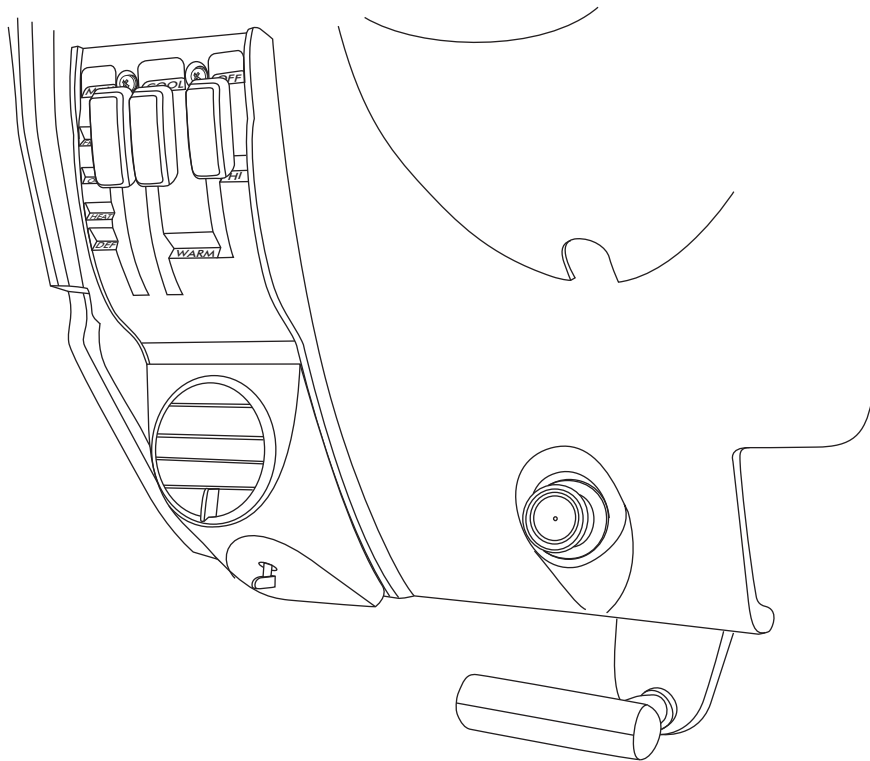




an ISO 9001:2008 Registered Company

# 1967-68 Ford Mustang, Mercury Cougar

*with Factory Air*  
**OEM Control Panel Replacement Kit  
(474266)**



**18865 Goll St. San Antonio, TX 78266**  
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[www.vintageair.com](http://www.vintageair.com)

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**Thank you for purchasing this control panel kit from Vintage Air. When installing these components as part of a complete SureFit™ system, Vintage Air recommends working from front to back on the vehicle, installing the condenser kit, hose kit, and compressor first, followed by the wiring, evaporator, and finally the control panel.**

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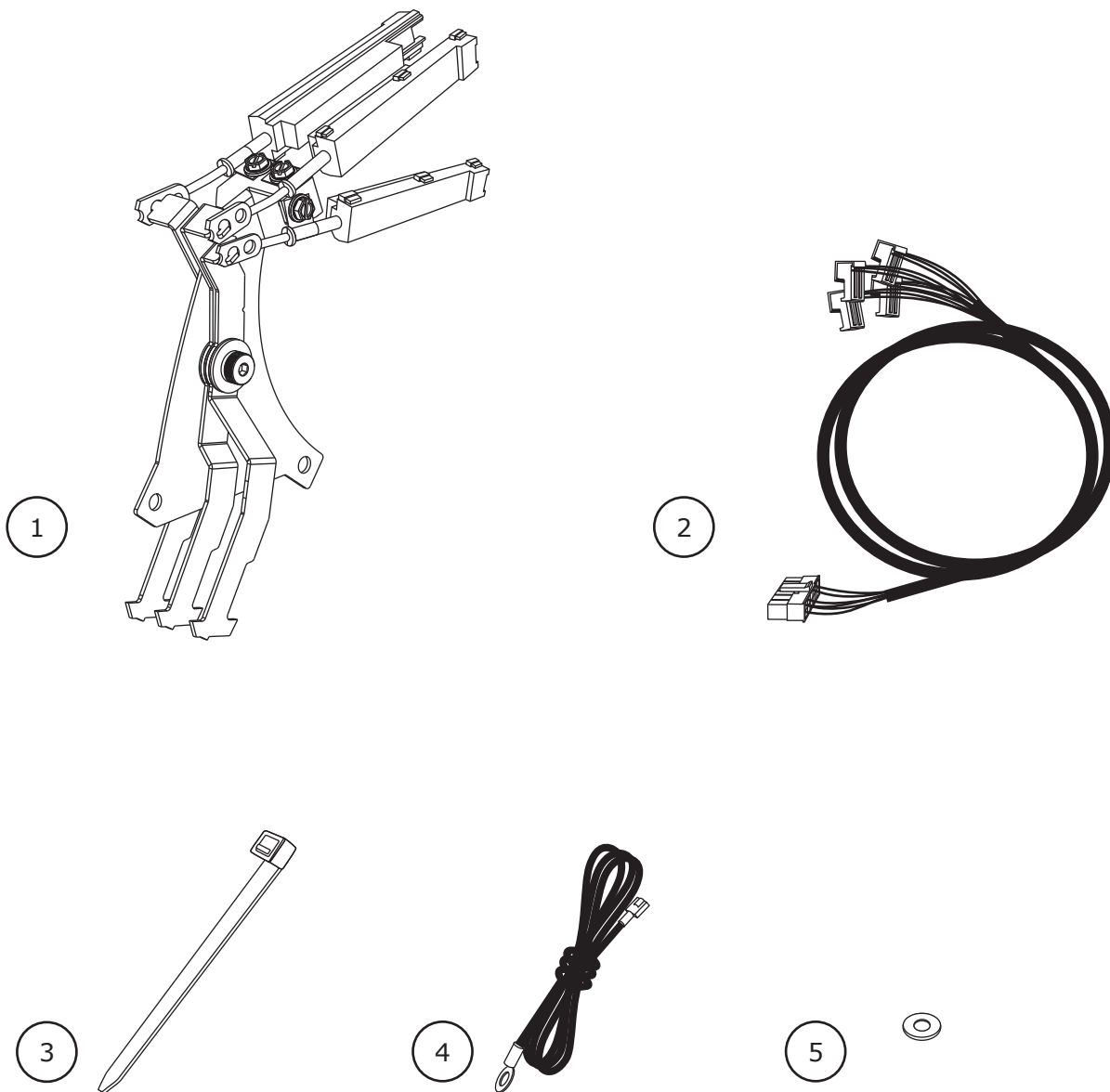


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## Packing List: Control Panel Kit (474266)

No.	Qty.	Part No.	Description
1.	1	474265	Control Lever Assembly
2.	1	232002-VUA	Control Harness, Gen IV Universal
3.	5	21301-VUP	Tie Wrap, 4"
4.	1	231520	Ground Wire
5.	3	18123-VUB	Washer, 3/16" x 1/2", Flat

**\*\* 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.**



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



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## OEM Control Panel Removal

### Perform the Following:

1. Remove (4) OEM mounting screws from the top and bottom of the control panel (retain) (See Figures 1 & 2, below).
2. Disconnect the cables and wires from the back of the control panel.
3. Remove the control panel.

1967 Model Shown

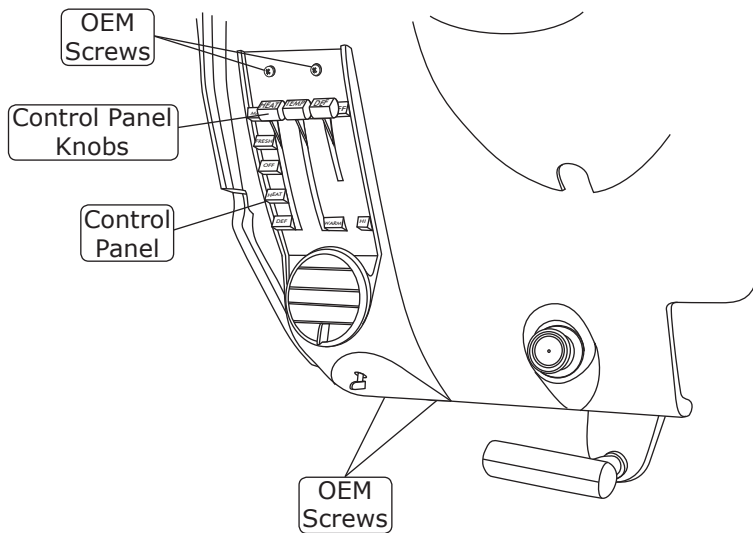


Figure 1

1968 Model Shown

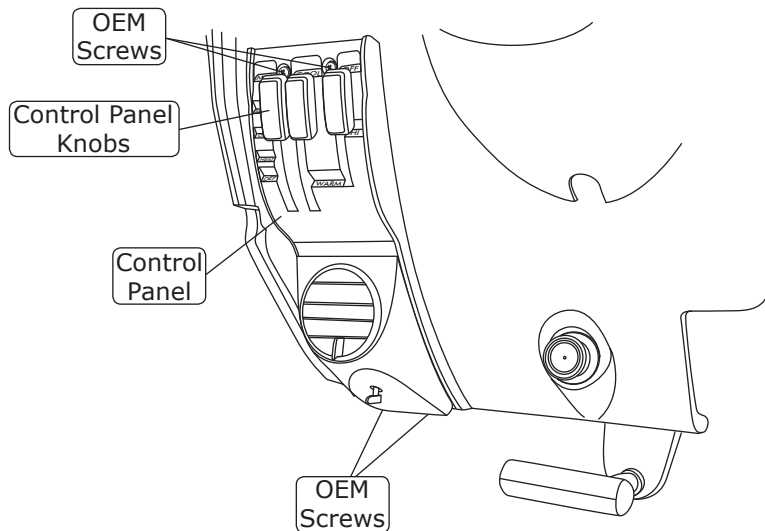


Figure 2



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## OEM Control Panel Disassembly

1. Remove the (3) control panel knobs (See Figures 1 & 2, Page 4).
2. Remove the (2) screws from the OEM control lever assembly (retain) (See Photo 1, below).
3. Separate the OEM control lever assembly from the OEM control panel bezel. Discard the lever assembly, but retain the bezel (See Photo 2, below).

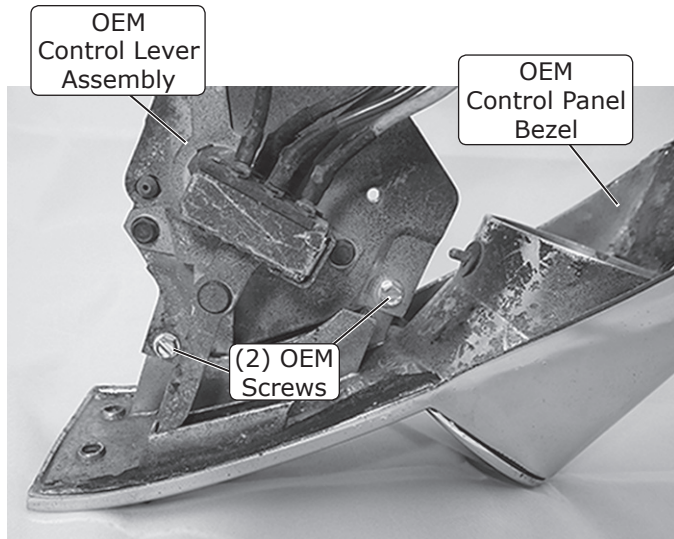


Photo 1

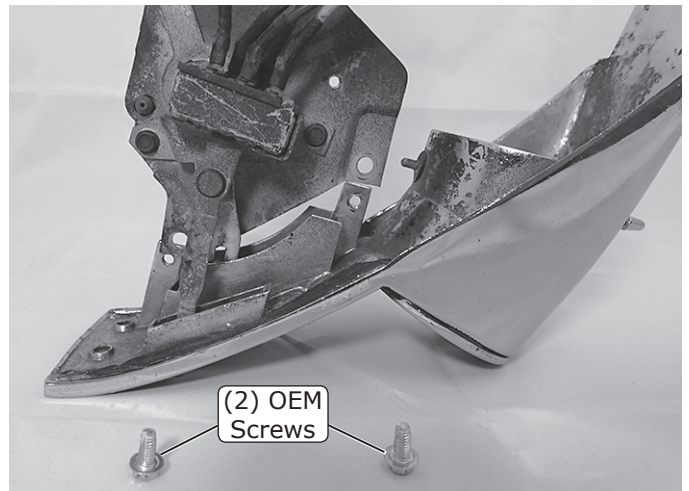


Photo 2

## Control Panel Modification (1967 Models Only)

1. Vintage Air recommends cutting the fan slot as shown in Figure 3, below.

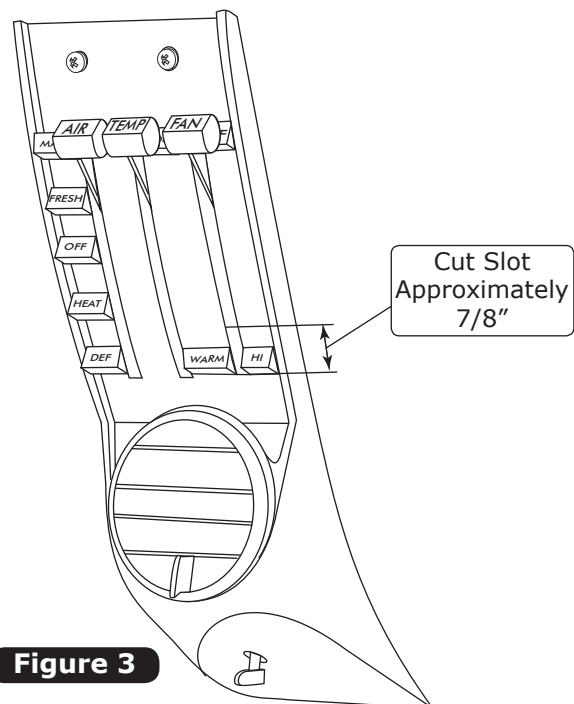


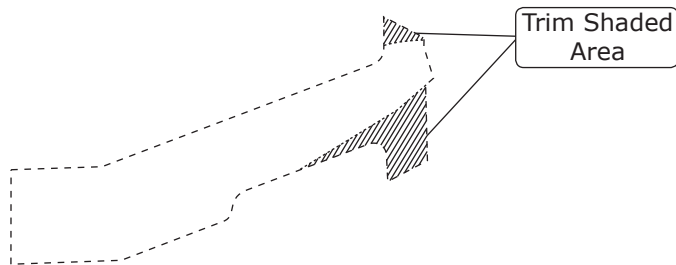
Figure 3



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# Vintage Air Control Lever Modification (1967 Models Only)

1. Using the template provided on Page 13, trim the (3) levers on the Vintage Air-supplied control lever assembly as shown below.



1967 Models Only

## Control Lever Assembly Installation

1. Install the new control lever assembly onto the control panel bezel using (2) OEM screws (See Photos 3 & 4, below). **NOTE: On 1968 models, it may be necessary to shim the lower bolt hole for proper alignment using the supplied 3/16" x 1/2" washers.**

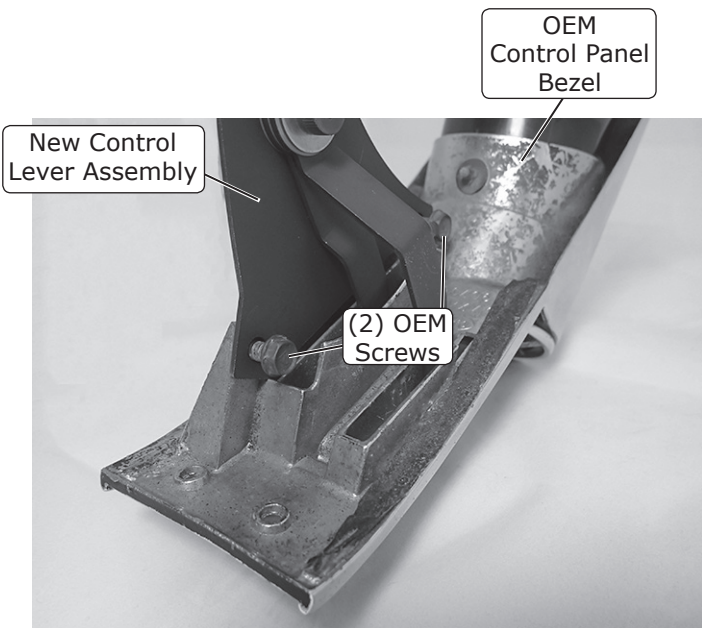


Photo 3

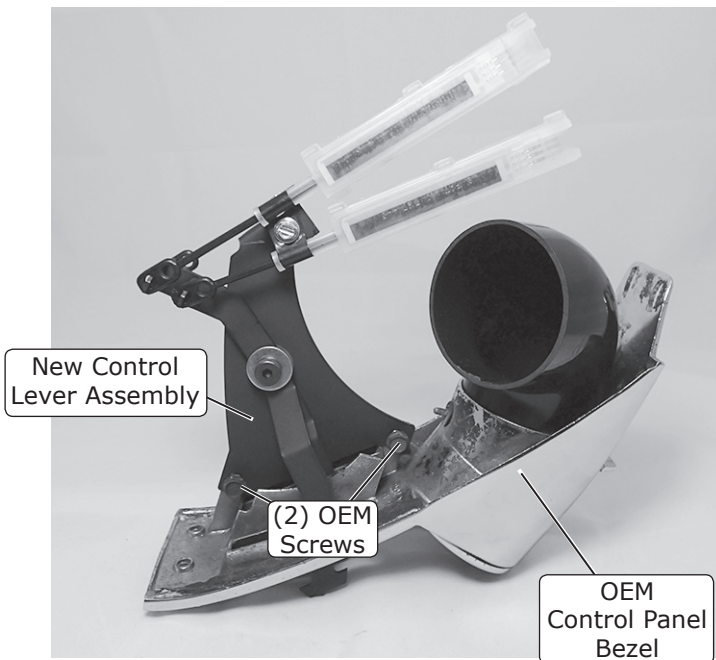


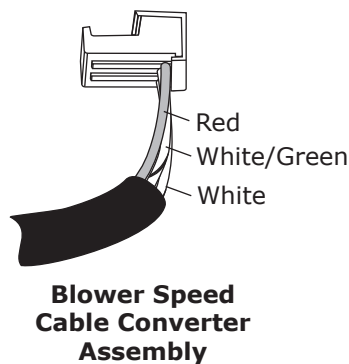
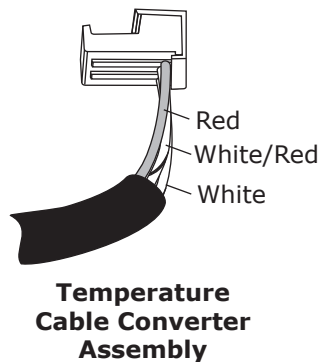
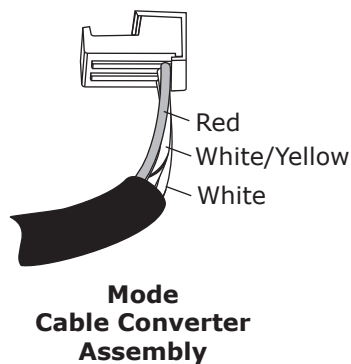
Photo 4



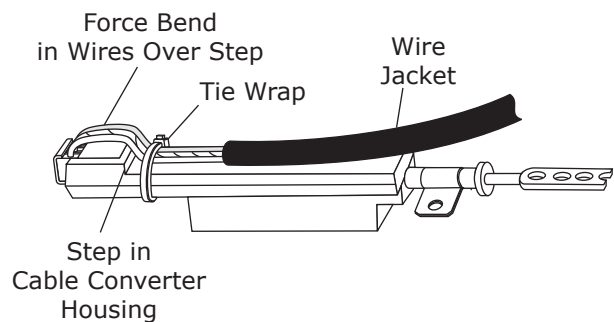
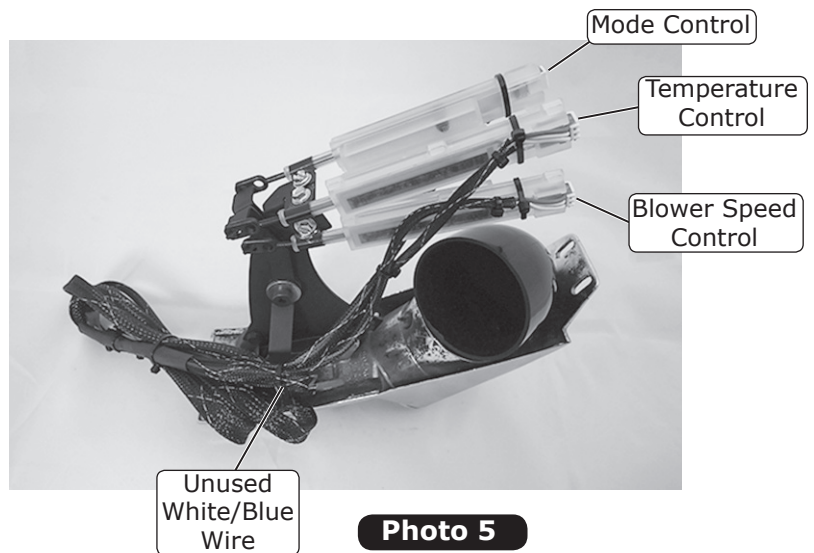
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## Control Harness Installation

1. Locate the control panel wiring harness, and plug the corresponding wires into the correct cable converter assemblies as shown in Figure 4 & Photo 5, below. **NOTE: Tie wrap the unused white/blue wire to the harness (See Photo 5, below).**
2. Once the wires are correctly plugged into the cable converter assemblies, secure the wires to the cable converter assemblies using the supplied tie wraps. The tie wrap must be located between the end of the wire jacket and the step in the cable converter housing, forcing a bend in each wire as it passes over the step in the cable converter housing (See Figure 4a, below). The head of the tie wrap must fall on the edge of the housing to remain tight. Ensure that the tie wraps are tight enough that the wires cannot move.



**Figure 4**

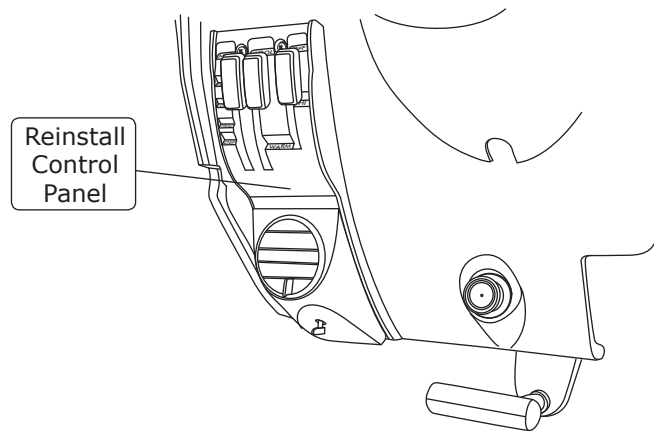




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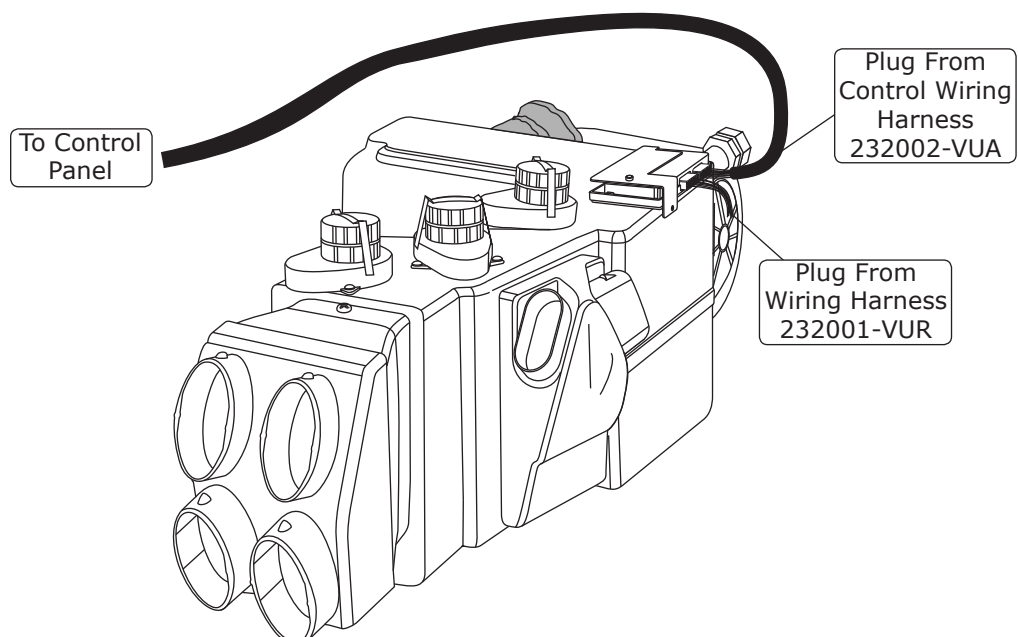
## Control Panel Reinstallation

1. Reinstall the control panel knobs.
2. Reinstall the control panel into the dash using (4) OEM screws.



## Final Steps

1. Plug the wiring harnesses into the ECU module on the sub case.
2. Wire according to the wiring diagram on Page 11.
3. Calibration procedure and operation instructions:
  - A. Calibrating the control panel will set the range of travel for the cable converters connected to the OEM control panel levers. Performing this procedure will set the limits of the cable converters at their highest and lowest points.
  - B. Locate the gray wire with an unused connector in the wiring harness near the cable harness relay. This wire is labeled PROGRAM on the wiring diagram.
  - C. It will be necessary to ground the gray wire for approximately five seconds while moving the controls, so it is sometimes helpful to attach one end of the white jumper to the vehicle's ground (for example, the chassis) and have the other end ready to connect to the gray PROGRAM wire when the procedure requires it.
  - D. To calibrate the control panel, follow the calibration procedures on Pages 9 & 10.





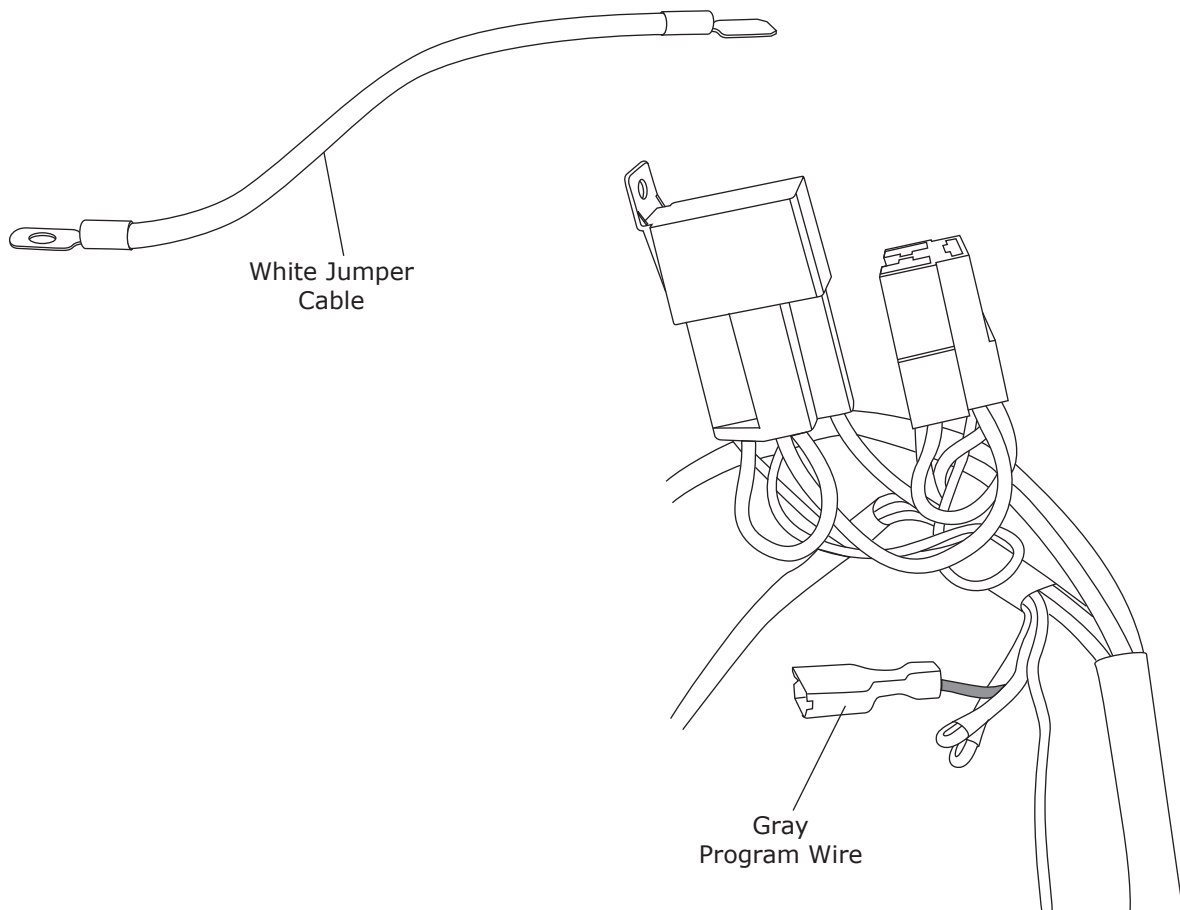


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## Control Panel Calibration Procedure

On Vintage Air Gen IV systems using factory controls, it is necessary to calibrate the system to your specific control panel. This procedure ensures that the stroke of your control panel levers or knobs is translated into precise control of the fan 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.

In preparation for calibration, you will need to attach the supplied white ground jumper wire 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 relays. 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 again change speeds, signaling that the lower limits have been learned and that the calibration procedure is complete.

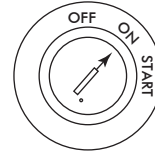




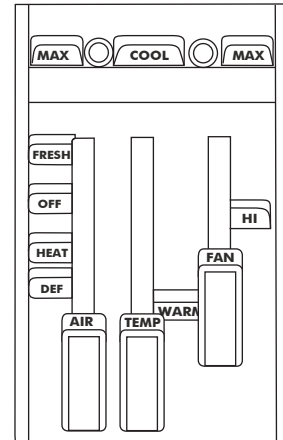
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## Control Panel Calibration Procedure (Cont.)

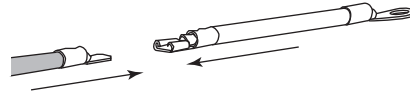
1. Turn on the ignition switch (Do not start the engine).



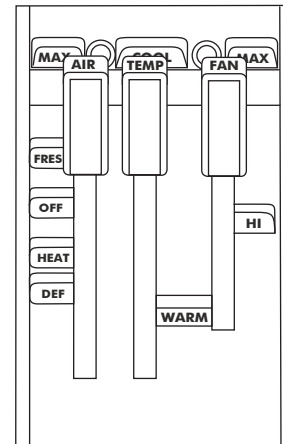
2. Move the control levers/knobs to the position shown.



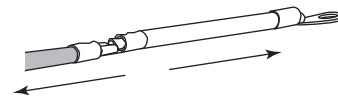
3. Connect the white jumper wire to the gray program wire. Wait for the blower speed to change (Approximately 5 seconds).



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, indicating completion of the calibration procedure.



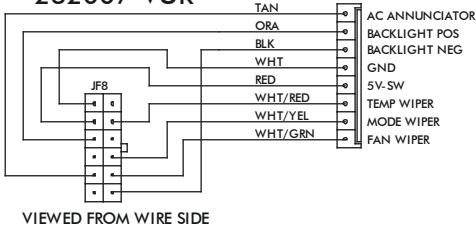
6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.



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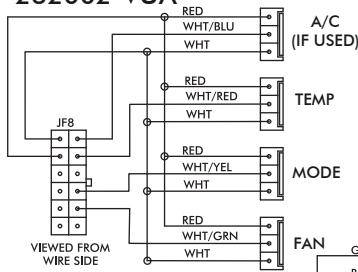
# Wiring Diagram

232007-VUR

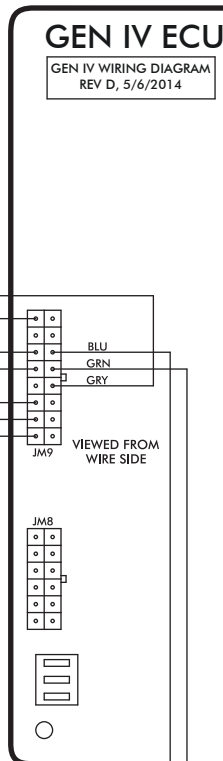


VIEWED FROM WIRE SIDE

232002-VUA

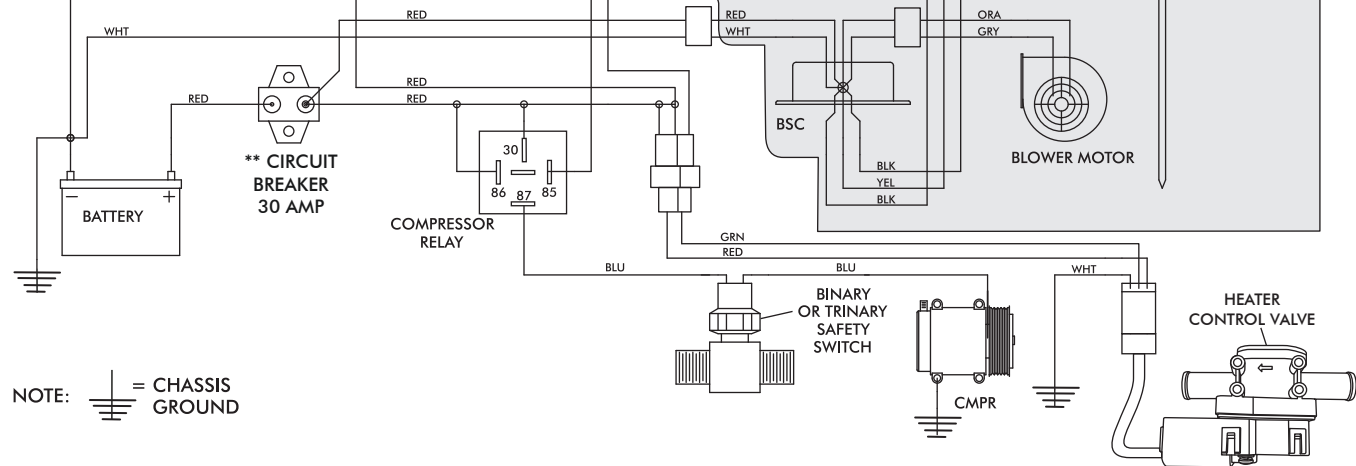
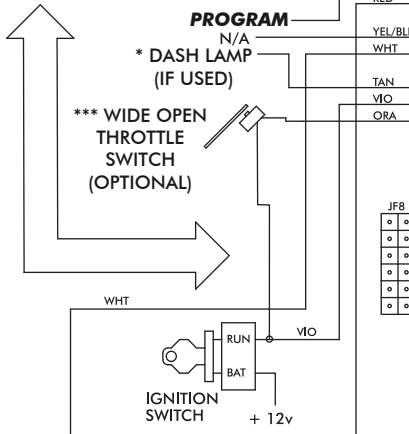
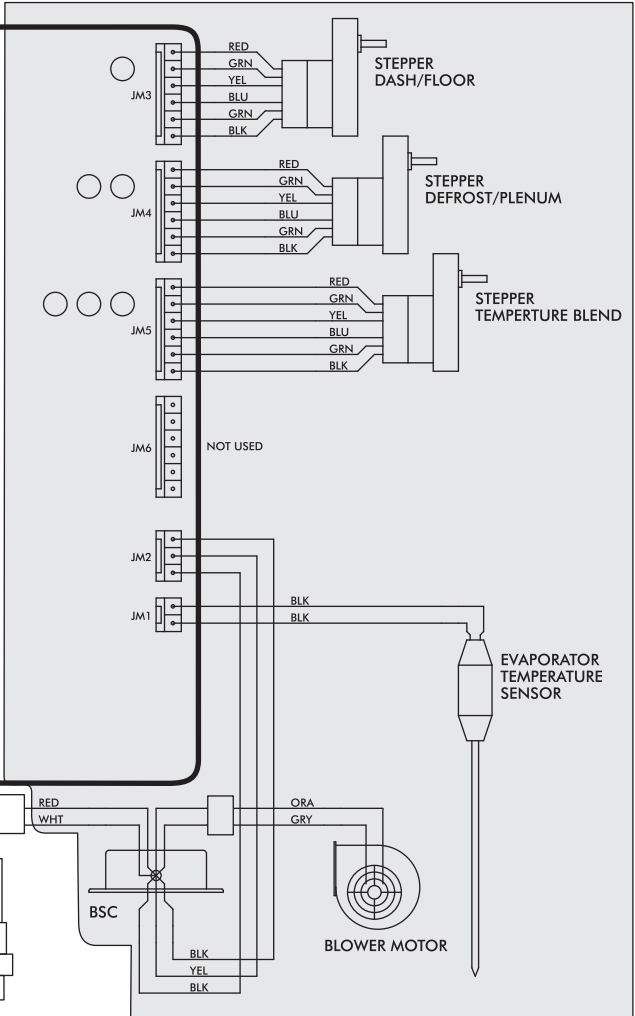


VIEWED FROM WIRE SIDE



VIEWED FROM WIRE SIDE

PRE-WIRED



NOTE: = CHASSIS GROUND

- Dash Lamp Is Used Only With Type 232007-VUR Harness.
- **Warning:** Always Mount Circuit Breaker As Close to the Battery As Possible. (NOTE: Wire Between Battery and Circuit Breaker Is Unprotected and Should Be Carefully Routed to Avoid a Short Circuit).
- Wide Open Throttle Switch Contacts Close Only at Full Throttle, Which Disables A/C Compressor.



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## Operation of Controls

On Gen IV 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 between operations, to indicate the change. **NOTE: For proper control panel function, refer to control panel instructions for calibration procedure.**

### Blower Speed

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

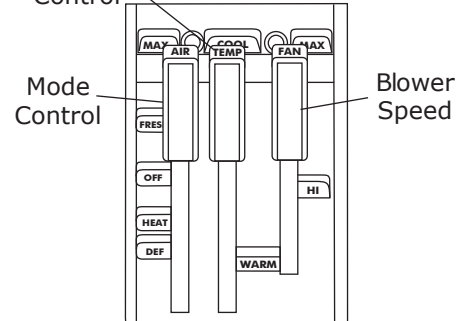
### Mode Control

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.

Temperature Control



## A/C Operation

### Blower Speed

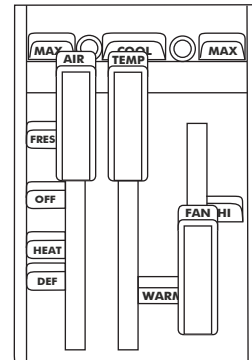
Adjust to desired speed.

### 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

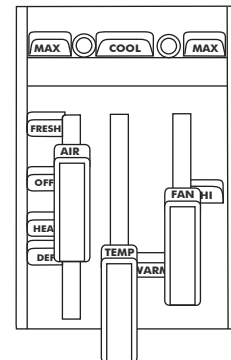
Adjust to desired speed.

### 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

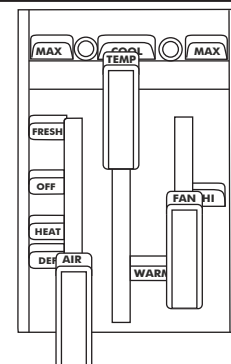
Adjust to desired speed.

### Temperature Control

Adjust to desired temperature.

### Mode Control

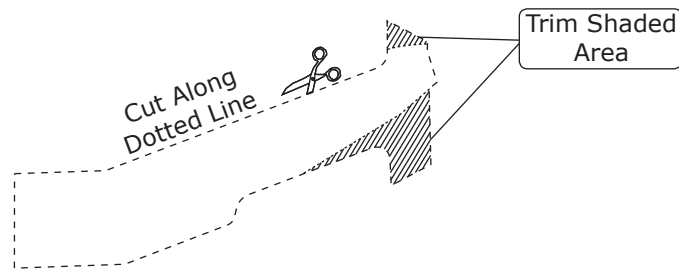
Adjust to DEFROST position for maximum defrost, or between FLOOR and DEFROST positions for a bi-level blend (Compressor is automatically engaged).





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## Vintage Air Control Lever Modification Template (1967 Models Only)



**1967 Models Only**





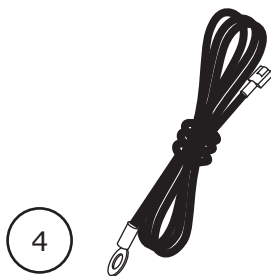
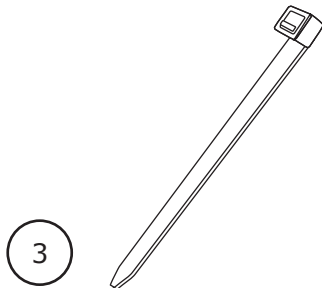
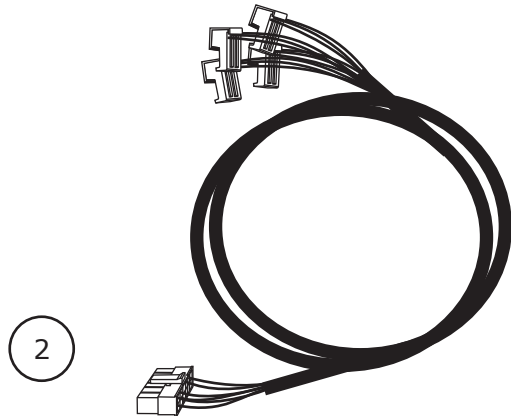
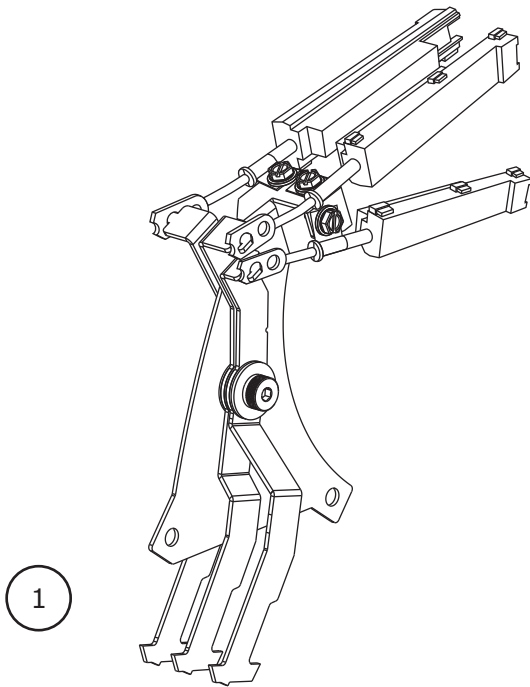


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# Packing List: Control Panel Kit (474266)

No.	Qty.	Part No.	Description
1.	1	474265	Control Lever Assembly
2.	1	232002-VUA	Control Harness, Gen IV Universal
3.	5	21301-VUP	Tie Wrap, 4"
4.	1	231520	Ground Wire
5.	3	18123-VUB	Washer, 3/16" x 1/2", Flat

Checked By: \_\_\_\_\_  
 Packed By: \_\_\_\_\_  
 Date: \_\_\_\_\_



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