



1971-80 International Harvester Scout II

Control Panel Kit
(474134)



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Packing List: Control Panel Kit (474134)

No.	Qty.	Part No.	Description
1.	4	180899	Nut with Star Washer, 4-40
2.	1	474133	Control Panel Assembly
3.	1	232002-VUA	Control Harness, Gen IV/Gen 5 Universal
4.	1	643319	Control Back Plate
5.	1	231520	Ground Wire, 12" White, 16 GA with 1/4" Male Spade

**** 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



4



5



**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

1. Disconnect the battery.
2. Disconnect the cables from the heater duct.
3. Disconnect the blower motor switch plug (See Photo 1, below). **NOTE: The blower motor switch plug may be difficult to see due to it being surrounded by other wiring.**
4. Remove the blower motor knob by pulling straight out firmly until it releases (See Photo 2, below).
5. There are (2) studs on the back side of the dash panel that fasten the control assembly to the dash. Remove the (2) nuts (See Photo 3, below). **NOTE: These studs cannot be easily seen but are reachable.**

Disconnect blower motor switch plug



Photo 1

Remove blower motor knob by pulling straight out firmly until it releases

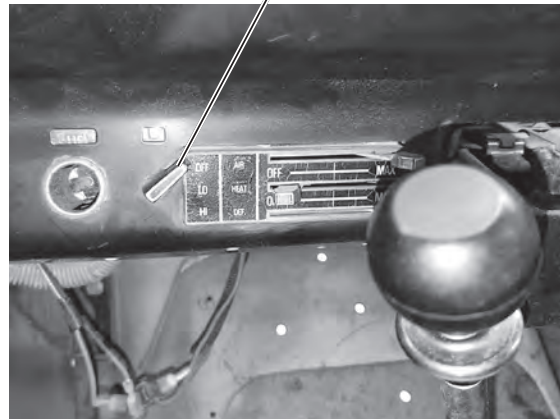


Photo 2

Location where studs insert through control panel

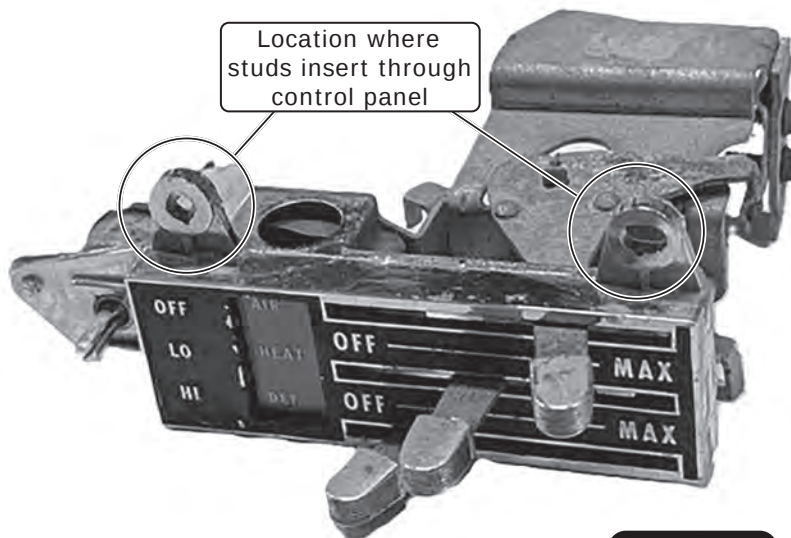


Photo 3



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Control Panel Installation

1. Install the control backing plate into the Scout II. **NOTE: The plate will be on the back side of the dash panel and use the OEM studs the factory heater controls used.** Use the OEM nuts to secure the backing plate (See Photo 1, below). **NOTE: This alignment moves the control panel bezel so the edges cover the factory fan motor switch hole and label.**
2. Install the control assembly front plate and bezel. The front plate studs will pass through the factory heater control holes and into the backing plate. Feed the control wiring through the factory heater controls holes. Ensure the backing plate and front plate are orientated as shown in Figures 1 and 2, below. Secure it using (4) 4-40 nuts. **NOTE: The 4-40 nuts are easier to fasten before the evaporator module is installed.**

Install control backing plate on back side of dash and secure it using OEM nuts



Photo 1

Install control assembly front plate and bezel. The front plate studs will pass through factory heater control holes and into backing plate

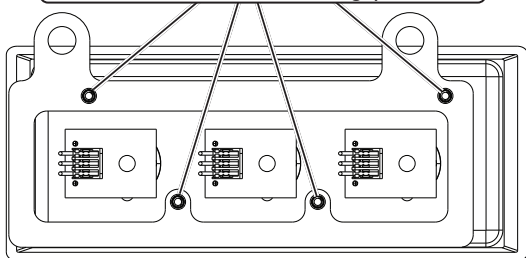


Figure 1

Secure using (4) 4-40 nuts

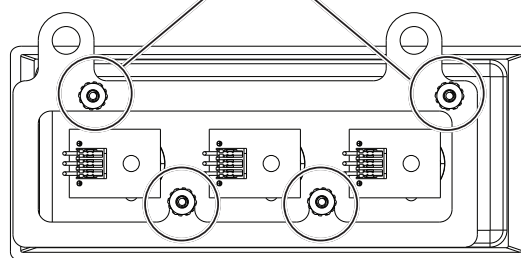


Figure 2

Final Steps

1. Plug the wiring harnesses into the ECU module located on the sub case.
2. Wire according to the wiring diagram on Page 8.



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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:

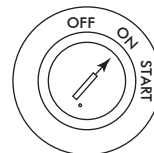
In preparation for calibration, you will need to attach the supplied white ground jumper wire (PN 231520) to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen 5 wiring harness, see the Gen 5 wiring diagram and instructions for more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



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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 positions shown.



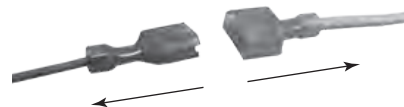
3. Connect the white jumper wire to the gray program wire. Wait approximately 5 seconds for the blower speed to change if using a Gen IV system, if using a Gen 5 system wait for the blower to default to medium speed.



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.

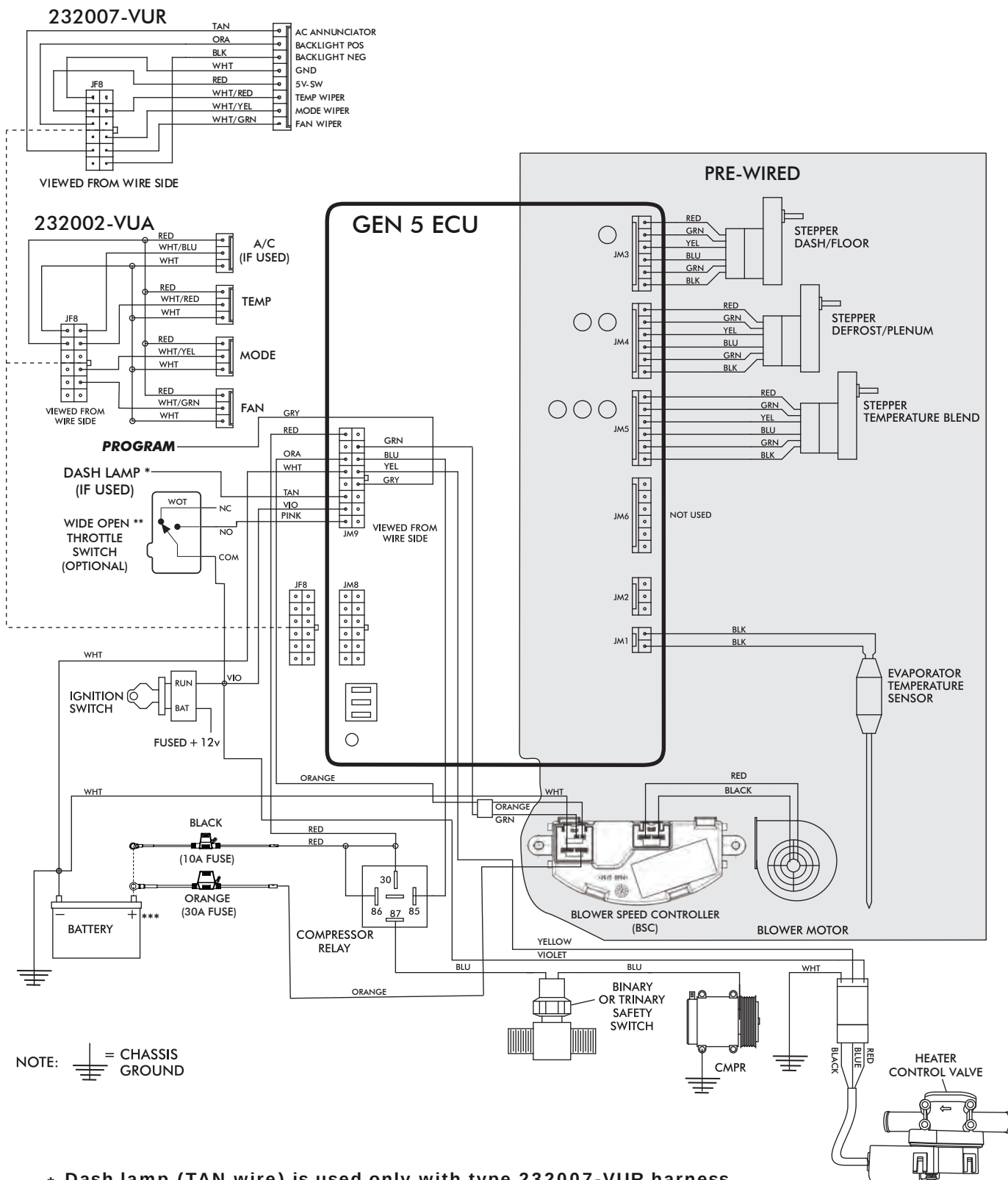


6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.



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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.



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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 and 7 for calibration procedure.**

Blower Speed

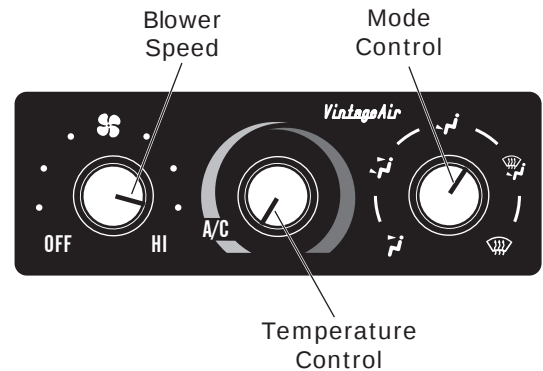
This lever/knob controls blower speed, from OFF to HI.

Mode Control

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

Temperature Control

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



A/C Operation

Blower Speed

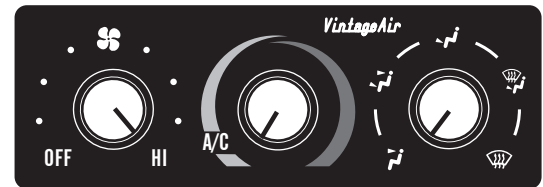
Adjust to desired speed.

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

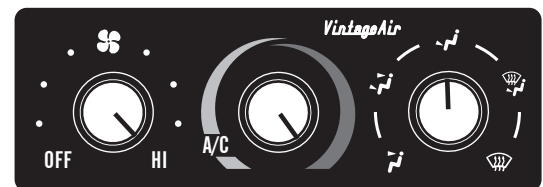
Adjust to desired speed.

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

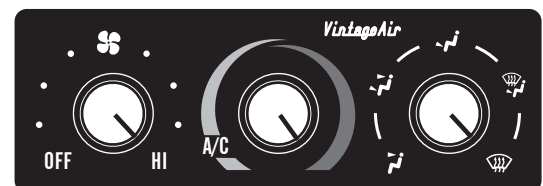
Adjust to desired speed.

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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Checked By: _____
Packed By: _____
Date: _____

1



2



3



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