corporation; Ford Motor Company; General Motors Corporation; Honda of America Mfg., Inc.; Navistar International Transportation Corp.; Paccar Inc.; Volvo North America Corporation

Automobile Importers Association (AIA)

Members: BMW of North America, Inc.;
American Honda Motor Company, Inc.;
Hyundai Motor America, Inc.; Isuzu Motors of
America, Inc.; Jaguar Cars, Inc.; Maserati
Automobiles, Inc.; Mazda Motors of America, Inc.;
Mitsubishi Motor America, Inc.; Nissan Motor
Corporation U.S.A.; Peugeot Motors of America, Inc.;
Porsche Cars North America, Inc.; Rolls-Royce
Motor Cars, Inc.; Rover Group USA, Inc.;
Saab-Scania of America, Inc.; Subaru of America, Inc.;
American Suzuki Motor Corporation; Toyota Motor
Sales U.S.A., Inc.; Volkswagen of North America, Inc.;
Volvo North America Corporation

Other Automobile Manufacturers

American Society of Heating, Refrigeration, and

Alfa Romeo Distributors of North America; Aston Martin Lagonda Limited; Audi of America, Inc.; Austin Rover; Daihatsu Motor Co., Ltd.; Excalibur Automobile Corporation; Freightliner Corporation; Grumman Olson; Mazda Motor Corporation; Mercedes-Benz of North America, Inc.; Yugo America, Inc.

Air Conditioning Engineers (ASHRAE)
Automotive Refrigeration Products Institute
Automotive Service Association (ASA)
Environmental Defense Fund (EDF)
Friends of the Earth (FOE)
International Mobile Air Conditioning Association (IMACA)
Mobile Air Conditioning Society (MACS)
National Institute of Automotive Service Excellence (ASE)
Natural Resources Defense Council (NRDC)
Society of Automotive Engineers (SAE)
Underwriters Laboratories (UL)

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