

## *DOC'S BLOCKS*

### **AUTOMOTIVE AIR CONDITIONING REPAIR**

#### **STEPS TO SERVICING THE AC SYSTEM**

##### **TOPPING OFF A SYSTEM**

1. When testing an AC system for a lack of cooling, it is best not to operate the AC for a few hours before testing the system for leaks. If the system has been run, oil will prevent leak detection.
2. Read static pressure. If it is a TXV system, does the high and low side of the system read different pressures? Is the low side reading lower than the high side? If so, this would indicate that the TXV is closed. It should be closed if there is refrigerant in the system. If the high and low side read different pressures on a CCOT system, there is a restriction. This knowledge will assist in diagnosing, if the system doesn't work. If static pressure is low, add refrigerant through the high side only, without running the engine. Restrictions can be detected by adding refrigerant in this manner.
3. To continue servicing, start and operate the engine at 1500 RPM with the AC controls set on high blower and inside air. Refrigerant should only be added on the low side of the system.

##### **SERVICING AN EMPTY SYSTEM**

1. After doing a visual inspection, using a service center or from cans, evacuate the system and then install about one pound refrigerant and then check for leaks. Follow steps listed above.
2. Service the system to seventy (70) % of the recommended capacity. If the system did not have leak tracer dye in it, install 1/3 ounce while installing refrigerant.

See sections on evacuation, expansion valves and orifice tubes, how much does the system hold, and diagnosing.