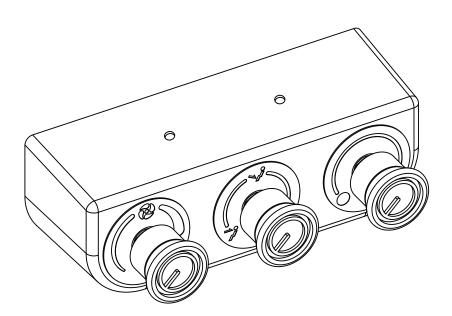


# GEN IV ROTARY CONTROL PANEL KIT 492050



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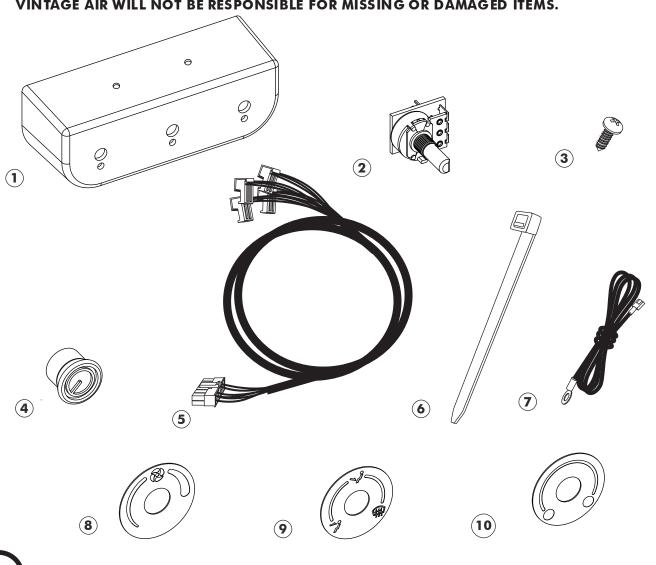


#### **GEN IV ROTARY CONTROL PANEL KIT**

CONTROL KIT 492050

No	QTY	PART No.	DESCRIPTION
1.	1	490006	GEN IV PLASTIC POD
2.	3	246018-0	ROTARY POT ASM
3.	2	18235-VUB	#8 x 1/2" PH PAN HEAD SCREW
4.	3	497004	KNOB SOFT BLACK METRIC
5.	1	232002-VUA	GEN IV UNIVERSAL CONTROL HARNESS
6.	5	21301-VUP	4" TIE WRAP
7.	1	231520	GROUND WIRE
8.	1	205550	LABEL GEN IV ROTARY FAN
9.	1	205551	LABEL GEN IV ROTARY MODE
10.	1	205552	LABEL GEN IV ROTARY TEMP

\*\* 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.

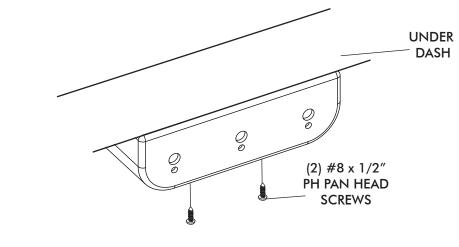


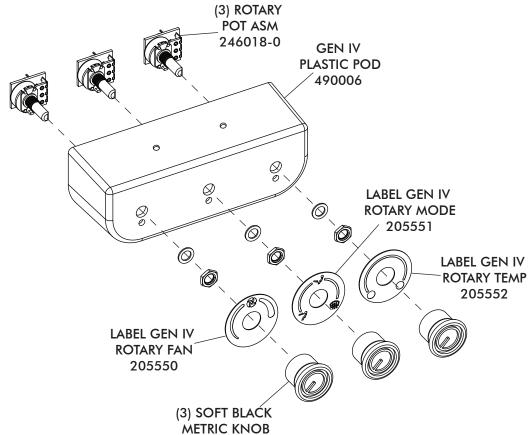


## GEN IV ROTARY CONTROL PANEL KIT INSTRUCTIONS

#### **UNDER DASH ROTARY POT INSTALLATION -**

- ☐ INSTALL PLASTIC POD UNDER DASH USING (2) #8 x 1/2" PH PAN HEAD SCREWS
- ☐ INSTALL THE (3) ROTARY POT IN GEN IV PLASTIC POD AS SHOWN BELOW.



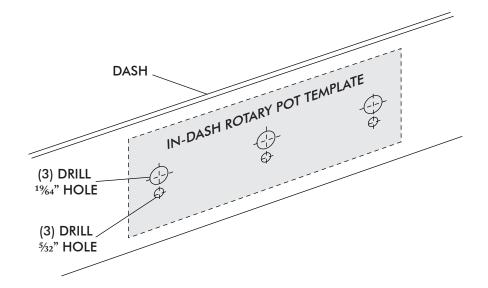


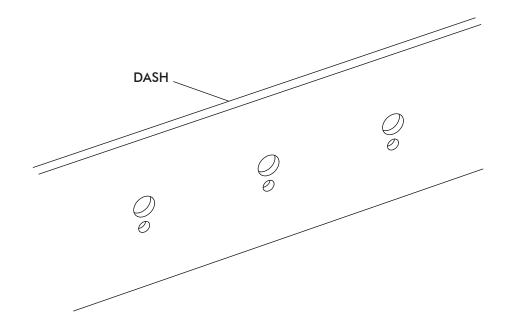
497004



### IN-DASH ROTARY POT INSTALLATION -

☐ USING TEMPLATE PROVIDED ON PAGE 10, PLACE TEMPLATE ON DASH AND DRILL (3) 19/64" HOLES AND (3) 5/32" HOLES IN DASH AS SHOWN BELOW.

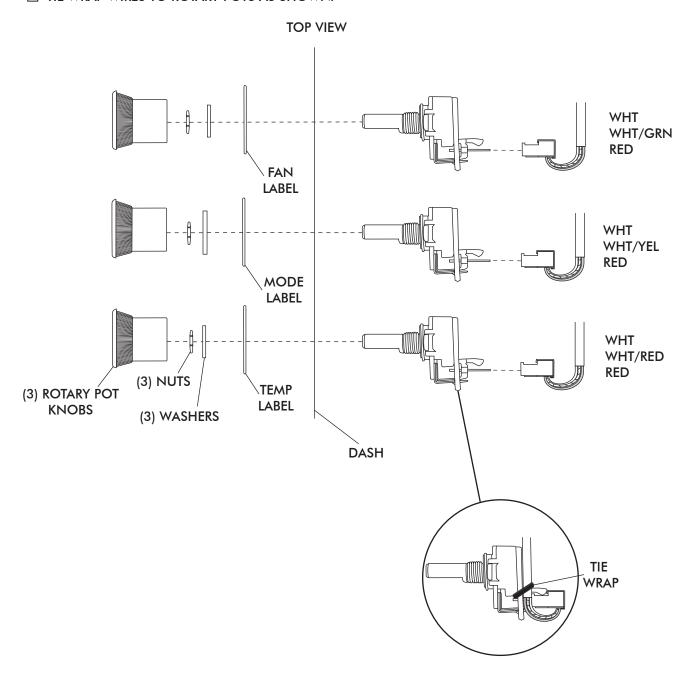






#### **ROTARY POT INSTALLATION -**

- $\hfill \square$  Locate the (3) rotary pot assemblies, and install in dash as shown below.
- ☐ TIE WRAP WIRES TO ROTARY POTS AS SHOWN.



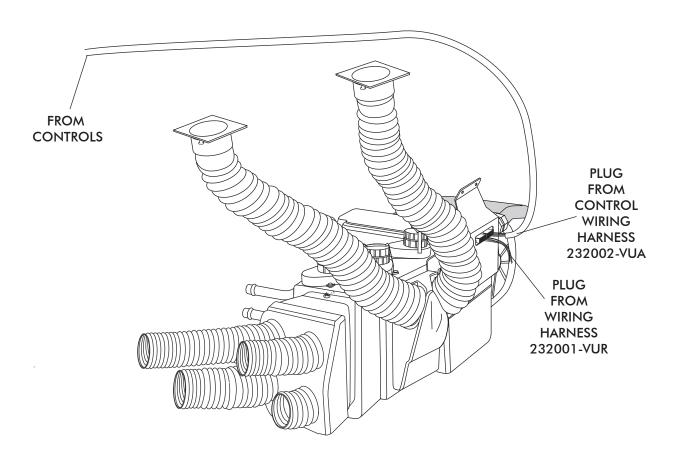


#### FINAL STEPS

- ☐ PLUG THE WIRING HARNESS INTO THE ECU MODULE ON SUB CASE. SEE BELOW.
- ☐ WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 10.
- ☐ CONTROL PANEL CALIBRATION PROCEDURE AND OPERATION INSTRUCTIONS:

NOTE: IF YOU ARE USING THE SUPPLIED POD AND LABELS, CALIBRATION WILL NOT BE NECESSARY. HOWEVER, IF YOU ARE DOING A CUSTOM INSTALLATION THAT REQUIRES YOU TO REVERSE A FUNCTION OR LIMIT THE TRAVEL OF A POTENTIOMETER, CALIBRATION IS REQUIRED.

- ☐ CALIBRATING THE CONTROLS WILL SET THE RANGE OF TRAVEL FOR THE ROTARY POT ASSEMBLIES CONNECTED TO THE OEM CONTROLS. PERFORMING THIS PROCEDURE WILL SET THE LIMITS OF THE ROTARY POTS AT THEIR HIGHEST AND LOWEST POINTS.
- ☐ LOCATE THE GRAY WIRE WITH AN UNUSED CONNECTOR IN THE WIRING HARNESS NEAR THE TWO CABLE HARNESS RELAYS. THE WIRE IS LABELED PRGM ON THE WIRING DIAGRAM ON PAGE 10.
- ☐ 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 WIRE TO THE VEHICLE'S GROUND (FOR EXAMPLE THE CHASSIS) AND HAVE THE OTHER END READY TO CONNECT TO THE GRAY PRGM WIRE WHEN THE PROCEDURE REQUIRES IT.
- ☐ TO CALIBRATE THE CONTROLS, FOLLOW THE CALIBRATION PROCEDURES ON PAGES 8 & 9.

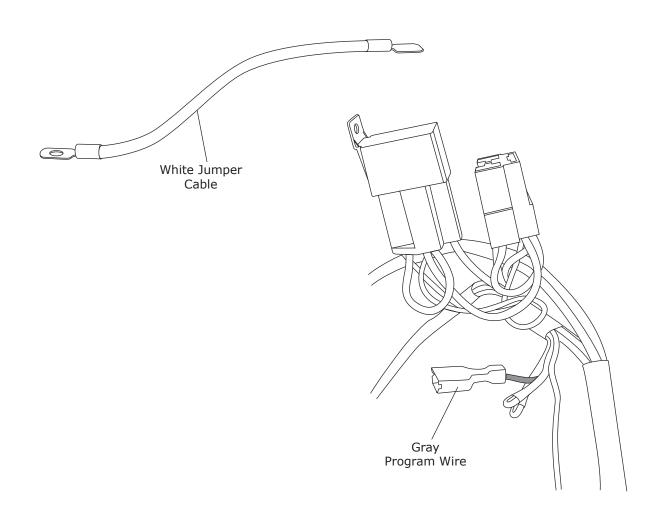




## Control Panel Calibration Procedure

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.



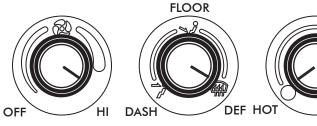


## Control Panel Calibration Procedure (Cont.)

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



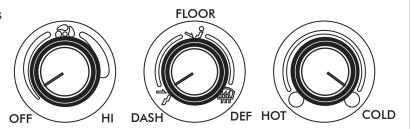
**2.** Move the control levers/knobs to the position shown.



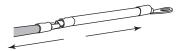
**3.** Connect the white jumper wire to the gray program wire. Wait for the blower speed to change (Approximately 5 seconds).



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



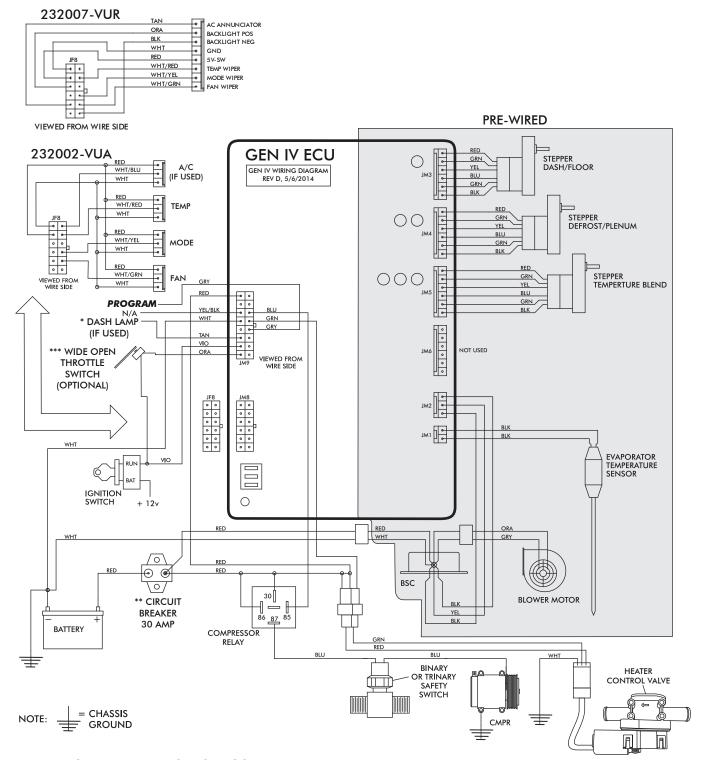
**5.** Disconnect the white jumper wire from the gray program wire. The blower speed will change, indicating completion of the calibration procedure.



**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.



## 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.



#### **OPERATION OF CONTROLS**

THE TEMPERATURE KNOB TOGGLES BETWEEN A/C AND HEAT MODES. FOR A/C MODE ROTATE THE TEMPERATURE KNOB ALL THE WAY LEFT FOR HEAT MODE ROTATE THE KNOB ALL THE WAY TO THE RIGHT TO DISENGAGE THE COMPRESSOR, THEN MOVE THE KNOB TO SELECT DESIRED TEMPERATURE.

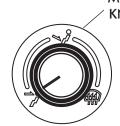
NOTE: EACH TIME THE SYSTEM TOGGLES BETWEEN MODES, THE BLOWER WILL MOMENTARILY CHANGE SPEEDS.

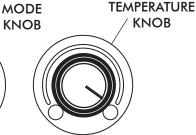
ALL SWITCHES ARE VARIABLE BETWEEN POSITIONS, SYSTEM WILL PERFORM A BLEND BETWEEN THE FUNCTIONS.

#### A/C MODE

BLOWER SPEED







#### **BLOWER SPEED**

THIS KNOB CONTROLS
THE BLOWER SPEED,
FROM OFF TO HI

#### **MODE KNOB**

ROTATE THE KNOB TO THE LEFT TO DIRECT AIR FLOW TO THE DASH VENTS

#### **TEMPERATURE KNOB**

IN A/C MODE ROTATE
THE TEMPERATURE KNOB
ALL THE WAY RIGHT TO
THE COLD POSITION TO
ENGAGE COMPRESSOR.
(ROTATE KNOB LEFT OR
RIGHT TO ADJUST
DESIRED TEMPERATURE)

#### **HEAT MODE**







## DEFROST/ DE-FOG MODE







#### **BLOWER SPEED**

ROTATE KNOB RIGHT TO DESIRED BLOWER SPEED FROM OFF TO HI

#### **MODE KNOB**

ROTATE THE KNOB TO THE CENTER TO DIRECT AIR FLOW TO THE FLOOR.

#### **TEMPERATURE KNOB**

IN HEAT MODE ROTATE
THE TEMPERATURE KNOB
ALL THE WAY LEFT TO THE
HOT POSTION. (ROTATE KNOB
LEFT OR RIGHT TO ADJUST
DESIRED TEMPERATURE)

#### **BLOWER SPEED**

ROTATE KNOB RIGHT TO DESIRED BLOWER SPEED FROM OFF TO HI

#### **MODE KNOB**

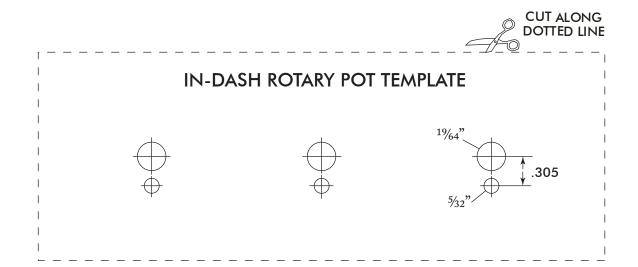
ROTATE THE KNOB TO THE RIGHT TO DIRECT AIR FLOW TO THE DEFROST VENTS

#### **TEMPERATURE KNOB**

ROTATE KNOB LEFT OR
RIGHT TO ADJUST
DESIRED TEMPERATURE
(COMPRESSOR IS
AUTOMATICALLY ENGAGED)



### IN-DASH ROTARY POT TEMPLATE





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