



Big 3-Knob Universal

Control Panel Kit

Clear Anodized (492140)

Black Anodized (492144)

Polished (492147)



18865 Goll St. San Antonio, TX 78266

Phone: 800-862-6658

Sales: sales@vintageair.com

Tech Support: tech@vintageair.com

www.vintageair.com



www.vintageair.com

Table of Contents

Cover.....	1
Table of Contents.....	2
Packing List/Parts Disclaimer.....	3
Control Panel Installation.....	4
Control Panel Installation (Cont.).....	5
Control Panel Installation (Final).....	6
Control Panel Calibration Procedure.....	7
Control Panel Calibration Procedure (Cont.).....	8
Gen IV Wiring Diagram.....	9
Gen 5 Wiring Diagram.....	10
Operation of Controls.....	11
Packing List.....	12

Important Notice—Please Read

This control panel is designed to work with a Gen IV evaporator unit equipped with a 246204-PUA ECU (all ECU's on Gen 5 evaporators will work with this control). Please confirm that your unit has the proper ECU prior to installing the control panel as shown below. A replacement ECU can be purchased from Vintage Air if needed.



www.vintageair.com

Packing List: Control Panel Kit (492140)

No.	Qty.	Part No.	Description
1.	1	492141	Control Panel Assembly, Clear Anodized
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

1



2



3



Control Panel Kit (492144)

No.	Qty.	Part No.	Description
1.	1	492145	Control Panel Assembly, Black Anodized
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

1



2



3



Control Panel Kit (492147)

No.	Qty.	Part No.	Description
1.	1	492148	Control Panel Assembly, Polished
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

1



2



3



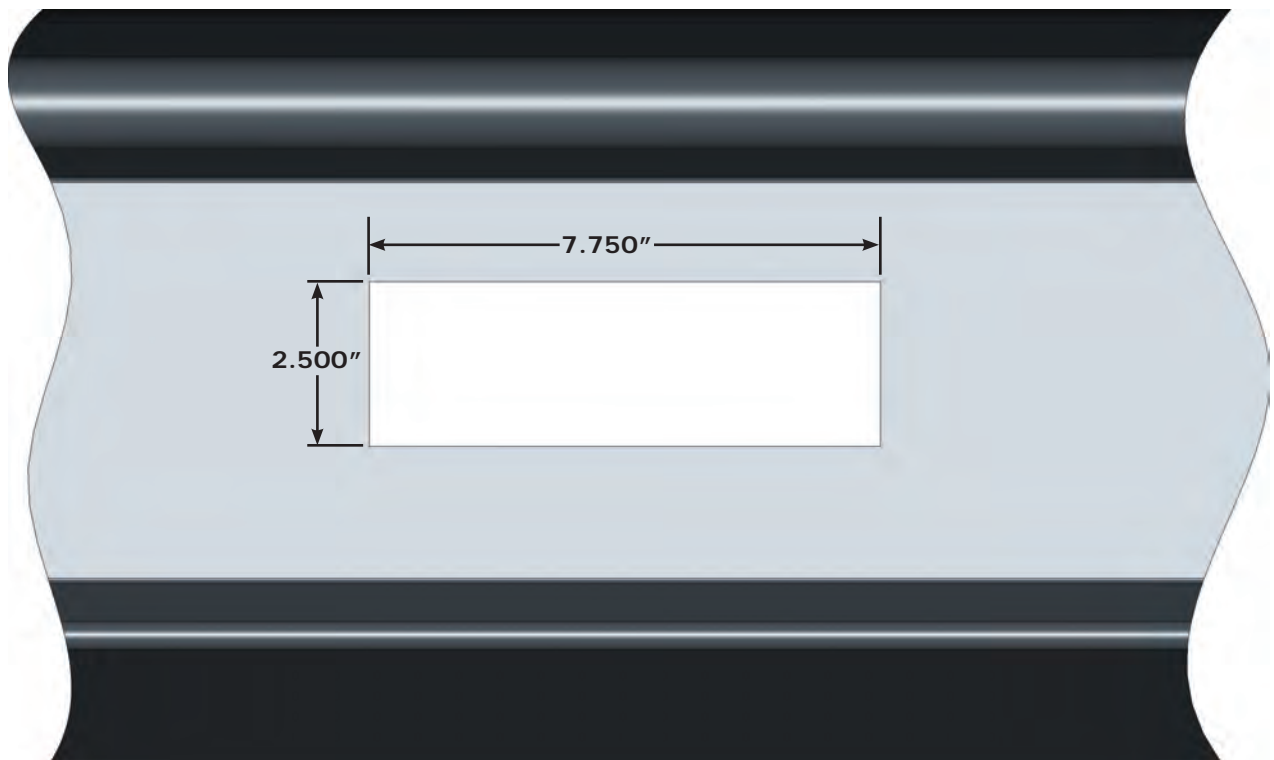
NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.



www.vintageair.com

Control Panel Installation

1. Select a suitable location for the control panel, considering the heater control valve location, wiring harness length, and operator convenience.
2. After selecting a location for the control panel, mask the area 3" (tall) x 8" (wide).
3. Using the dimensions provided below, mark or scribe the control panel opening location onto the dash.
4. When certain the dimensions and markings are correct, cut the dash to make the control panel opening.
NOTE: Measure twice, cut once. This opening MUST be a precise fit. Cut the opening undersize, and then file to fit. The mounting brackets only hold the panel against the dash, they do not locate the panel laterally. If the opening is oversized, the panel may shift during use.



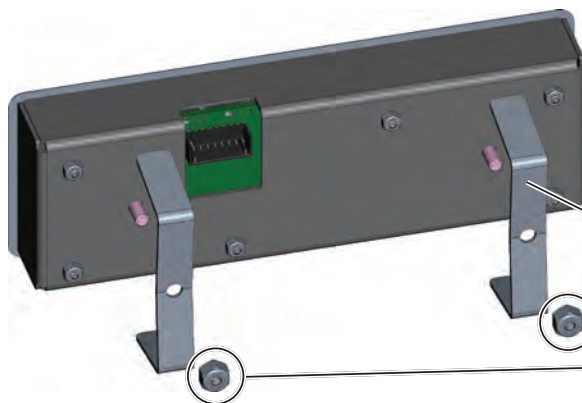


www.vintageair.com

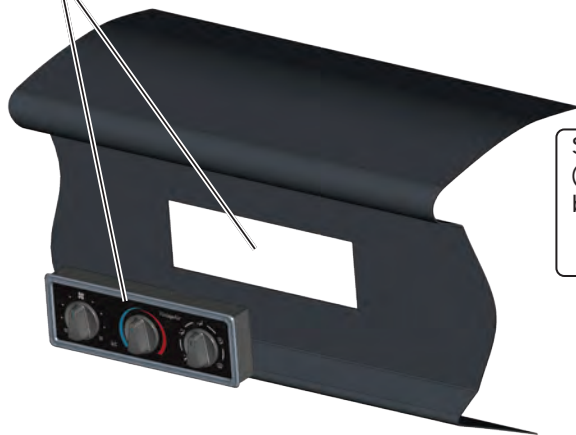
Control Panel Installation (Cont.)

5. Remove the (2) rear mounting brackets and (2) 10-24 locknuts from the back of the control panel assembly (See Figure 1, below).
6. Install the control panel assembly through the opening in the dash, and secure it using the (2) mounting brackets and (2) 10-24 locknuts (See Figure 2, below). **NOTE: Mounting bracket legs can be trimmed to accomodate panel thickness (See Figure 3, below).**

Figure 1



Install control panel assembly through opening in dash



Secure using (2) mounting brackets and (2) 10-24 locknuts

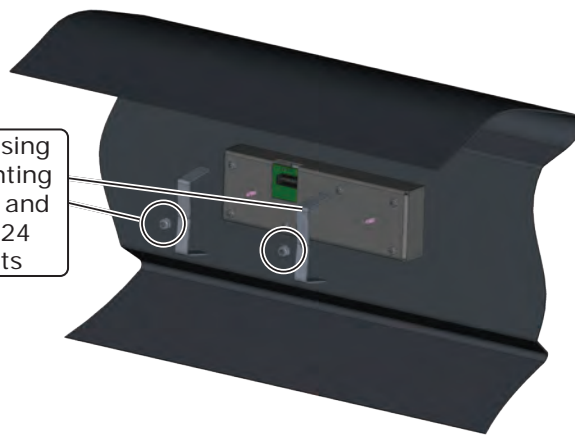
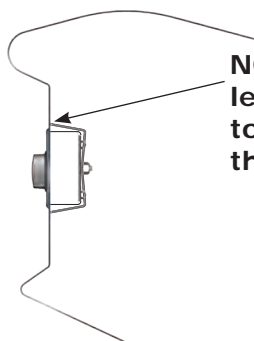


Figure 2

Figure 3



NOTE: Mounting bracket legs can be trimmed to accomodate panel thickness.



www.vintageair.com

Control Panel Installation (Final)

7. Plug the control panel wiring harness into the control panel and the ECU on the evaporator (See Figure 4, below).
8. Wire according to the wiring diagram on Page 9 for Gen IV systems or Page 10 for Gen 5 systems.

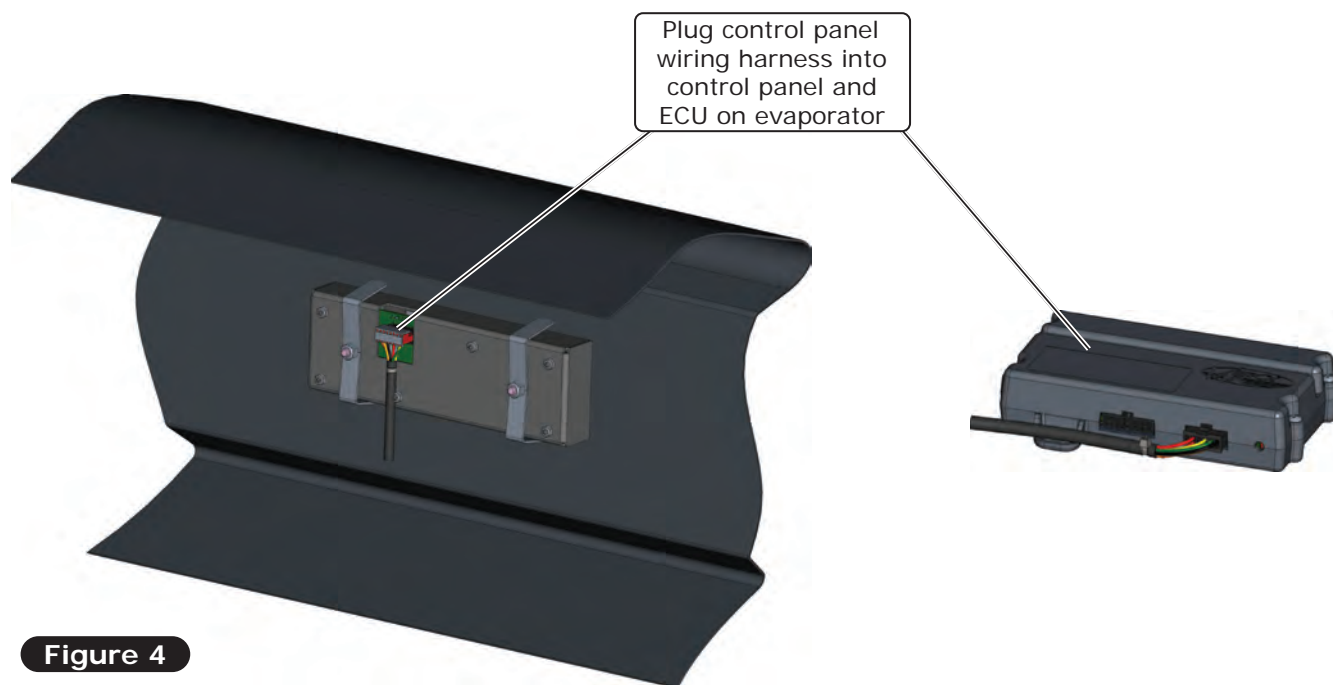


Figure 4



www.vintageair.com

Control Panel Calibration Procedure

On Vintage Air Gen IV and Gen 5 systems using cable converters or replacement electronic controls, it is necessary to calibrate the system to your specific control panel. This procedure ensures that the travel of your control panel levers or knobs is translated into precise control of the blower speed, temperature blend and mode door position. Please carefully read and understand these procedures before beginning. The procedure may be repeated as many times as necessary to get it right.

Gen IV Systems:

In preparation for calibration, you will need to attach the supplied white ground jumper wire (PN 231520) to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen IV wiring harness next to the compressor relay. During the calibration procedure, you will connect the white jumper to the gray program wire, which will "teach" the Gen IV ECU the upper limits of the control levers or knobs. The blower will momentarily change speeds, signaling that the upper limits have been "learned". You will move the levers or knobs to opposite extreme positions of their travel and then disconnect the white jumper. The blower will pulse on/off, signaling that the lower limits have been learned and that the calibration procedure is complete.

Gen 5 Systems:

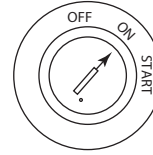
In preparation for calibration, you will need to attach the supplied white ground jumper wire (PN 231520) to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen 5 wiring harness, see the Gen 5 wiring diagram and instructions for more information. During the calibration procedure, you will connect the white jumper to the gray program wire, and ground, which will then put the ECU into calibration mode. When the ECU is in calibration mode, the blower will default to medium speed and the ECU will flash a solid red light. Once in calibration mode you will cycle the controls as indicated in the calibration procedure on the next page. When complete, the jumper and program wire will be disconnected. The blower will turn off indicating calibration is complete.



www.vintageair.com

Control Panel Calibration Procedure (Cont.)

1. Turn on the ignition switch (Do not start the engine).



2. Move the control levers/knobs to the positions shown.



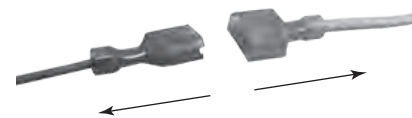
3. Connect the white jumper wire to the gray program wire. Wait approximately 5 seconds for the blower speed to change if using a Gen IV system, if using a Gen 5 system wait for the blower to default to medium speed.



4. Move the control levers/knobs to the positions shown.



5. Disconnect the white jumper wire from the gray program wire. The blower speed will change if using a Gen IV system, and will shut off if using a Gen 5 system, indicating completion of the calibration procedure.

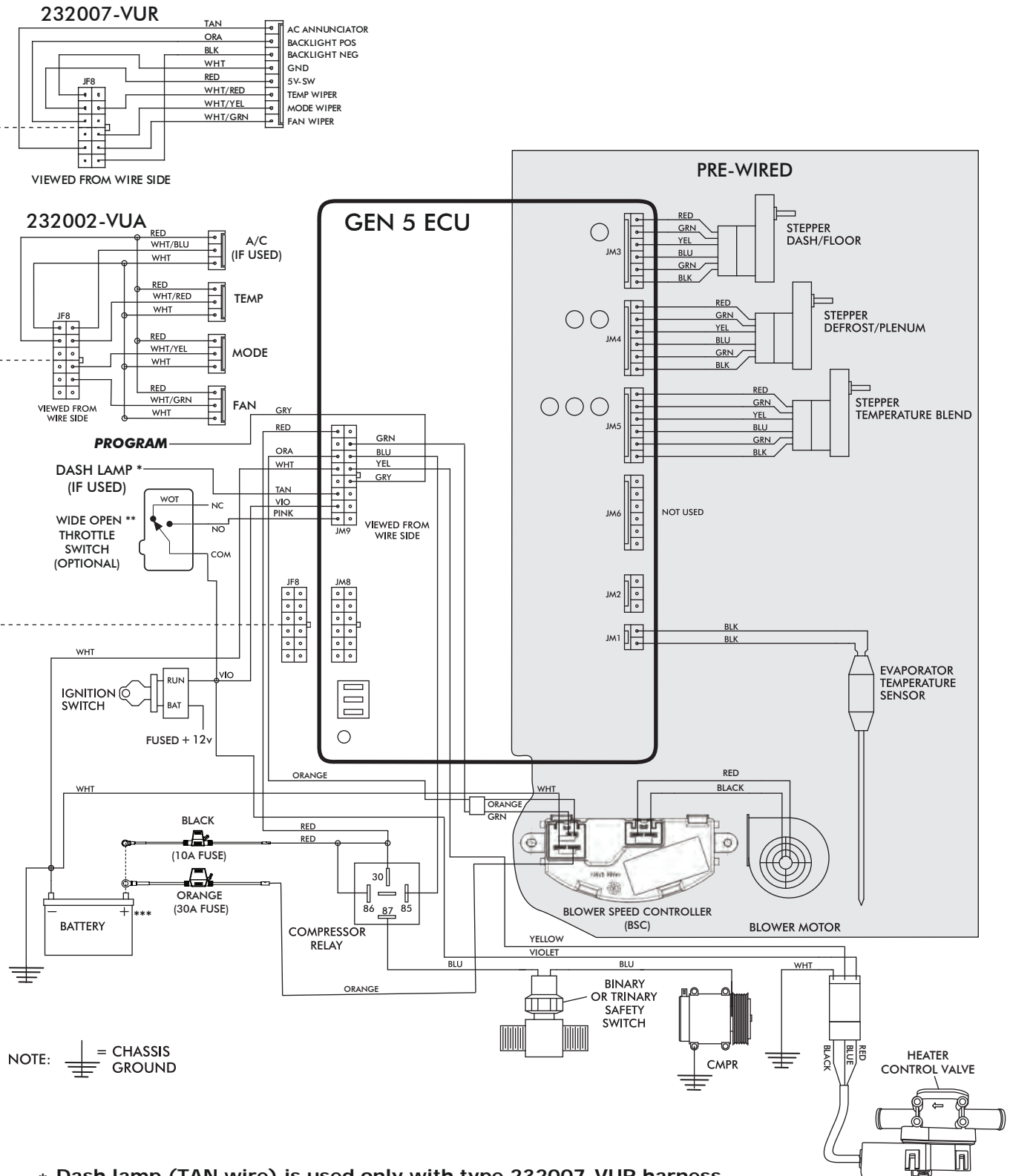


6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.



www.vintageair.com

Gen 5 Wiring Diagram



NOTE: = CHASSIS GROUND

- * Dash lamp (TAN wire) is used only with type 232007-VUR harness.
- ** Wide open throttle switch contacts close only at full throttle, which disables A/C compressor.
- *** Install fuse assemblies at or as near to the battery as possible.



www.vintageair.com

Operation of Controls

On Gen IV or Gen 5 systems with three lever/knob controls, the temperature control toggles between heat and A/C operations. To activate A/C, move the temperature lever/knob all the way to cold and then back it off to the desired vent temperature. For heat operation, move the temperature lever/knob all the way to hot and then adjust to the desired vent temperature. The blower will momentarily change speed, each time you toggle in and out of heat and A/C operations, to indicate the change. **NOTE: For proper control panel function, refer to Pages 7 and 8 for calibration procedure.**

Blower Speed

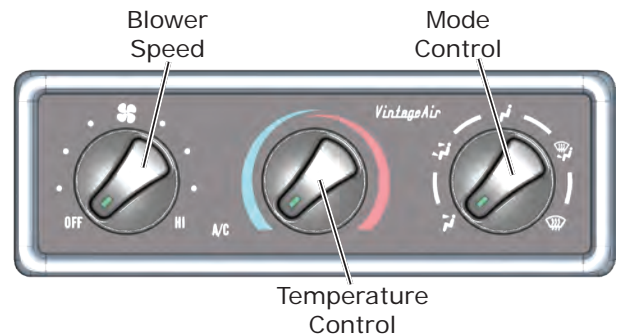
This lever/knob controls blower speed, from OFF to HI.

Mode Control

This lever/knob controls the mode positions, from DASH to FLOOR to DEFROST, with a blend in between.

Temperature Control

This lever/knob controls the temperature, from HOT to COLD.



A/C Operation

Blower Speed

Adjust to desired speed.

Mode Control

Adjust to desired mode position (DASH position recommended).

Temperature Control

For A/C operation, adjust to coldest position to engage compressor (adjust between HOT and COLD to reach desired temperature).



Heat Operation

Blower Speed

Adjust to desired speed.

Mode Control

Adjust to desired mode position (FLOOR position recommended).

Temperature Control

For maximum heating, adjust to hottest position (adjust between HOT and COLD to reach desired temperature).



Defrost/De-fog Operation

Blower Speed

Adjust to desired speed.

Temperature Control

Adjust to desired temperature.

Mode Control

Adjust to DEFROST position for maximum defrost, or between FLOOR and DEFROST positions for a bi-level blend (Compressor is automatically engaged).





www.vintageair.com

Packing List: Control Panel Kit (492140)

No.	Qty.	Part No.	Description
1.	1	492141	Control Panel Assembly, Clear Anodized
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

Checked By: _____
Packed By: _____
Date: _____

1



2



3



Control Panel Kit (492144)

No.	Qty.	Part No.	Description
1.	1	492145	Control Panel Assembly, Black Anodized
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

Checked By: _____
Packed By: _____
Date: _____

1



2



3



Control Panel Kit (492147)

No.	Qty.	Part No.	Description
1.	1	492148	Control Panel Assembly, Polished
2.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
3.	1	231520	Ground Wire, 12" White, 16 GA

Checked By: _____
Packed By: _____
Date: _____

1



2



3



**NOTE: Images may not depict actual parts and quantities.
Refer to packing list for actual parts and quantities.**