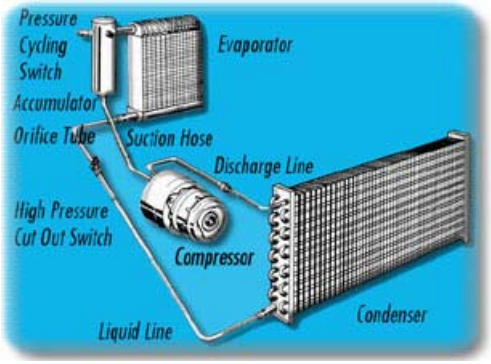
FAQ: FLUSHING EVAPORATORS?

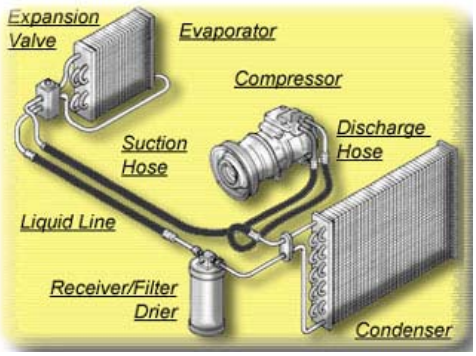
THE DIFFERENT APPROACHES TO SATISFACTORY EVAPORATOR FLUSHING

Successful flushing of A/C evaporators has proven to save Technician time and frustration related to the difficulty of in dash replacement, eliminates the guessing about how much waste oils are remaining and the concern of unknown debris, and reduces the overall repair cost, which turns quotes into jobs.

Complete or partially assembled systems cannot be flushed. You must always isolate the heat exchanger and flush through the most direct and unrestricted path to obtain satisfactory flushing results. The following information is provided as a basic guide and does not cover all the possible scenarios a Technician will encounter.



Common Orifice Tube (OT) systems will usually have an Accumulator located between the Evaporator and Compressor and the debris load is limited to what can pass through the OT and its screen. The Evaporators inlet is the lower or smaller of the two ports. Usually only one flush in the back flush direction by flushing in through the larger or upper port is required. Until you are satisfied, you can flush in both directions as many times as you want. However, it is recommended, that you make the last (or only) flush through the larger or upper port so you can properly air purge or recover the remaining solvent from the component.



Common Thermal Expansion Valve (TXV) systems will usually have a filter/dryer located between the Condenser and the TXV and the debris is usually very limited from entering the Evaporator through the filter and TXV. However, in the case of a catastrophic Compressor failure, with nothing between the Evaporator outlet and the Compressor inlet, large debris can back up into the Evaporator when the system pressures equalize. This large debris cannot be flush through the component and must be backed out the direction it came in. The TXV should be removed and the component should be flushed through the smaller of the two ports. Flush in both directions as many times as you want and purge through either port.

When a TXV is “in the dash” with the Evaporator, flushing through a TXV becomes desirable. The HECAT H1000 has shown some success due to the use of a highly evaporative “refrigerant” solvent (Genesolv SF) and a vacuum recovery process. However, flushing through a TXV with a HECAT “Pulsating” flusher will limit the flow velocity, pulsating, and air purging processes. For this reason, removal of the TXV is recommended.

For vehicles with rear air, access the rear Evaporator and bypass the expansion device and flush the rear Evaporator. While disconnected from the front and rear, the long hoses can be connected together at one end and flushed like another component.