

COACH MODEL : All VanHool Models With Adjustable Expansion Valves

DATE : 1/30/2013

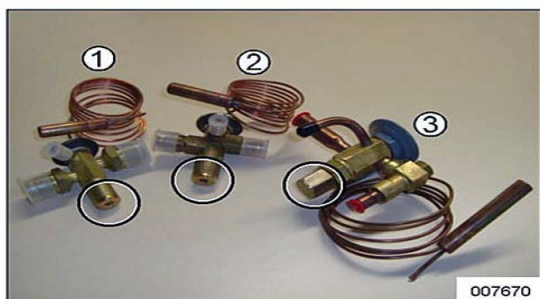
SUBJECT : To Free Up A Seized Thermostatic Expansion Valve

Introduction

When diagnosing an HVAC system for poor performance and you find ice on the evaporators, follow this procedure to verify proper expansion valve operation.

1. Connect the high & low AC pressure gauges, refer to the HVAC section in the maintenance manual.

Thermostatic expansion valves



The adjusting screw of expansion valves types (1) & (2) is located under a Allen head plug, expansion valve (3) is under a hexagonal cap.

2. Remove the plug (or hexagonal cap) of the adjusting screw.
3. Using an Allen wrench, turn the adjusting screw clockwise as far as it will go while counting the number of turns.
4. Turn the adjusting screw counterclockwise until its end face is approximately 0.08 inch above the edge.

CAUTION!

Do not screw out the adjusting screw entirely! This will damage the valve.



5. Start the engine and let it run at approximately 1000rpm.
6. **Non-Multiplex** ensure the main liquid line and driver solenoid valves are open. Use the "service override" switch in the HVAC junction box in the luggage compartment.
7. **Multiplex** coaches set the climate-control system in the "GAS CH" state, follow the instruction mentioned in chapter 8.2, under "Passenger compartment control system: to troubleshoot using the dashboard display".
8. The high-pressure gauge should indicate a pressure of approximately 275 psi.
9. If necessary, increase the pressure by disconnecting one or more on the condenser fans (disconnect the connector).
10. After 5 minutes turn off the engine.
11. Turn the adjusting screw in completely (CW) then unscrew it (CCW) by the number of turns counted in step 3.
12. Install the plug (or hexagonal cap).
13. Run the engine on fast idle for 20 minutes. Verify that ice is not building up on the evaporators and the high & low pressure readings are within specifications. Refer to the HVAC section in the maintenance manual.
14. Reset HVAC system to normal operation.