

## **AUTOMOTIVE AIR CONDITIONING REPAIR**

### **STEPS TO INSPECTING THE AC SYSTEM**

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1. What was the customer's complaint? Was it a lack of cooling, noise, vibration, or no air delivery?
2. If moving the vehicle, check to see if the AC is on, and if so, turn the unit off.
3. Raise the hood and perform a visual inspection. Your looking for:
  - Signs of oil leaking around AC components
  - Belt condition and / or tensioner
  - Electric fans and / or fan clutch
  - If you can see it, the AC clutch condition
  - Cleanliness of condenser.
  - Condition of fan shroud and / or air dams
  - Location of AC fittings
  - Is this a R-12, R134a, or has the system been retrofitted to an alternative refrigerant. Are the labels correct?
4. Connect the AC identifier and perform the test of confirming the purity of the refrigerant in the system.

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### **NOTE**

EPA states that the last person to work on the AC system is responsible for compliance.

5. Connect the proper manifold set and/or machine to the system. Read the static pressure of the system. Static pressure will read near ambient temperature if the system is at least  $\frac{1}{4}$  full. If the static pressure is less than ambient temperature, add refrigerant to the system, under its own pressure, until pressure is equal to ambient temperature. Check for leaks.
  - Inspect for leaks using a black light.
  - Inspect for leaks using an electronic leak detector.
  - If necessary, check for leaks with soapy water
  
6. If the complaint was no blowers, check AC fuses and blower relay. Start the car and check for clutch and fan operation. If they are working, there is an electrical problem in the blower circuit.