



New Carrier HVAC Systems on G4500 coaches

Beginning in mid June 2002, Greyhound® will take delivery of 23 new G4500 coaches equipped with a Carrier HVAC System. This system differs substantially from the first 120 G4500 coaches with the Thermo King system.

Below you will find some operating instructions for the new Carrier system. However, here are some of the major differences you will notice.

1. The dash mounted controller is far less complex to operate than the Thermo King controller.
2. The Driver's HVAC system is totally independent of the main coach HVAC system. Meaning separate switches, fan speed selection and temperature settings are all controlled by the driver and not the system's electronics.
3. The Parcel Rack A/C units remain the same as previous G4500 and even 102 D Series coaches.
4. The Carrier system (main) has a range temperature of 60°F to 80°F and will hold a set temperature within 2°.
5. The driver cannot accidentally press the wrong keys and lock up the system or go into diagnostic features.

Again, below you will find instructions on how to operate the Carrier system as well as some photos of the controller and switches.

The control keypad for the main (passenger) system and driver's HVAC control are located in the left dash switch panel as shown in Figure 1.



Figure 1 - Carrier control keypad and driver's controls

- A. The keypad (Figure 2) controls consist of;
1. ON/OFF key.
 2. Display window
 3. Interior temperature key.
 4. Outside (ambient) air temperature key.
 5. Up & Down arrow keys.

- B. The driver's controls (Figure 3) consist of;
1. A/C - Heat switch.
 2. Fan speed control (includes OFF position).
 3. Temperature control.
 4. Parcel Rack A/C ON/OFF switch.



Figure 2 - Carrier keypad control functions

- C. Once the coach is started and charging system is engaged, the HVAC system can be turned ON by pressing the ON/OFF key. Note - Whatever the previous temperature selection was set at, is the set point the controller will default back to.

D. The main system is fully automatic. This means all you need to do is set the temperature (Up or Down arrow keys). The system will then maintain the set point through its electronics.

1. To adjust the temperature, simply press the Up or Down arrow keys until



Figure 3 - Driver HVAC controls

- you have reached your desired set point.
2. The controller will then switch back and display the interior temperature.
 3. To view the outside (ambient) temperature press the key with the thermometer symbol outside the bus on the controller keypad.
- E. To turn ON the driver's HVAC system, use the Driver's A/C - Heat switch (Figure 4).
1. The upper portion (snowflake) is A/C.
 2. The lower portion (radiant) is Heat.
 3. Center position is OFF.



Figure 4

- F. To adjust the driver's blower (fan) speed and driver's temperature (A/C or Heat) use the sliding (up & down) rheostats on the dash (Figure 5).
1. DEF slider controls fan speed.
 2. HEAT slider controls temperature.



Figure 5

NOTE - The driver's A/C will not work (cool) if the main system is OFF.
NOTE - There is no display for the driver's area temperature.

- G. To activate the Parcel Rack A/C system, use the Parcel Rack A/C (P/R A/C) switch (Figure 6).
1. Top portion is OFF.
 2. Lower portion with snowflake symbol is ON.
 3. The temperature settings for each Parcel Rack A/C unit is controlled automatically by independent thermostats (left & right parcel rack) pre-set at approximately 72° on each unit. If the temperature falls under 72°, the refrigerant flow to the parcel racks is shut OFF (electrically) however, the parcel rack fans remain ON.



Figure 6

Remember, this and other Driver Operating Tips can be found on the Greyhound Intranet Maintenance Web Page. Click on the "Bulletins" link to view and print additional driver tips.