

Wheels: An e-mail from Preston says, “Your recent series on maintenance has been very useful in sorting the fact and fiction of information provided by manufacturers and suppliers. Your column on antifreeze was particularly informative. I have a 1993 Ford E-350 B-van equipped with air conditioning that uses R-12 Freon refrigerant. I am considering having this system converted to R-134a, but have not been able to locate much in the way of specific information regarding the conversion process. I am interested in the cons of such a conversion and specific procedures that should be followed for the best outcome. Please give me your recommendations regarding this process and suggestions to where I can obtain service manuals or publications that deal with this topic. Perhaps, there is a textbook used at Sinclair that covers this topic.”

Halderman: Thanks for writing and the kind words. Regarding the conversion from R-12 to R-134a, I would not retrofit your system unless you have a problem. R-134a will deliver slightly warmer air and is not needed if your system is working OK. If you have a leak in the system or the compressor, or if another major component fails, it is worthwhile to do the conversion. The steps that should be done have to be performed by a licensed technician and include:

1. Recovery of the R-12
2. Replacement of the drier assembly
3. Installation of new fittings to match the equipment for R-134a
4. Installation of a high-pressure cutoff switch, if not already equipped
5. Evacuation of the system
6. Installation of lubricating oil compatible with your compressor and R-134a (usually Ester oil)
7. Installation of the R-134a
8. Installation of a label showing who did the conversion with all of the technical details.

I recommend the air-conditioning textbook by Tom Birch. Check www.amazon.com or visit the publisher’s web site at www.autotech.prenhall.com.

