

AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

How can refrigerants be identified for contamination when using recycled refrigerant? No identifier available.

Answer:

Once the refrigerant has been recovered into the tank, there is no way to tell if it is contaminated unless identified with a tester. A cross blend of refrigerants will cause many problems once it has been installed into a system.

When servicing with recycled refrigerant, it's necessary to watch for this kind of a problem. If repairs were made or the system is just being serviced, it is assumed that the system will operate correctly. The signs of contamination will be the system will operate at higher pressures than what is normal. Both high and low sides will be high and the air delivery temperature will be around fifty degrees or more. If this is the case, remove the charge from the system and recharge it with virgin refrigerant. If that corrects the problem, the refrigerant is contaminated. If not, then there is a problem in the system.

If a vehicle is operated with contaminated refrigerant, running at higher than normal pressures, the compressor will likely start leaking or fail. In high ambient temperatures, this process of failure will happen rather quickly. If the compressor fails shortly after a service has been performed, this could be the reason.