

A/C FLUSHING TO AVOID RETROFIT CROSS CONTAMINATION



SITUATION:

The lubricant in any refrigerant system will retain a certain amount of the refrigerant, even after a normal evacuation period. When the system is then charged with a different refrigerant, there is a certain amount of refrigerant "CROSS CONTAMINATION". Cross contamination occurs when the original refrigerant is released or "out-gassed" from the oil in the system and combines with the replacement refrigerant.

PROBLEM:

The Cross-Contamination of refrigerants in a system can lead to a reduction in performance, and an increase in high side pressure. The abnormal increase in the high side pressure can cause rapid compressor failure. This problem can occur when a system is retrofitted from R-12 to R-134a, or when a system that has been retrofitted to R134a is returned back to the use of R12.

SOLUTION:

The removal of the lubricating oil from the system prior to the retrofit is very important. The procedure to remove the oil should be as follows:

- Recover the refrigerant properly.
- The accumulator/drier "Must" be changed at the time of retrofit.
- Flush the condenser and the evaporator with an approved flushing procedure.
- Blow out the hoses and lines with dry shop air or nitrogen.
- If the compressor is not being replaced, the old oil must be drained.

CONCLUSION:

The EPA has decided that "Cross Contamination" of refrigerants is a major problem in the automobile industry today. The system will not perform properly when the refrigerant is contaminated. The problem will become complicated when the customer comes back in for additional work, and the contaminated refrigerant is recovered into your tank.