

**EVANS HVAC SYSTEM WITH AUTOMATIC TEMPERATURE CONTROL (ATC)**  
**INITIAL OPERATION AND ROAD TEST**

1. Start and run vehicle engine at a normal idle speed. Turn ATC system on by selecting any operation mode on the Rotary Selector Switch other than "OFF", and depressing the Systems ON/OFF key "O" on the ATC keypad. Recommended operating mode for this test is panel / recirc. on the rotary selector switch. Allow the engine to reach normal operating temperatures as the valve temperature sensor will inhibit the fan speed in heat mode until the engine coolant temperature is high enough.
  
2. Use the ATC keypad to achieve the following function checks and control settings:
  - A) Temperature - Depress UP/DOWN arrow keys to select a "set" temperature of 70 degrees (F).
  
  - B) Fan - By depressing the FAN button, check the blower for "LO" speed and "HI" speed operation, then switch to "AUTO".
  
  - C) A/C - Snowflake. By depressing this key, check to see if A/C (compressor) and condenser fan come "ON" and "OFF" when selected, then switch to "AUTO" for test.
  
  - D) Outside Temperature - Depress the EXTERNAL TEMPERATURE key. A temperature close to the known outside temperature should appear briefly. If it does not, check to see that the outside temperature sensor is connected and attached to the underside of front cap. Since this sensor is attached after the cap is installed, it may be a good idea to check to be sure it is installed.
  
3. The HVAC / ATC system should now be operating, and discharging air through the panel louvers (panel / recirc mode).
  
4. Depress the DOWN arrow to select a "set" temperature of 60 degrees (F). The blower speed and resulting air discharge should begin to change. After a few moments, depress the UP arrow to select a "set" temperature of 86 degrees (F). The blower speed and resulting air discharge should again begin to change. As the "set" temperature approaches the actual cabin (interior) temperature, the blower speed will decrease. As the "set" temperature increasingly deviates from the actual cabin temperature, the blower speed will increase.

5. Selecting a change in the "set" temperature will also result in a noticeable change in discharge air temperature. If cooling is required, discharge air will begin to feel chilled. If heating is required, discharge air will begin to feel warm (if engine is up to operating temperature). If the "set" temperature is at or near actual cabin temperature, discharge air will begin to feel neutral.
  
6. Select a "set" temperature of 70 degrees (F) and proceed with the standard vehicle road test. Blower speed and discharge air temperature should gradually change as necessary to bring the cabin temperature to (approximately) the set temperature. After the set temperature is achieved, the ATC system will maintain this cabin temperature. Periodic changes in blower speed and air temperature may be noticed, as the ATC system works to maintain the cabin temperature.
  
7. Rotate the mode selector switch through each of the available settings. Verify proper air discharge path at each of the selected settings. Verify that the Fresh Air / Recirc. Door opens and closes. Refer to the Evans Tempcon Owner's Manual (supplied with every vehicle) for proper discharge path in each mode. The Owner's Manual also contains descriptions and operating instructions for additional ATC and HVAC system's features.
  
8. Refer to document titled "**Functional Testing and Diagnostics Procedure**" to verify proper operation of the HVAC system with respect to A/C cooling, heating, and ATC features.