

TECH TIP

Guide to R134a Compressor Compatibility

The survivability of a given compressor when retrofitted to R134a has been heatedly discussed for several years. First we need to clarify whether we are discussing a Factory Air by Four Seasons remanufactured compressor or an Original Equipment (OEM) compressor that came with the vehicle. When considering retrofitting to R134a all Factory Air by Four Seasons compressors are up to the task, with the only recommendation being that the GM DA6 be replaced with an HR6 compressor. When it comes to OEM compressors the only guide that should be accepted as true would be the OEM guidelines themselves.

GM:

- The DA6 is not recommended for use after the 1987 model year for R134a use. The Factory Air by Four Seasons HR6 should be used to replace the DA6 whenever the customer considers retrofitting to R134a.
- GM reported that the R4, which appeared in pickup trucks from the late 1980's to the early 1990's and was designated as a 16-valve compressor, is not a candidate for retrofit. This compressor had a gold label attached to it from the manufacturer. The compressor should be replaced with a new, or a remanufactured Factory Air by Four Seasons R4 compressor.
- GM requires the use of a special V5 retrofit PAG lubricant for use with replacement GM OEM V5 compressors. The use of this special lubricant is not required on Factory Air by Four Seasons remanufactured units, therefore we recommend replacing the compressor to a Factory Air Four Seasons unit.

Ford:

- The FX15 compressor is considered by FORD to be too weak to handle R134a. The FS10 was introduced to take the place of the weaker FX15. Factory Air by Four Seasons has replaced the FX-15 with the FS-10 compressor in all applications. The FS-10 compressor can be successfully retrofitted to R134a. (*Be sure to review Tech Tip #AB302 Compressor Sludge for proper R&I procedure*)
- The HR980 compressor should not be retrofitted. The use of a Factory Air by Four Seasons compressor conversion kit should be used where applicable.

Chrysler:

- The OEM Chrysler C171 compressor that originally came with the vehicle is not a good candidate for retrofit. There are several other compressors offered by Chrysler that will not be able to be retrofitted if they are the OEM compressors. We recommend that in order to properly retrofit a Chrysler vehicle to R134a, a new OEM Chrysler or remanufactured Factory Air by Four Seasons compressor must be installed.

Others:

- The Honda Keihin compressor should not be retrofitted. The use of a compressor conversion kit should be used where applicable.
- Panasonic Scroll compressors should not be used for retrofit to R134a. These compressors are found in some Mazda applications as well as certain year models of the Ford Probe.