1967-68 Chevrolet Camaro/ Firebird

Control Panel Deluxe Kit (492130)

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Table of Contents

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Packing List: Control Panel Kit (492130)

No.	Qty.	Part No.	Description
1.	1	492131	Control Panel Assembly
2.	4	18235-VUB	Screw, #8 x 1/2", Pan Head
3.	1	231520	Ground Wire
4.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal
5.	1	238001	Cable, Dakota Digital, HLC

**** 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.**

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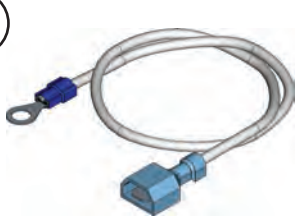

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NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.

Control Panel Removal

1. Remove the (4) mounting screws from the bottom of the dash bezel (See Figure 1, below).
2. Remove the (4) screws from behind the dash bezel, and remove the control panel.
3. Disconnect all cables and wires from the back of the control panel.

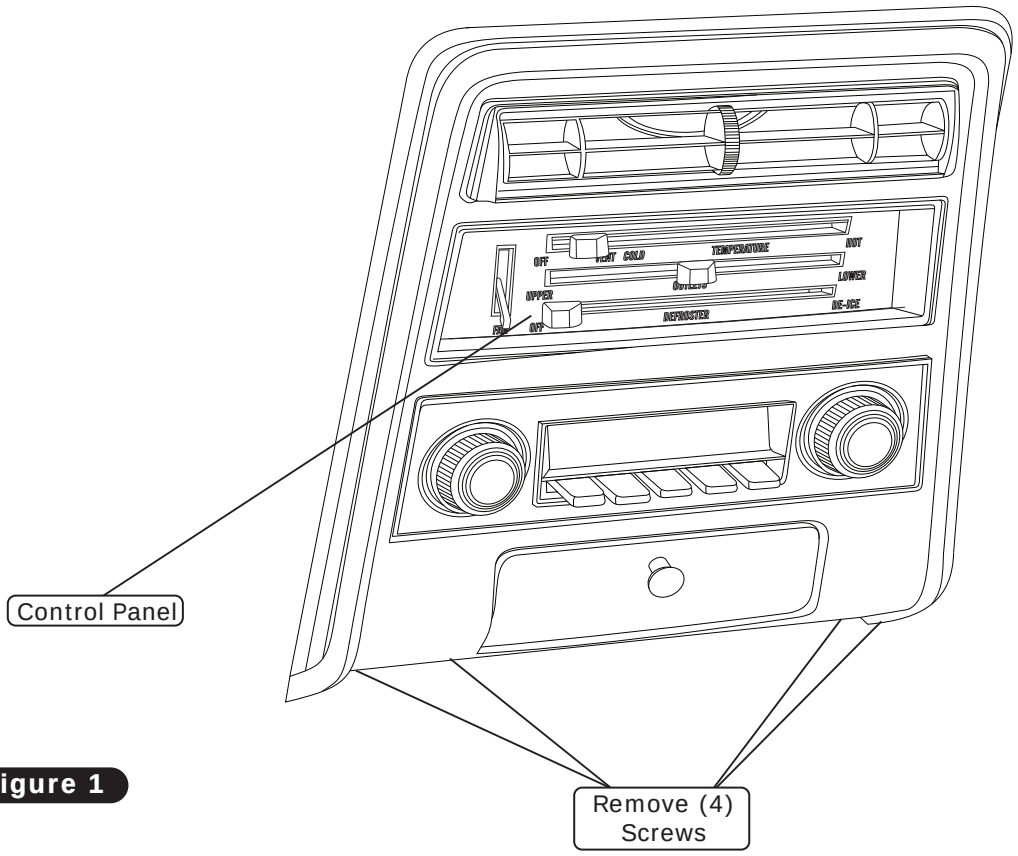

Figure 1

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Control Panel Installation

1. Plug the Gen IV/Gen 5 universal control harness into the control panel (See Figure 1, below).
2. From behind the dash, place the control panel against the dash opening (See Figure 2, below).
3. Secure the control panel to the dash using (4) #8 x 1/2" pan head screws (See Figure 2, below).
4. Reinstall the dash bezel.
5. Plug the control harness into the ECU module on the sub case (See Figure 3, below).

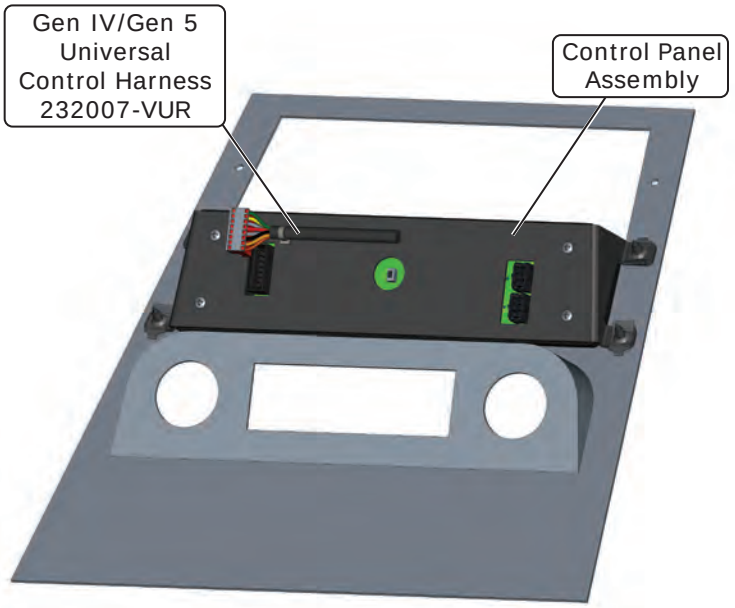


Figure 1

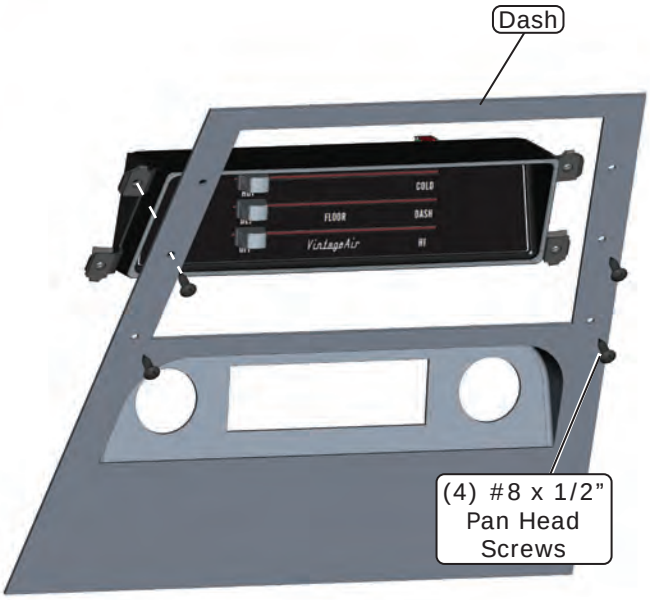


Figure 2

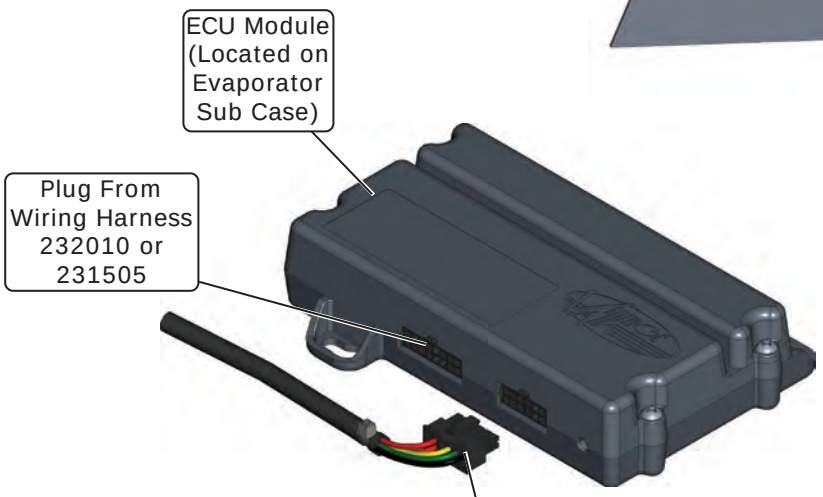


Figure 3

NOTE: When using a Vintage Air supplied control panel, connect the tan 20 AWG wire from the Gen IV Evaporator wiring harness (232010) or Gen 5 Wiring Harness (231505) to the factory dash lights to enable panel backlighting.

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:

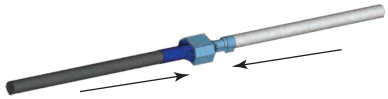
In preparation for calibration, you will need to attach the supplied white ground jumper wire (PN 231520) to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen 5 wiring harness, see the Gen 5 wiring diagram and instructions for more 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.

Control Panel Calibration Procedure (Cont.)

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

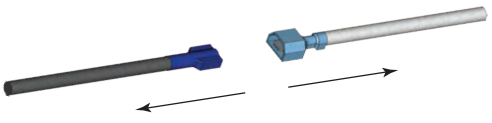
2. Move the control levers/knobs to the positions shown.

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.

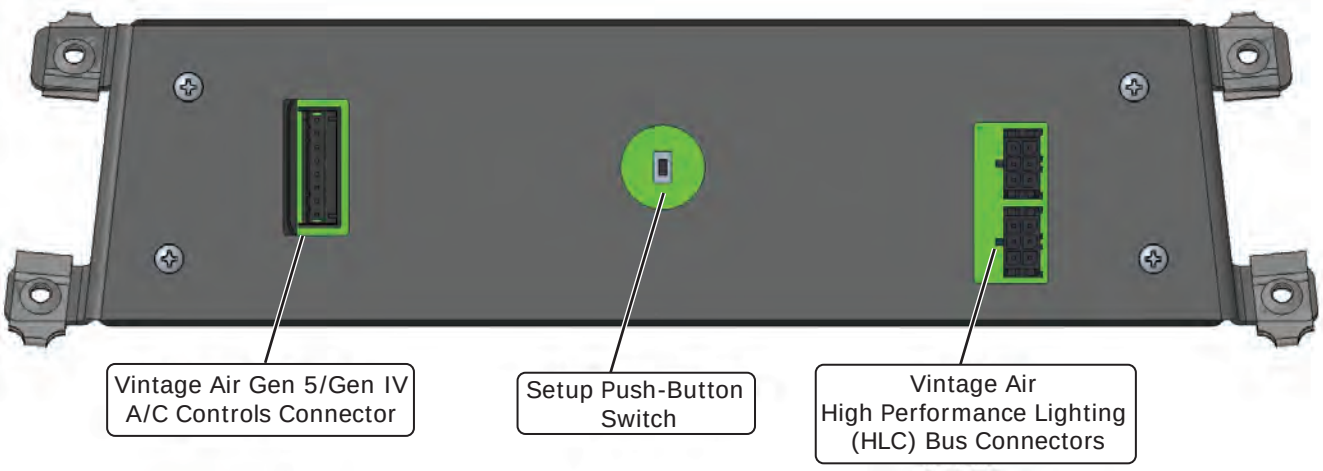


6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.

Connections

- **Vintage Air Gen 5/Gen IV Controls Connector:** Connects the control panel to the ECU.
- **Setup Push-Button Switch:** Is used to verify lighting function, and setup lighting color and backlighting intensity.
- **Vintage Air High Performance Lighting (HLC) Bus Connectors:** To be used for optional Vintage Air Remote Setup Cable or for integration into the Dakota Digital HDX or RTX instrument system. This enables the control panel to track the lighting of the connected Dakota Digital instrument system.

NOTE: The function of these two connectors is identical and either can be used as the input or output connection.



Lighting Setup

Lighting Function Verification:

- Holding down the Setup push-button at the time of power up, the panel will cycle through the primary color channels (red, green, blue, white). Upon release of the button, the panel will resume normal operation.

Lighting Setup:

NOTE: The push-button switch will only respond for lighting setup if the backlight is currently on. The switch is disabled when the backlight is off, or if the backlighting is tracking a Dakota Digital instrument system.

1. Short presses less than 1 second, will step through the list of backlight colors. **NOTE: Backlight color will be the stored color setting.**
2. Long presses greater than 1 second, will adjust the intensity of the backlight while the switch is held.
   a. Intensity will decrease with initial hold of switch.
   b. Intensity adjustment direction will alternate for each subsequent long switch press. **NOTE: Intensity will track the duty of the backlight circuit (this will be scaled by the stored intensity setting set by user via the setup switch).**
3. After about 4 seconds of no further interaction with the switch, the backlight will flash off and back on, to indicate the settings are being saved.

Remote Setup Wire (Optional):

- The optional Remote Setup Cable serves the same purpose as the push-button switch on the back of the control panel with the added benefit of being able to mount in a convenient location (See Figure 1, below).

Vintage Air Remote Setup Cable

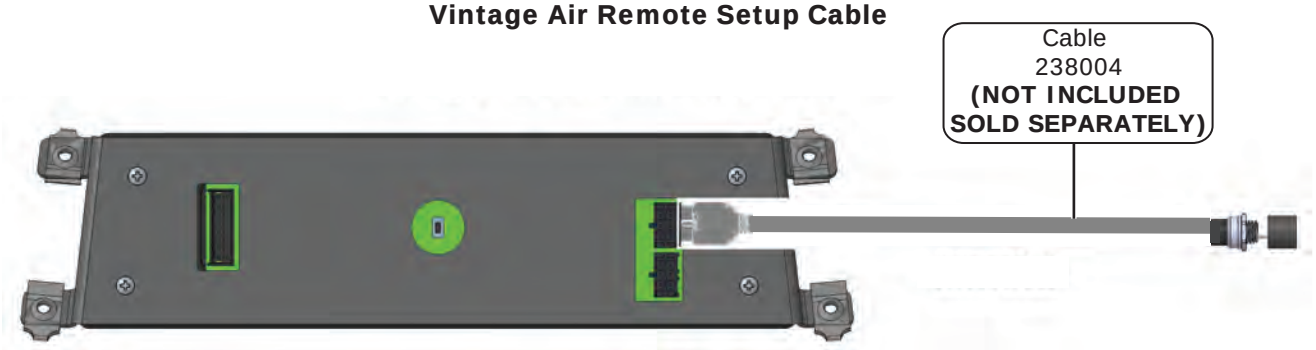


Figure 1

Colors

WHITE	<<< WHITE
WARM WHITE	<<< WARM WHITE
COOL WHITE	<<< COOL WHITE
BARN FIND	<<< BARN FIND
CANDLE LIGHT	<<< CANDLE LIGHT
LOG BOOK	<<< LOG BOOK
SHIFT	<<< SHIFT
STAGED	<<< STAGED
TRAFFIC CONE	<<< TRAFFIC CONE
TROPHY GOLD	<<< TROPHY GOLD
GRAPEFRUIT	<<< GRAPEFRUIT
RED LIGHTED	<<< RED LIGHTED
RED ANODIZE	<<< RED ANODIZE
FADED RED	<<< FADED RED
GRENADINE	<<< GRENADINE
SALMON	<<< SALMON

PINK SLIP	<<< PINK SLIP
CANDY STORE	<<< CANDY STORE
GARNET PINK	<<< GARNET PINK
AMETHYST	<<< AMETHYST
NIGHTFALL	<<< NIGHTFALL
DENIM JACKET	<<< DENIM JACKET
QUENCHED	<<< QUENCHED
ROAD TRIP	<<< ROAD TRIP
CLEAR VIEW	<<< CLEAR VIEW
TURQUOISE	<<< TURQUOISE
MINTY FRESH	<<< MINTY FRESH
GREEN FLAG	<<< GREEN FLAG
SAGE	<<< SAGE
COOLANT	<<< COOLANT
KRYPTONITE	<<< KRYPTONITE
KEY LIME	<<< KEY LIME

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Integration into Dakota Digital HDX/RTX/GRFX Instrument System (Optional)

- The two 6-pin Vintage Air High Performance Lighting (HLC) bus connectors can be used for integration into the Dakota Digital HDX or RTX Instrument System.

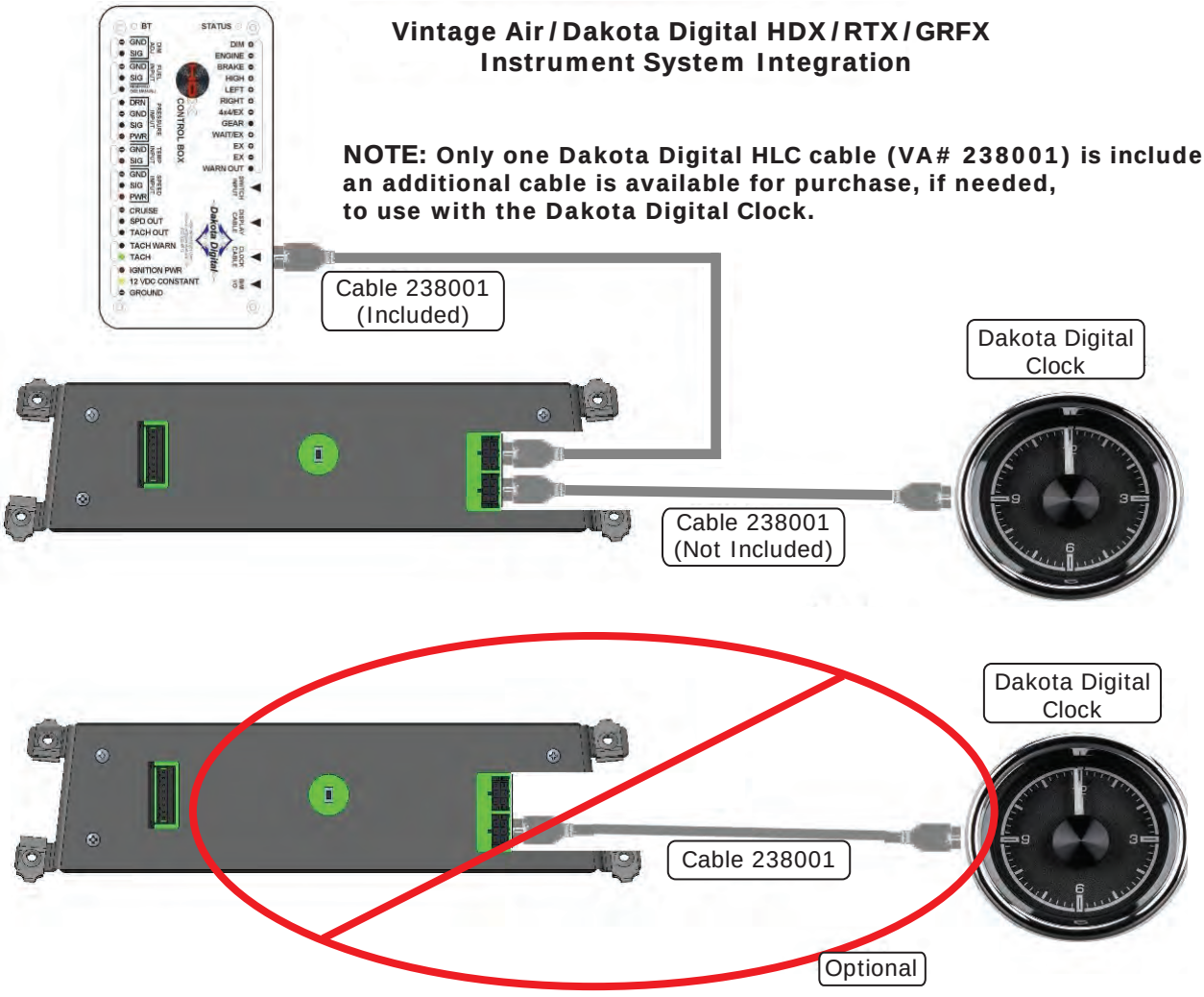
  a. Using Dakota Digital HLC cable (VA# 238001) from one of the HLC bus connectors to the 6-pin clock cable from the HDX or RTX system control box enables the control panel to track the lighting of the Dakota Digital Instrument. **NOTE: Only one Dakota Digital HLC cable (VA# 238001) is included, an additional cable is available for purchase, if needed, to use with the Dakota Digital Clock.**

  b. Optionally, the second HLC bus connector can also be used to connect this control panel in line with optional Dakota Digital components that employ this connection, e.g., Dakota Digital Clock. **NOTE: The Vintage Air control panel cannot be used to drive optional Dakota Digital components when not connected to the Dakota Digital Instrument System.**

- When signal is received from the Dakota Digital instrument system via the clock cable connection, the panel enters “lighting track” mode. In this mode, both intensity and color are set by the signal received from the Dakota Digital instrument system. Any adjustment to panel lighting intensity or color in this mode must be made in the Dakota Digital instrument system.

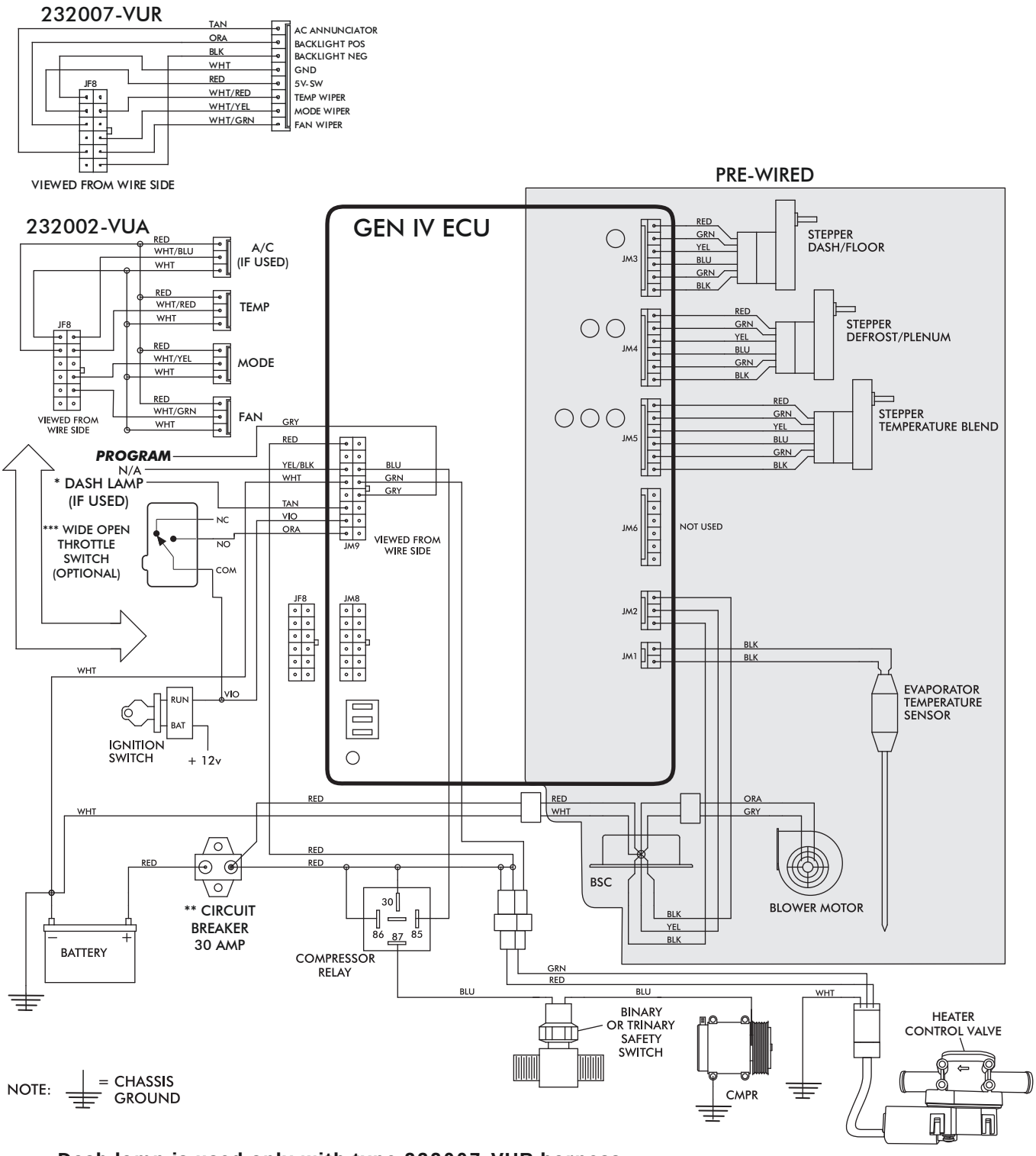
Vintage Air/Dakota Digital HDX/RTX/GRFX Instrument System Integration

NOTE: Only one Dakota Digital HLC cable (VA# 238001) is included, an additional cable is available for purchase, if needed, to use with the Dakota Digital Clock.



NOTE: The Vintage Air control panel cannot be used to drive optional Dakota Digital components when not connected to the Dakota Digital Instrument System.

Gen IV Wiring Diagram

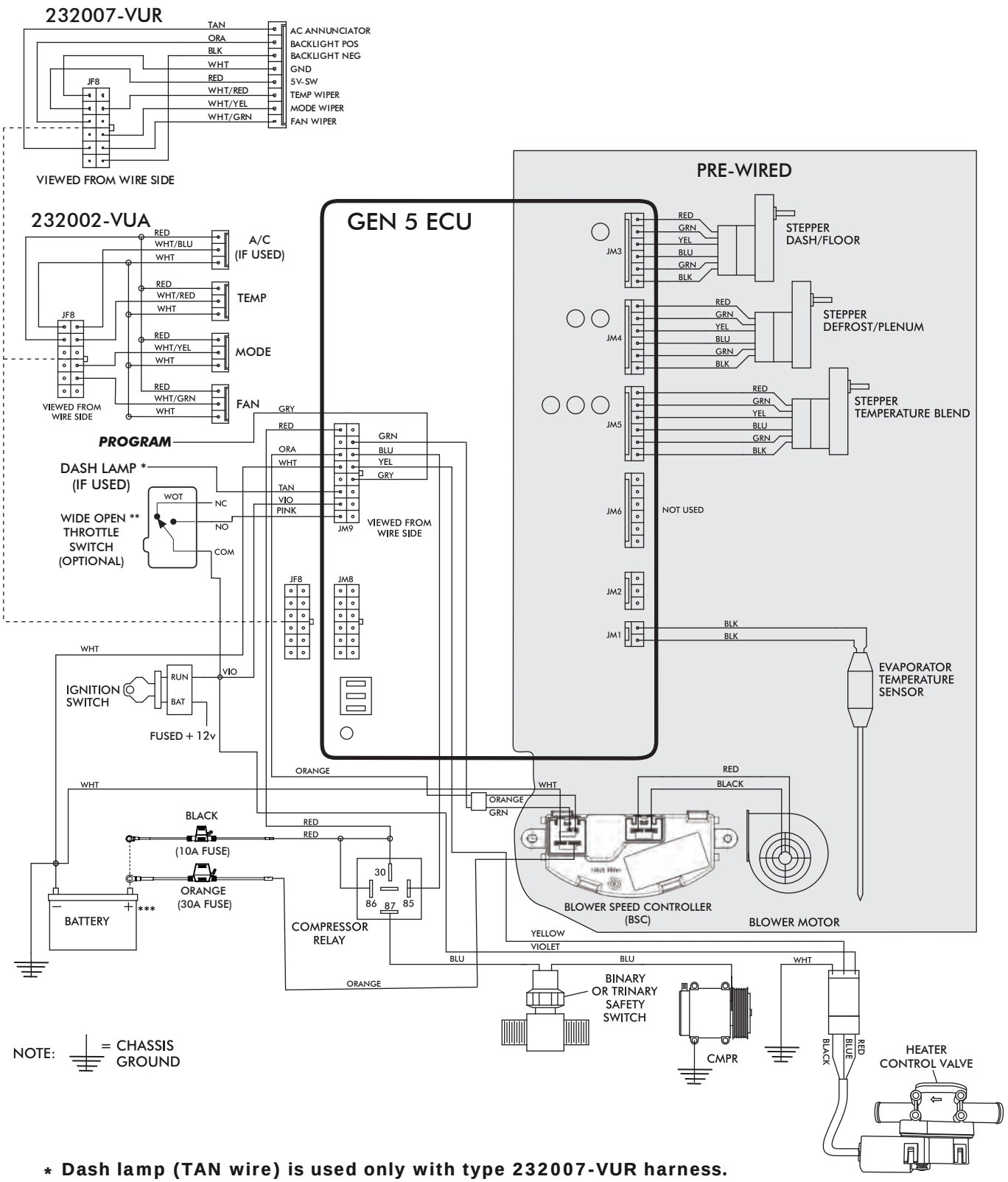


*** Dash lamp is used only with type 232007-VUR harness.**

**** 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.**

Gen 5 Wiring Diagram



*** 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.**

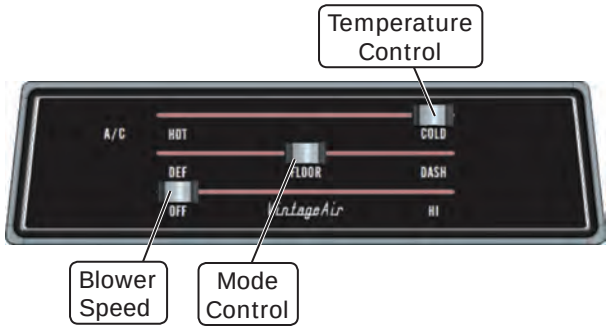
Operation of Controls

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 6 & 7 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).

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Packing List: Control Panel Kit (492130)

No.	Qty.	Part No.	Description	
1.	1	492131	Control Panel Assembly	_____
2.	4	18235-VUB	Screw, #8 x 1/2", Pan Head	_____
3.	1	231520	Ground Wire	_____
4.	1	232007-VUR	Control Harness, Gen IV/Gen 5 Universal	_____
5.	1	238001	Cable, Dakota Digital, HLC	_____

Checked By: _____
Packed By: _____
Date: _____

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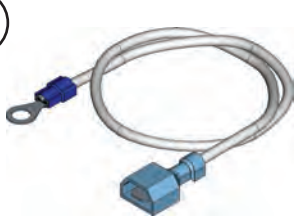

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Refer to packing list for actual parts and quantities.