

AIR CONDITIONING TROUBLE SHOOTING GUIDE FOR EVANS TEMPCON HEATER – A/C SYSTEMS

PROBLEM	POSSIBLE CAUSES	REMEDY
<p>1. Inadequate Cooling (Discharge air from A/C vents is only slightly cool.</p>	<ul style="list-style-type: none"> • Misadjusted or leaking valve (Cooling may be diminished at engine idle. Increased engine and compressor speed will improve A/C cooling). • Condenser clogged with road debris or Condenser Fan inoperative. • Incorrect refrigerant charge in system. If charge is excessively low or high, the compressor clutch will not engage, or remain engaged. • Moisture or air present in system. • Restriction in receiver-drier or liquid line resulting in a starved evaporator. • Defective expansion valve restricting flow. 	<ul style="list-style-type: none"> • For electronic valves see: ELECTRONIC COOLANT VALVE Or EVANS NEW ELECTRONIC VALVE • Examine fin region of the condenser for debris and bent fins. Clean and straighten as required. Repair and/or replace the condenser fan components as required. • Install manifold gage set onto high side and low side service ports and operate A/C. Observe for low pressures. If low pressures are observed, leak check all A/C components as required. If excessive oil loss is suspected, check oil level in compressor, evacuate, and recharge. • Discharge and recover refrigerant. Replace receiver-drier. Add 2 ounces of oil, to replace oil removed with the old receiver-drier, evacuate and recharge. • If low and high side readings are excessively low and/or the liquid line at the expansion valve is cool to the touch and showing signs of sweating or frosting, discharge and recover the refrigerant. Replace the receiver-drier, liquid lines or any other defective parts. Add 2 ounces of oil, to replace oil removed with the old receiver-drier, evacuate and recharge. • Symptoms are the same as receiver-drier restriction. Discharge and recover refrigerant. Remove and replace expansion valve. Check oil level

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PROBLEM	POSSIBLE CAUSES	REMEDY
<p>1. Inadequate Cooling (Discharge air from A/C vents is only slightly cool. (Continued)</p>	<ul style="list-style-type: none"> Defective, worn or leaking compressor. 	<p>in the compressor, evacuate and recharge.</p> <ul style="list-style-type: none"> Low side gauge reading too high and high side gauge reading too low. Discharge and recover refrigerant. Remove and replace new or rebuilt compressor and replace receiver-drier. Add 2 ounces of oil, to replace oil removed with the old receiver-drier, evacuate and recharge.
<p>2. Inadequate cooling during hot part of the day.</p>	<ul style="list-style-type: none"> Excessive moisture in system freezing in expansion valve and restricting refrigerant flow. 	<ul style="list-style-type: none"> Discharge and recover refrigerant. Replace receiver-drier, check oil level in compressor, evacuate and recharge.
<p>3. Gradual loss over time of cooling and air flow during A/C operation.</p>	<ul style="list-style-type: none"> Defective thermostat, causing continuous operation of the compressor thereby freezing condensate within the evaporator core. 	<ul style="list-style-type: none"> Examine capillary tube of thermostat to ensure that it is inserted into the evaporator fins. If the core still freezes and the compressor clutch doesn't cycle off, replace the thermostat.
<p>4. Compressor clutch cycles too rapidly or discharge air warms excessively during compressor clutch "OFF" cycle.</p>	<ul style="list-style-type: none"> Defective thermostat 	<ul style="list-style-type: none"> Replace thermostat