SUBARU®

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SERVICE BULLETIN

APPLICABILITY

DATE 06-17-94

SUBARU VEHICLE

Subject: **R-12 and R-134a AIR CONDITIONING SYSTEM HANDLING PROCEDURES**

OVERVIEW:

This bulletin is for your information concerning CFC-12 concerns and phase-out. In the coming months, additional advisory information will be provided whether a retrofit modification is planned or will be available for CFC-12 equipped Subaru models.

Are Chloroflurocarbon Refrigerants Safe?

Automobile air conditioning systems have used a chloroflurocarbon (CFC) compound known as CFC-12 (also known by the trade name Freon or R-12) as a refrigerant for many years because of its safety and efficiency. It is reported that CFC chemical compounds can cause a destruction of the ozone layer, which shields the earth from harmful ultraviolet rays.

Due to growing scientific concerns that CFCs pose a depletion threat to the earth's stratospheric ozone layer, Subaru and other automobile manufacturers have accelerated implementation plans to phase-out the usage of the CFC-12 refrigerant in new model vehicle air conditioners. Commencing in 1993, Subaru SVX used an alternate refrigerant HFC-134a which does not deplete the ozone layer because it does not contain chlorine. By the end of model year 1994, all new Subaru vehicles will have a CFC free HFC-134a air conditioning system.

What Role has the U.S. Government Played in CFC Phase-Out?

Under the guidance of the United Nations, an international ozone protection agreement was signed by the United States and 23 other nations in 1987. An additional 70 nations have since signed the agreement. U.S. regulations issued in 1988 required the annual CFC production be decreased by 50 percent from a 1986 baseline by 1998. The protocol was amended in 1990 to require a CFC phase-out by January 1, 2000. Late in 1992, the United States mandated a complete phase-out of CFC production by January 1, 1996. This decision significantly accelerated Subaru's conversion to the CFC free HFC-134a air conditioning system.

Are Customers Covered Under Warranty If Their Vehicle Needs Service or HFC-134a System Modifications?

Subaru is committed to making sure that your customers CFC-12 air conditioning performs in the same manner as it was designed. Subaru has made arrangements for R-12 supply in the immediate future to support warranty needs. In the event that a vehicle requires air conditioning warranty service (or is covered under a Subaru Added Security® extended service contract), any authorized Subaru dealer will repair it using CFC-12 refrigerant, if available. If CFC-12 refrigerant is not available, the dealer will modify the air conditioning system to use the CFC free alternate HFC-134a refrigerant. If the Subaru limited basic warranty is still in affect or if the owner has an optional Subaru Added Security® extended service contract, the needed service will be covered. If covered by warranty, the owner will only be responsible for any applicable deductibles. If the vehicle is not under warranty, the owner is responsible for any CFC-12 system repair costs or, if the owner chooses, the HFC-134a air conditioning system modification costs, if available. Only an authorized Subaru repair facility can provide warranty service.

Are Other Refrigerants Acceptable?

A number of other refrigerants are being offered as substitutes for the CFC-12 refrigerant. The United States Government has found many substitutes unacceptable and not safe for use in vehicle air conditioning systems. Subaru does not approve of these substitute refrigerants. All automobile manufacturers are responding to the CFC production phase-out by only producing vehicles with the alternative HFC-134a refrigerant.

Subaru vehicle air conditioning systems should be serviced by a properly trained and equipped Subaru Technician, who should use the correct refrigerant.

What are A/C Servicing Requirements?

The U.S. Government prohibits the venting or release of CFC-12 (and HFC-134a) into the atmosphere during the servicing of motor vehicle air conditioners. It also requires certification for both service technicians and refrigerant recycling equipment. These regulations are to preclude possible damage to the earth's ozone layer.

What Modifications are Needed to Convert CFC-12 A/C Systems to CFC Free HFC-134a A/C Systems?

In the future, if CFC-12 refrigerant becomes unavailable, it may be necessary to modify a vehicle's air conditioning system for usage with the alternate CFC-free HFC-134a refrigerant. Additionally, since each Subaru model's CFC-12 air conditioning system was designed differently, retrofit modifications such as new system components, hoses, fittings, lubricants, etc. will vary on a model to model basis.

In the coming months, Subaru will keep you advised whether a retrofit modification is planned or will be available for CFC-12 equipped Subaru models. Currently under development are HFC-134a retrofit modifications for 1990-1993 Legacy, 1993 Impreza, and 1992 SVX models. Subaru expects to provide technical service modification instructions for the above models this summer. The decision for possible retrofit modifications for Loyale, Justy, and XT models is still under study. At this time, it is difficult to determine the cost of retrofit modifications. In general, the cost depends on the model and age of the vehicle.

What does the CFC Information Statement Mean Listed on the Bottom of the Manufacturer's Suggested Retail Price Window Sticker?

The U.S. Government requires a CFC information label on all vehicles manufactured after May 15, 1993 that contain CFC-12 and other ozone depleting substances (ODS). If applicable, the statement may read as outlined below. The listed ODS substance 1,1,1-Trichloroethane is a metal cleaning solvent used during vehicle manufacturing process and is expected to be replaced upon the availability of a safe substitute.

WARNING: Manufactured with 1,1,1-Trichloroethane and CFC-12, Substances Which Harms Public Health and Environment by Destroying Ozone in the Upper Atmosphere.

What Commitment has Subaru Made to Protect the Environment?

Subaru is concerned about protecting our environment and the need for cleaner air. Subaru has continually strived to find ways in which the environmental impact of our vehicles can be limited both during and after the manufacturing process. Our Subaru factory in Lafayette, Indiana is an excellent example of steps that Subaru has taken during the production process. In 1993, the factory recycled 21,644 tons of steel, 2877 tons of cardboard, 822 tons of wood, and 18 tons of plastic. The factory uses and recycles paint solvents which have been passed through an afterburner to reduce hydrocarbon emissions. Recycled plastics are used for interior and trunk trim pieces as well as cosmetic engine components. The use of asbestos has been eliminated from brake components, head gaskets and insulation. Every 1994 and newer Subaru Legacy, SVX and Impreza model has been equipped with CFC-free HFC-134a air conditioning.

Subaru has made significant, environmental progress which exceed U.S. Government requirements. You can be assured our environmental efforts will not stop here. Subaru has eliminated most harmful ozone depleting substances used in the manufacturing process. Subaru factory design engineers are developing fuel efficient and lightweight alternative fueled engines and components to take us to the next century.

For Further Information, Call the Toll Free
Service Helpline at 1-800-762-8324.

CAUTION

VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE OR TO OTHERS.

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition. Impreza is a Trademark and Legacy, Justy, Loyale and Subaru SVX are Registered Trademarks.