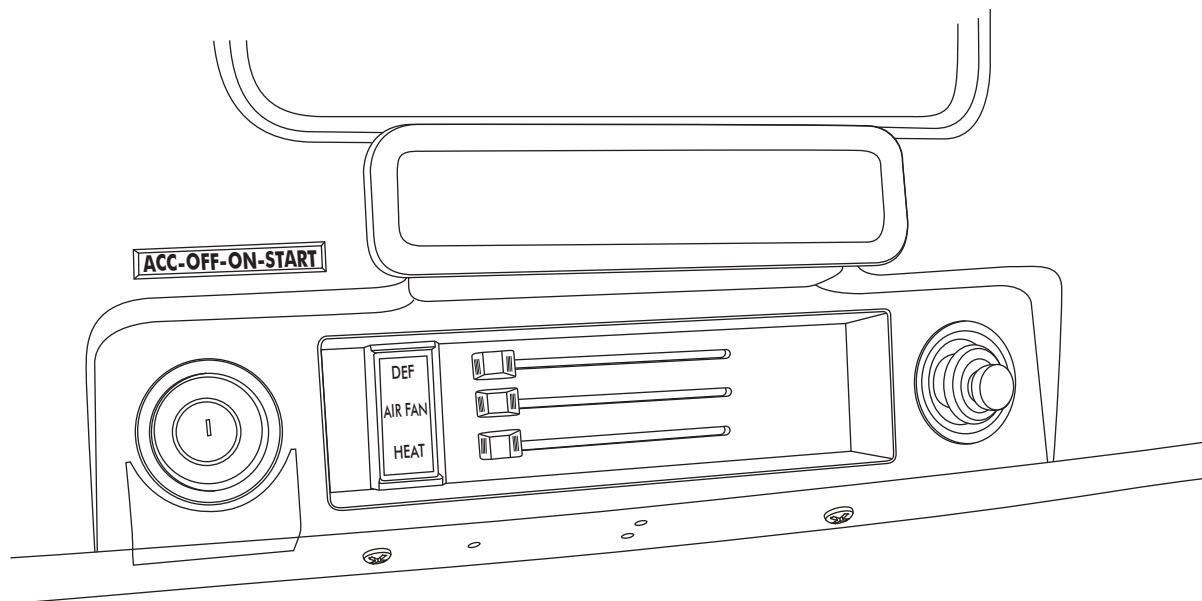




an ISO 9001: 2008 Registered Company

# 1967-72 CHEV PICK-UP

WITHOUT AC CONTROL PANEL  
CONVERSION KIT  
473266



18865 GOLL ST. - SAN ANTONIO, TX. - 78266 ph.210-654-7171 - fax 210-654-3113



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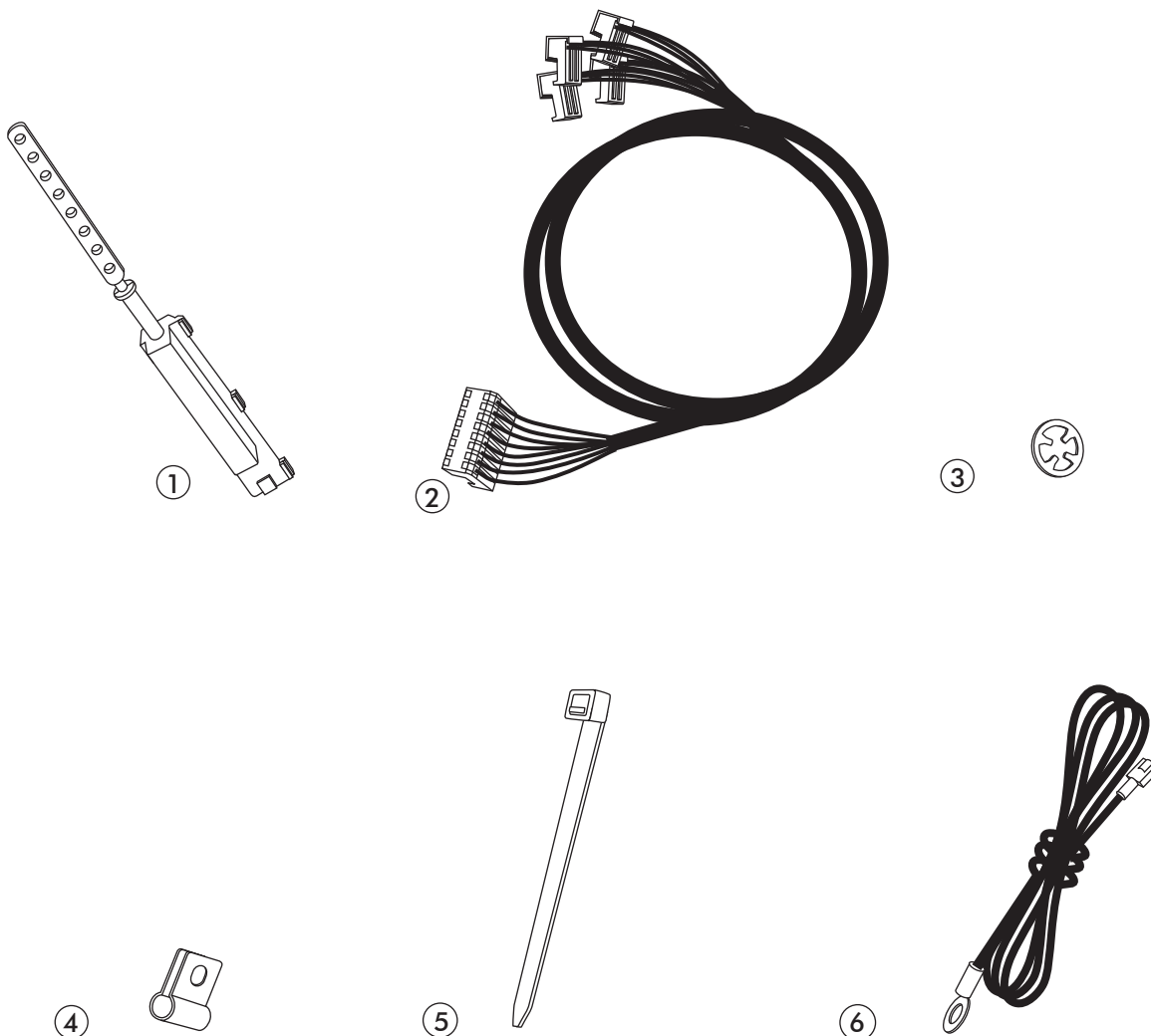


## CONTROL KIT PACKING LIST

CONTROL KIT  
473266

No	QTY	PART No.	DESCRIPTION
1.	3	112002-SUA	CABLE CONVERTER ASSEMBLY
2.	1	232002-VUA	GEN IV UNIVERSAL CONTROL HARNESS
3.	3	65976-VUE	3/16" PUSH-ON RING
4.	3	491010-VUR	CABLE CONVERTER CLAMP
5.	5	21301-VUP	4" TIE WRAP
6.	1	231520	GROUND WIRE

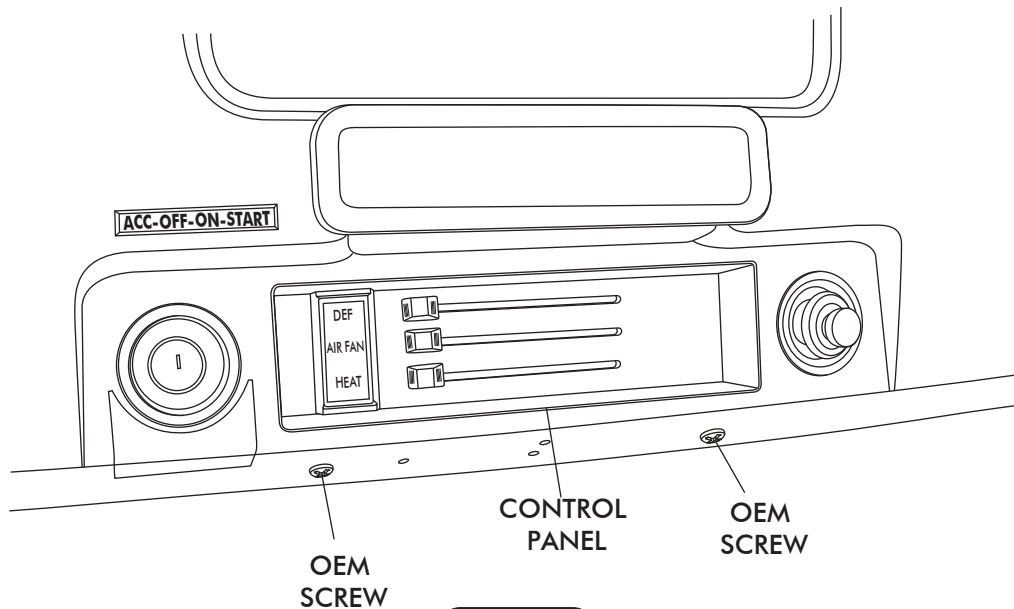
**\*\* BEFORE BEGINNING INSTALLATION OPEN ALL PACKAGES AND CHECK CONTENTS OF SHIPMENT. PLEASE REPORT ANY SHORTAGES DIRECTLY TO VINTAGE AIR WITHIN 15 DAYS. AFTER 15 DAYS, VINTAGE AIR WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED ITEMS.**



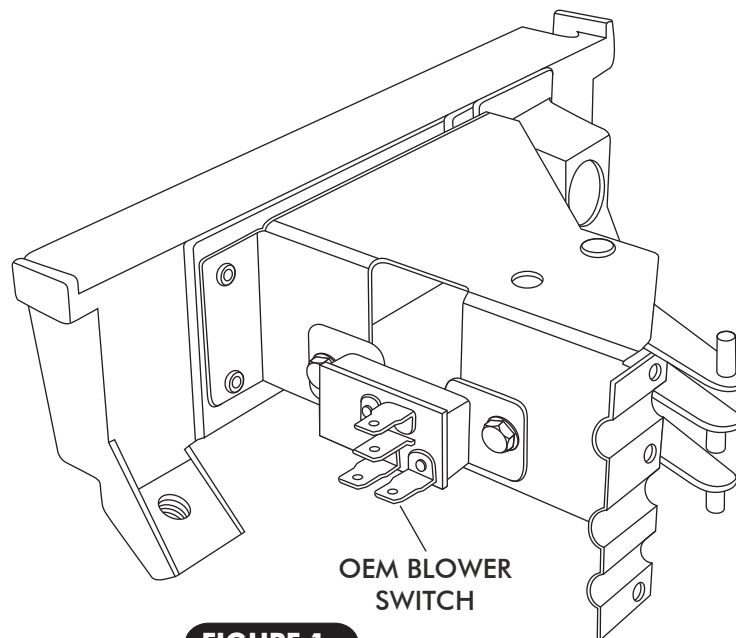


## REMOVING OEM CONTROL PANEL & BLOWER SWITCH

- REMOVE THE (2) OEM SCREWS FROM UNDER DASH. (SEE FIGURE 1 BELOW)
- DISCONNECT CABLES AND WIRES FROM BACK OF CONTROL PANEL.
- REMOVE THE CONTROL PANEL FROM DASH.
- REMOVE OEM BLOWER SWITCH (DISCARD). (SEE FIGURE 1a)



**FIGURE 1**

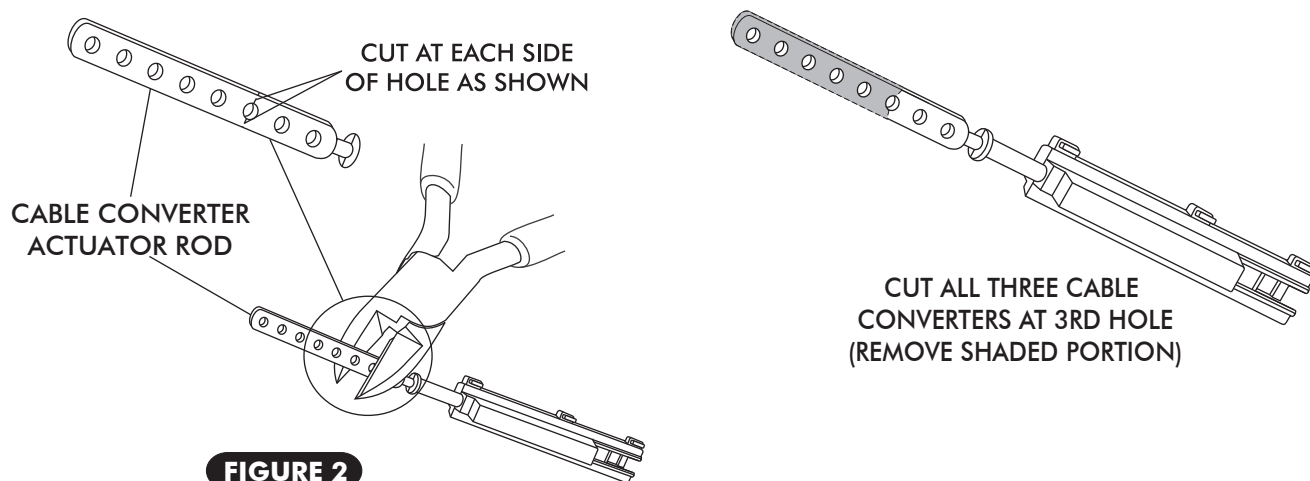


**FIGURE 1a**



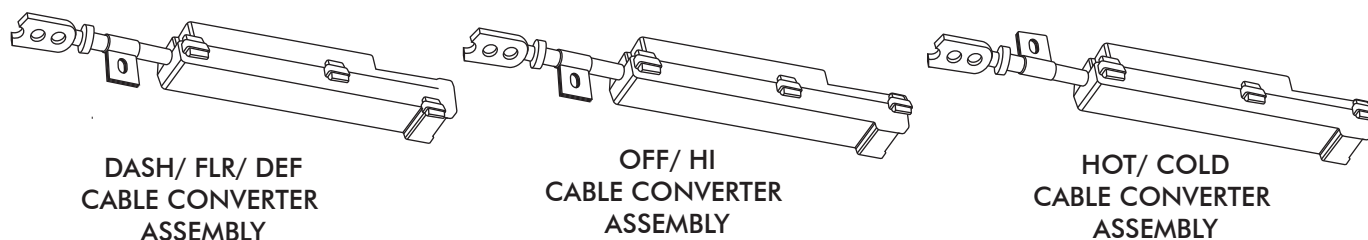
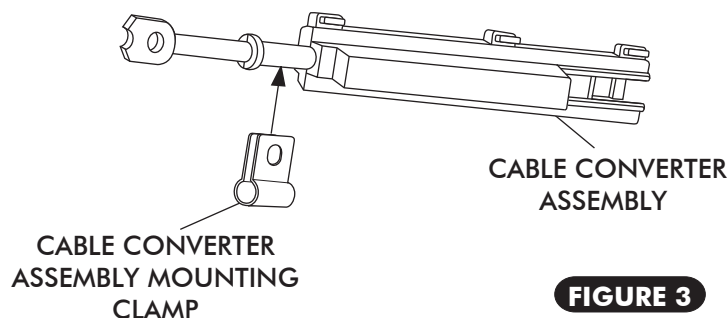
## CABLE CONVERTER ASSEMBLY MODIFICATION

- LOCATE THE (3) CABLE CONVERTER ASSEMBLIES, AND USING A PAIR OF WIRE CUTTERS, CUT CABLE CONVERTER ACTUATOR RODS AS SHOWN BELOW IN FIGURE 2.



## CABLE CONVERTER ASSEMBLY MOUNTING CLAMP INSTALLATION

- INSTALL CABLE CONVERTER ASSEMBLY MOUNTING CLAMPS. (SEE FIGURE 3 BELOW)



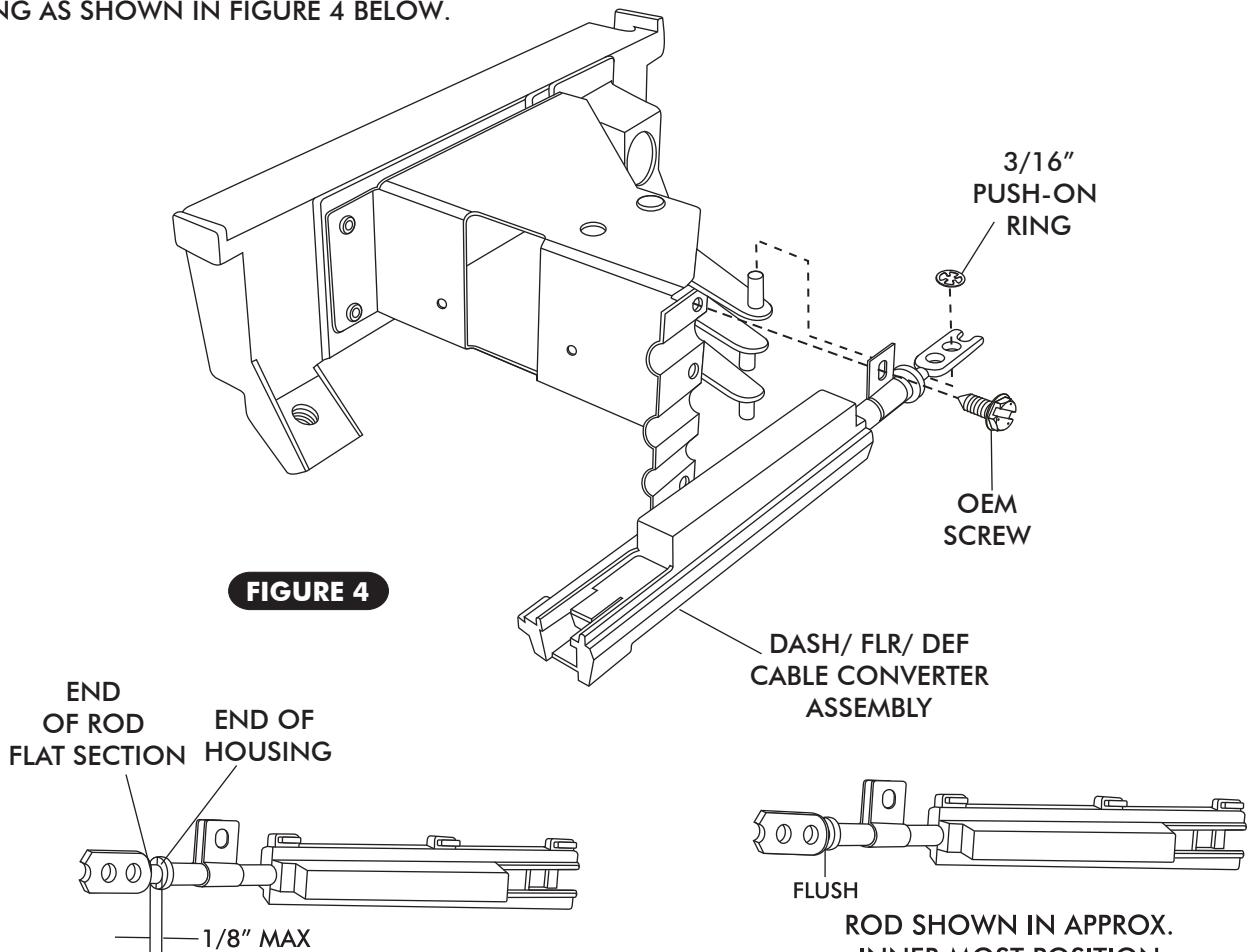
**ORIENT CABLE CONVERTER ASSEMBLIES AS SHOWN AND INSTALL MOUNTING CLAMPS AS SHOWN. (NOTE: ORIENT CLAMPS IN RELATION TO THE TWO HOUSING SNAPS ON CABLE CONVERTER ASSEMBLY)**



## CABLE CONVERTER ASSEMBLY INSTALLATION

### DASH/ FLR/ DEF CABLE CONVERTER ASSEMBLY

- INSTALL CABLE CONVERTER ASSEMBLY ON THE DASH/ FLR/ DEF LEVER. (SEE FIGURE 4 BELOW.)
- INSTALL CABLE CONVERTER PUSH ROD ONTO DASH/ FLR/ DEF LEVER.
- SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL PANEL MOUNTING BRACKET USING OEM SCREW AS SHOWN BELOW.
- SINCE THE CABLE CONVERTER ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION CABLE CONVERTER ASSEMBLY SUCH THAT THE FLAT PART OF THE ROD IS AS CLOSE TO FLUSH AS POSSIBLE WITH THE END OF HOUSING AT THE LEVER'S INNER MOST POSITION. (SEE FIGURE 4a BELOW.)
- SECURE CABLE CONVERTER LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 4 BELOW.



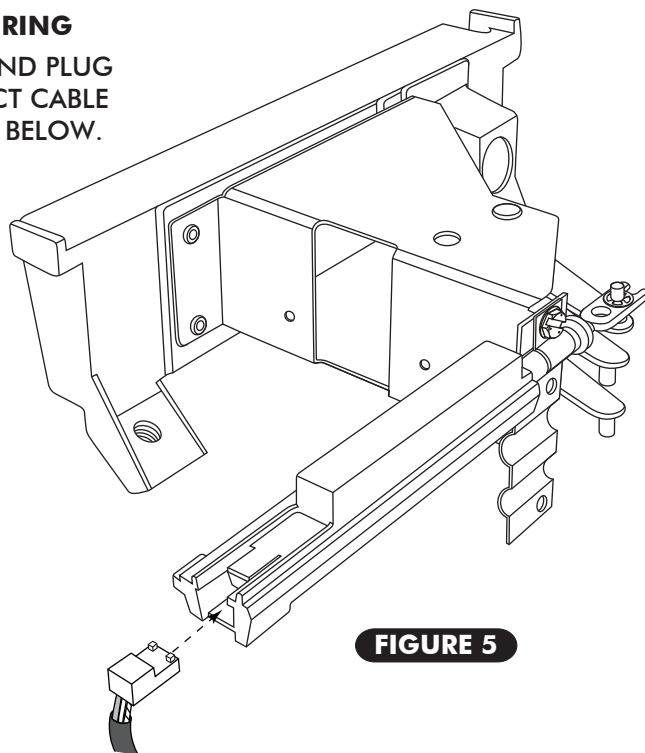
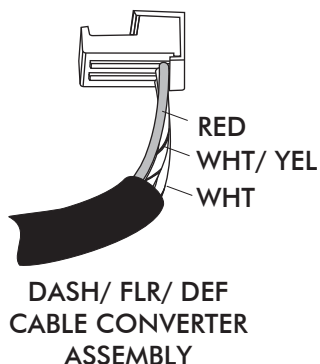
NOTE: DO NOT ALLOW ROD TO SEPARATE HOUSING WHEN ROD IS IN INNER MOST POSITION.



## CONTROL HARNESS

### DASH/ FLR/ DEF CABLE CONVERTER ASSEMBLY WIRING

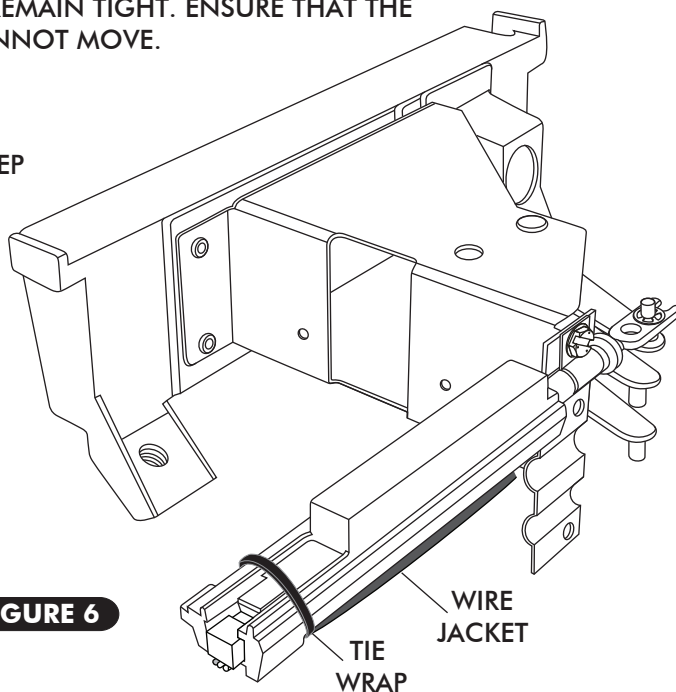
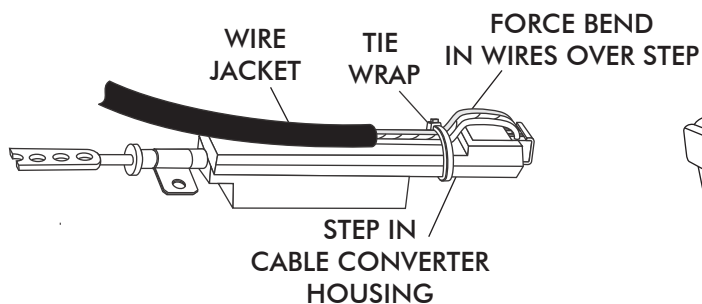
- LOCATE THE CONTROL PANEL WIRE HARNESS AND PLUG THE CORRESPONDING WIRES INTO THE CORRECT CABLE CONVERTER ASSEMBLY AS SHOWN IN FIGURE 5 BELOW.



**FIGURE 5**

### CONTROL HARNESS CONT.

- ONCE WIRES ARE CORRECTLY PLUGGED INTO CABLE CONVERTER ASSEMBLY, SECURE WIRES TO THE CABLE CONVERTER ASSEMBLY USING TIE WRAPS (SUPPLIED). SEE FIGURE 6 BELOW. 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 THEY PASS OVER THE STEP IN CABLE CONVERTER HOUSING. HEAD OF TIE WRAP MUST FALL ON EDGE OF HOUSING AS SHOWN TO REMAIN TIGHT. ENSURE THAT THE TIE WRAPS ARE SNUG ENOUGH THAT THE WIRES CANNOT MOVE. (SEE FIGURE 6 BELOW.)



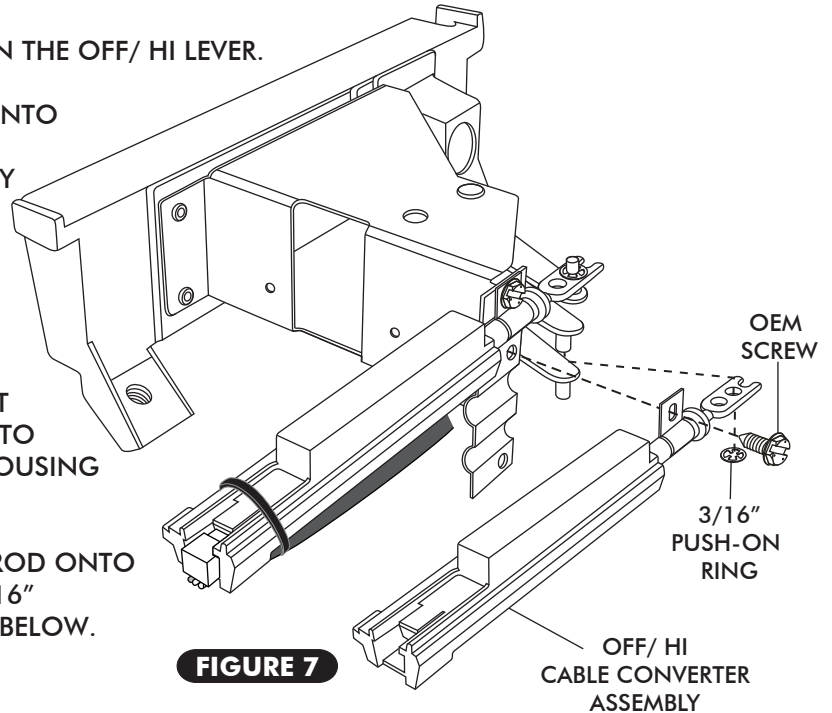
**FIGURE 6**



## CABLE CONVERTER ASSEMBLY INSTALLATION

### OFF/ HI CABLE CONVERTER ASSEMBLY

- ☐ INSTALL CABLE CONVERTER ASSEMBLY ON THE OFF/ HI LEVER.  
(SEE FIGURE 7 BELOW.)
- ☐ INSTALL CABLE CONVERTER PUSH ROD ONTO OFF/ HI LEVER.
- ☐ SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL PANEL MOUNTING BRACKET USING OEM SCREW AS SHOWN BELOW.
- ☐ SINCE THE CABLE CONVERTER ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION CABLE CONVERTER ASSEMBLY SUCH THAT THE FLAT PART OF THE ROD IS AS CLOSE TO FLUSH AS POSSIBLE WITH THE END OF HOUSING AT THE LEVER'S INNER MOST POSITION.  
(SEE FIGURE 4a.)
- ☐ SECURE CABLE CONVERTER LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 7 BELOW.

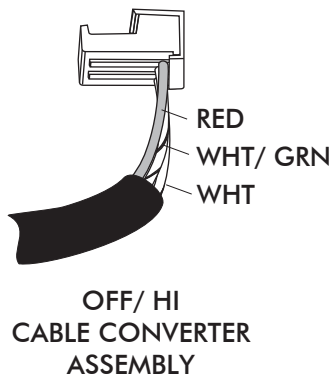


**FIGURE 7**

## CONTROL HARNESS

### OFF/ HI CABLE CONVERTER ASSEMBLY WIRING

- ☐ LOCATE THE CONTROL PANEL WIRE HARNESS, PLUG THE CORRESPONDING WIRES INTO THE CORRECT CABLE CONVERTER ASSEMBLY AS SHOWN IN FIGURE 8 BELOW.



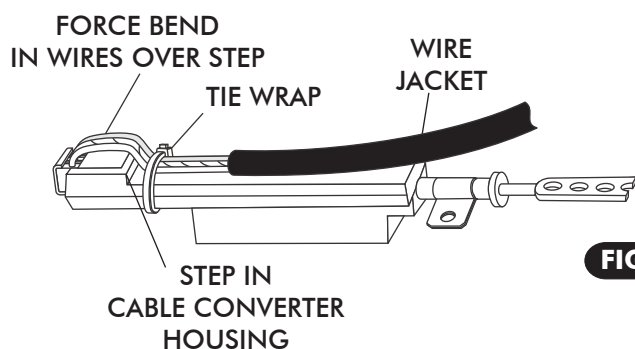
**FIGURE 8**



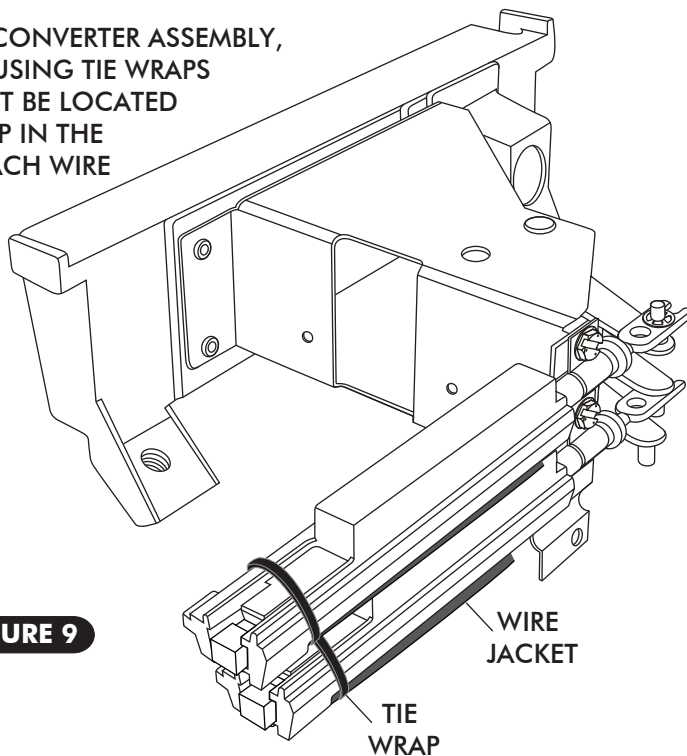


## CONTROL HARNESS CONT.

- ONCE WIRES ARE CORRECTLY PLUGGED INTO CABLE CONVERTER ASSEMBLY, SECURE WIRES TO THE CABLE CONVERTER ASSEMBLY USING TIE WRAPS (SUPPLIED). (SEE FIGURE 9 BELOW.) 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 THEY PASS OVER THE STEP IN CABLE CONVERTER HOUSING. HEAD OF TIE WRAP MUST FALL ON EDGE OF HOUSING AS SHOWN TO REMAIN TIGHT. ENSURE THAT THE TIE WRAPS ARE SNUG ENOUGH THAT THE WIRES CANNOT MOVE. (SEE FIGURE 9 BELOW.)



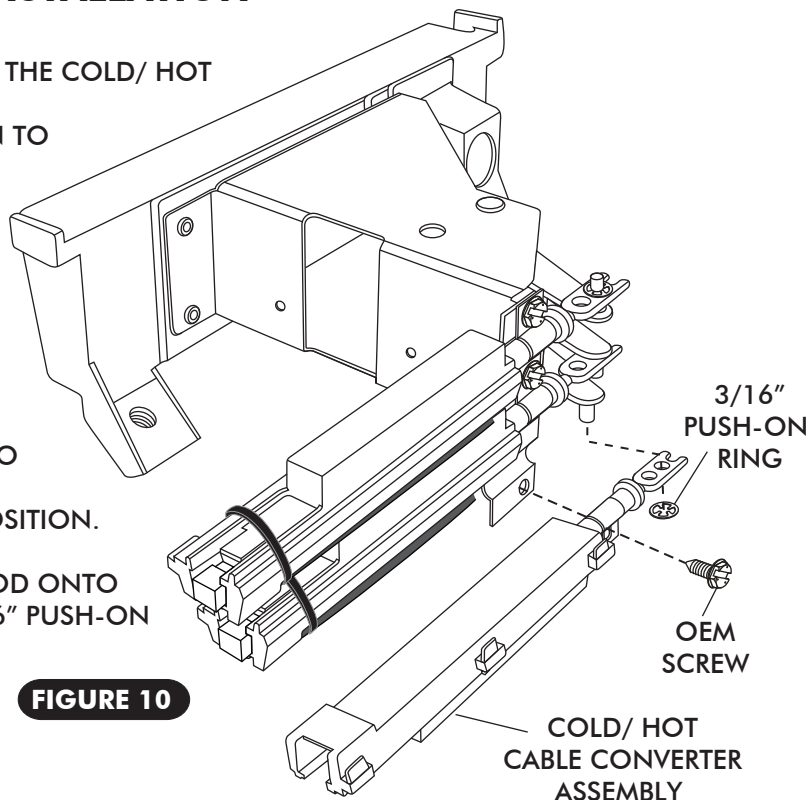
**FIGURE 9**



## CABLE CONVERTER ASSEMBLY INSTALLATION

### COLD/ HOT CABLE CONVERTER ASSEMBLY

- INSTALL CABLE CONVERTER ASSEMBLY ON THE COLD/ HOT LEVER. (SEE FIGURE 10 BELOW.)
- INSTALL CABLE CONVERTER PUSH ROD ON TO COLD/ HOT LEVER.
- SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL PANEL MOUNTING BRACKET USING OEM SCREW AS SHOWN BELOW.
- SINCE THE CABLE CONVERTER ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION CABLE CONVERTER ASSEMBLY SUCH THAT THE FLAT PART OF THE ROD IS AS CLOSE TO FLUSH AS POSSIBLE WITH THE END OF HOUSING AT THE LEVER'S INNER MOST POSITION. (SEE FIGURE 4a.)
- SECURE CABLE CONVERTER LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 10 BELOW.



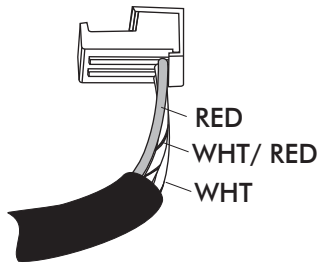
**FIGURE 10**



## CONTROL HARNESS

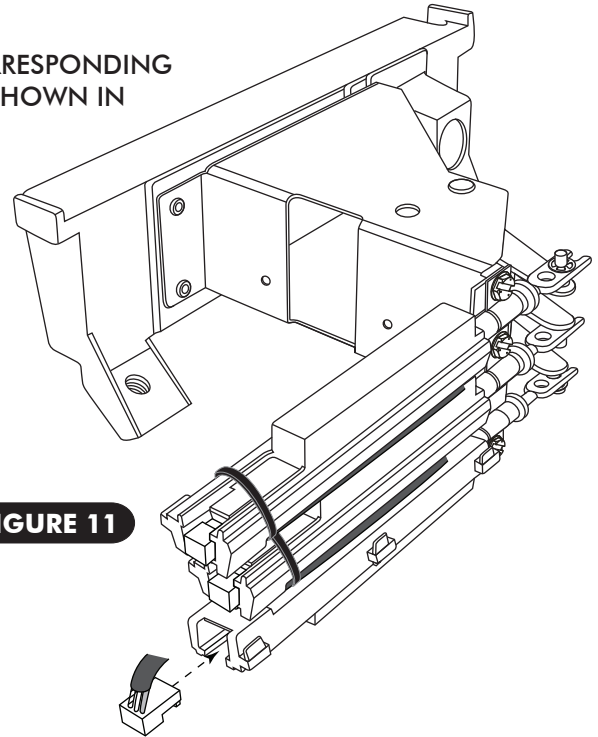
### COLD/ HOT CABLE CONVERTER ASSEMBLY WIRING

- LOCATE THE CONTROL PANEL WIRE HARNESS, PLUG THE CORRESPONDING WIRES INTO THE CORRECT CABLE CONVERTER ASSEMBLY AS SHOWN IN FIGURE 11 BELOW.



COLD/ HOT  
CABLE CONVERTER  
ASSEMBLY

FIGURE 11



## CONTROL HARNESS CONT.

- ONCE WIRES ARE CORRECTLY PLUGGED INTO CABLE CONVERTER ASSEMBLY, SECURE WIRES TO THE CABLE CONVERTER ASSEMBLY USING TIE WRAPS (SUPPLIED). (SEE FIGURE 12 BELOW.) 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 THEY PASS OVER THE STEP IN CABLE CONVERTER HOUSING. HEAD OF TIE WRAP MUST FALL ON EDGE OF HOUSING AS SHOWN TO REMAIN TIGHT. ENSURE THAT THE TIE WRAPS ARE SNUG ENOUGH THAT THE WIRES CAN NOT MOVE.(SEE FIGURE 12 BELOW.)

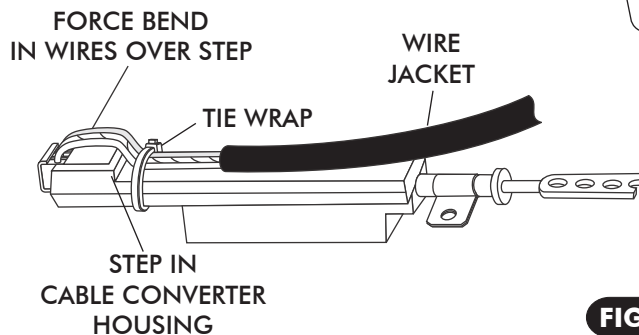
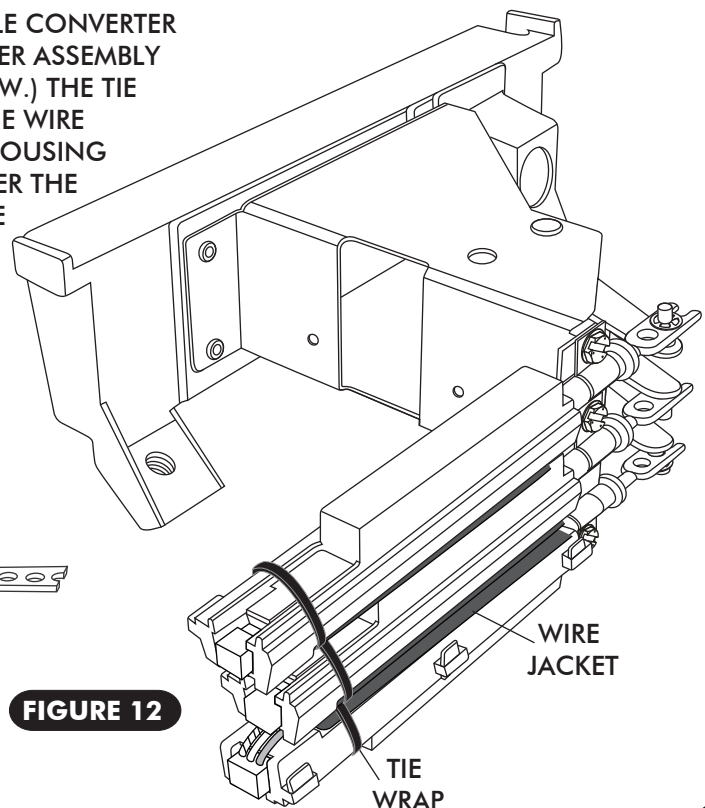


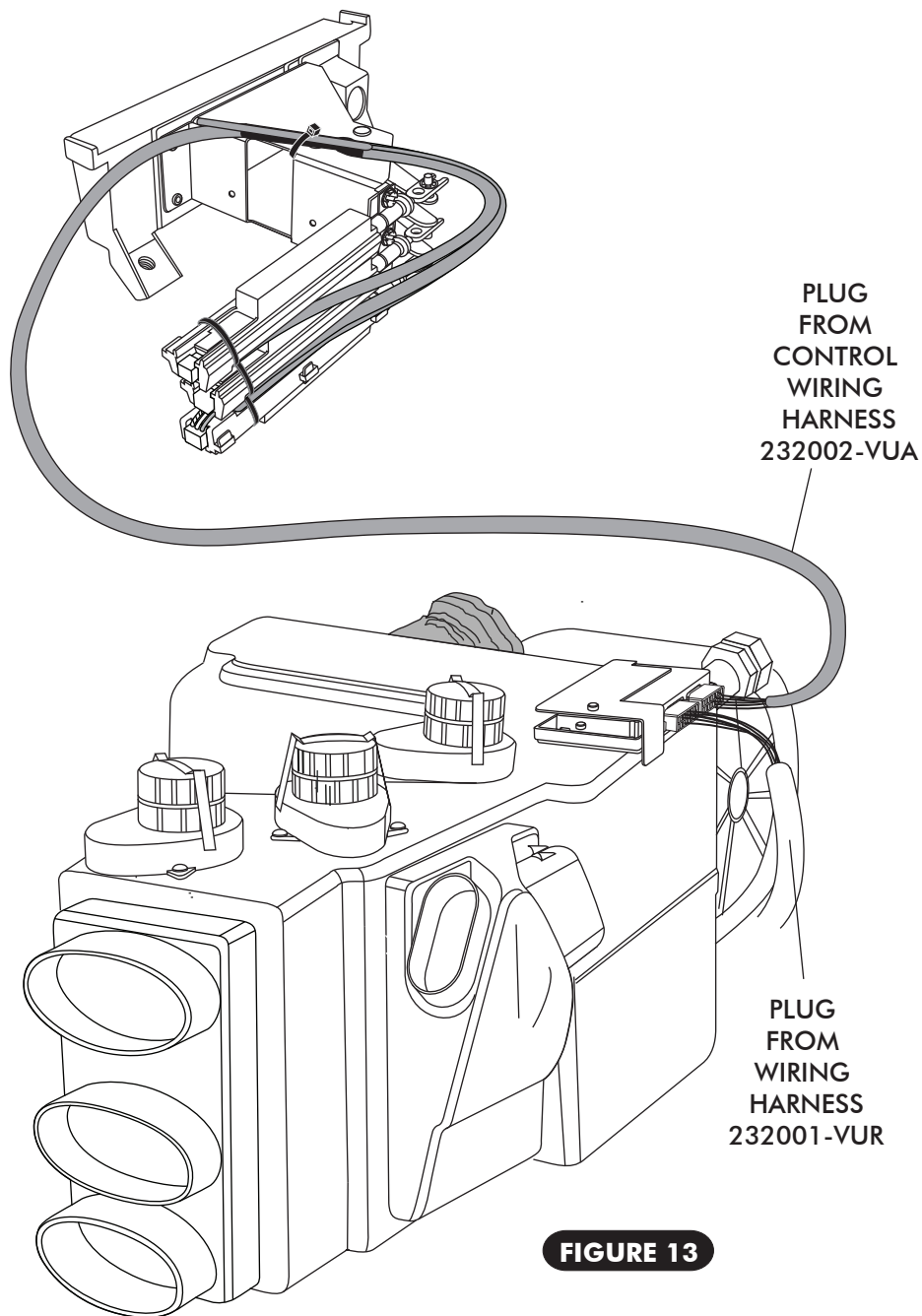
FIGURE 12





## FINAL STEPS

- ☐ REINSTALL CONTROL PANEL IN DASH.
- ☐ PLUG THE WIRING HARNESS INTO THE ECU MODULE ON THE SUB CASE. (SEE FIGURE 13 BELOW.)
- ☐ WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 14.



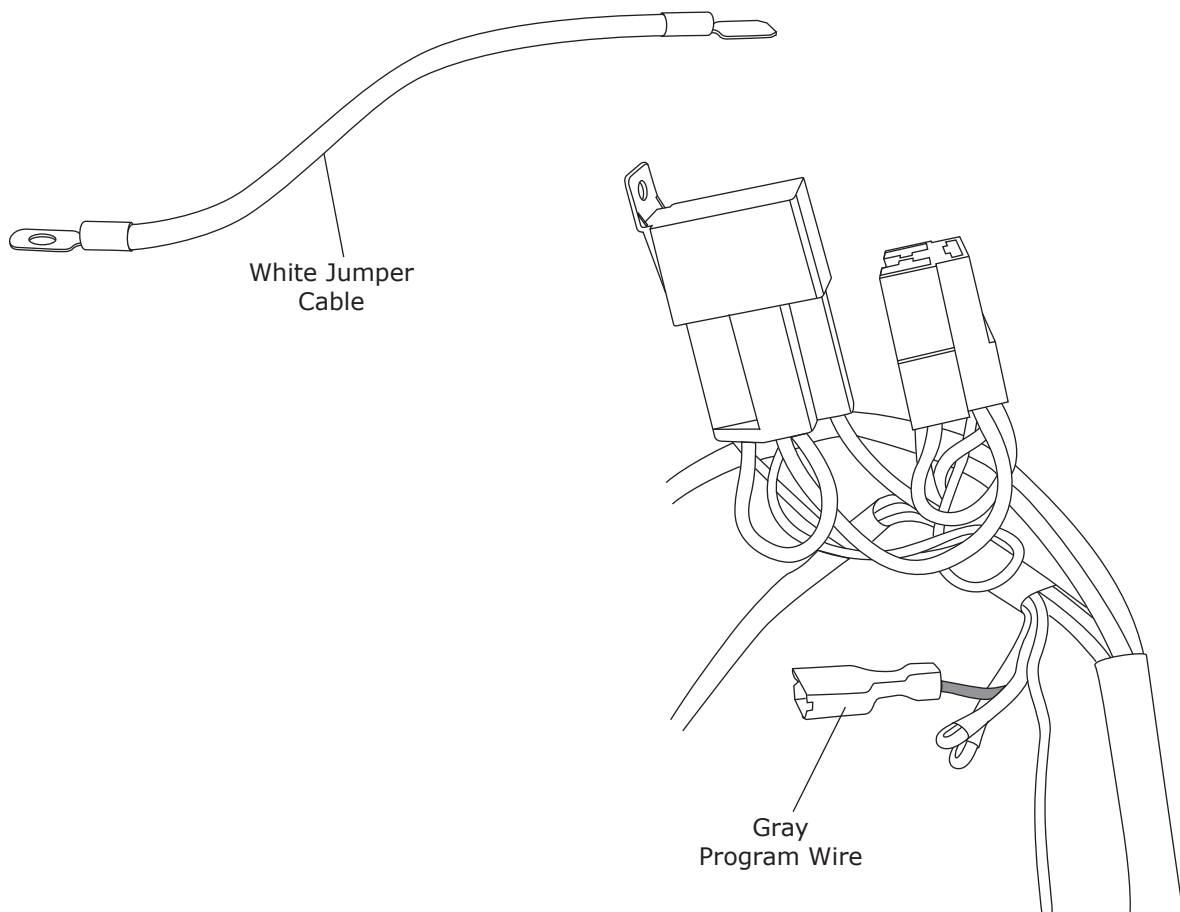
**FIGURE 13**



## 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.

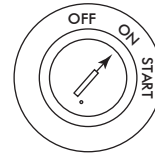
In preparation for calibration, you will need to attach the supplied white ground jumper wire to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen IV wiring harness next to the relays. During the calibration procedure, you will connect 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.)

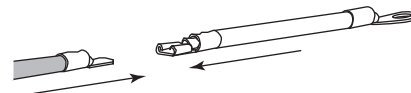
1. Turn on the ignition switch (Do not start the engine).



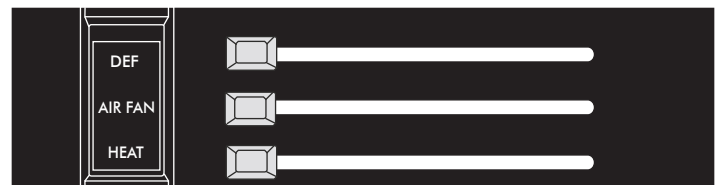
2. Move the control levers/knobs to the position shown.



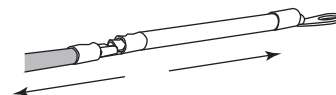
3. Connect the white jumper wire to the gray program wire. Wait for the blower speed to change (Approximately 5 seconds).



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.

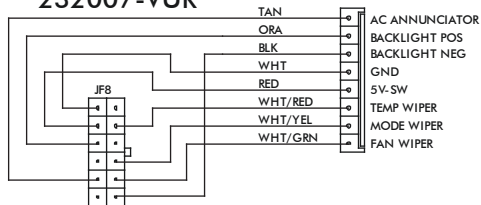


6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.



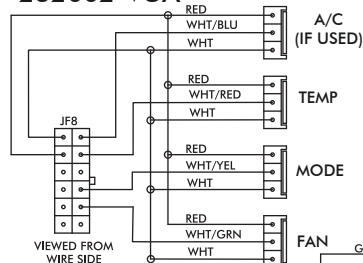
# Wiring Diagram

## 232007-VUR



VIEWED FROM WIRE SIDE

## 232002-VUA

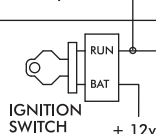


VIEWED FROM WIRE SIDE

### PROGRAM

N/A  
\* DASH LAMP (IF USED)

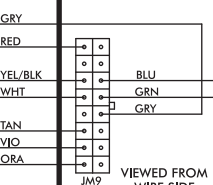
\*\*\* WIDE OPEN THROTTLE SWITCH (OPTIONAL)



IGNITION SWITCH + 12v

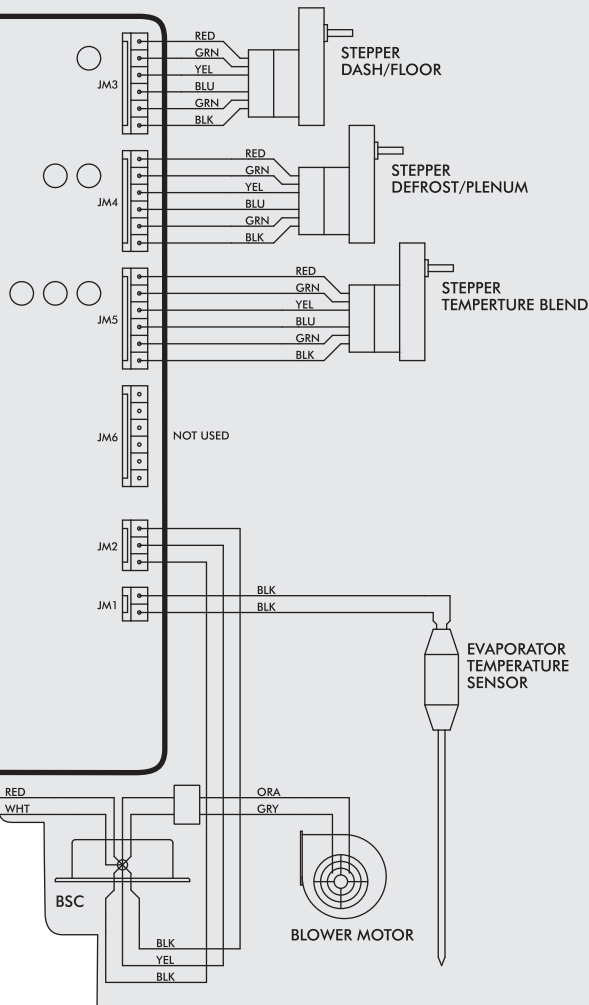
## GEN IV ECU

GEN IV WIRING DIAGRAM  
REV D, 5/6/2014



VIEWED FROM WIRE SIDE

## PRE-WIRED



NOT USED

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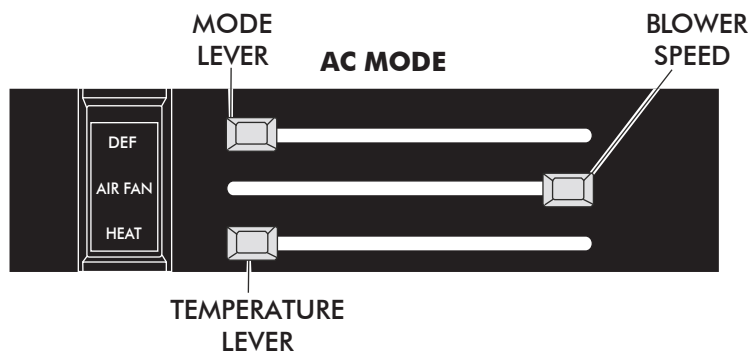
## OPERATION OF CONTROLS

NOTE: CONTROLS MUST BE CALIBRATED FOR PROPER OPERATION.

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

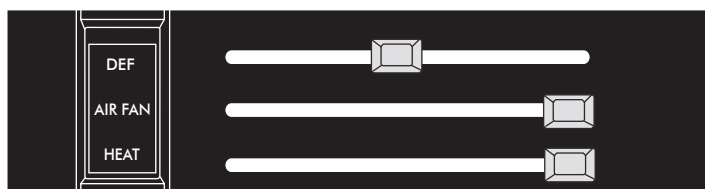


**BLOWER SPEED**  
ADJUST TO DESIRED  
SPEED

**MODE LEVER**  
SLIDE THE LEVER TO  
THE LEFT POSITION

**TEMPERATURE LEVER**  
IN A/C MODE SLIDE THE  
TEMPERATURE LEVER ALL  
THE WAY TO THE LEFT  
TO ENGAGE COMPRESSOR.  
(SLIDE LEVER LEFT OR RIGHT  
TO ADJUST DESIRED  
TEMPERATURE)

### HEAT MODE



**BLOWER SPEED**  
ADJUST TO DESIRED  
SPEED

**MODE LEVER**  
SLIDE THE LEVER TO  
THE CENTER POSITION

**TEMPERATURE LEVER**  
SLIDE THE TEMPERATURE  
LEVER ALL THE WAY RIGHT  
TO THE HOT POSITION.  
(SLIDE LEVER LEFT OR RIGHT  
TO DESIRED TEMPERATURE)

### DEFROST/ DE-FOG MODE



**BLOWER SPEED**  
ADJUST TO DESIRED  
SPEED

**MODE LEVER**  
SLIDE THE LEVER TO  
THE RIGHT POSITION

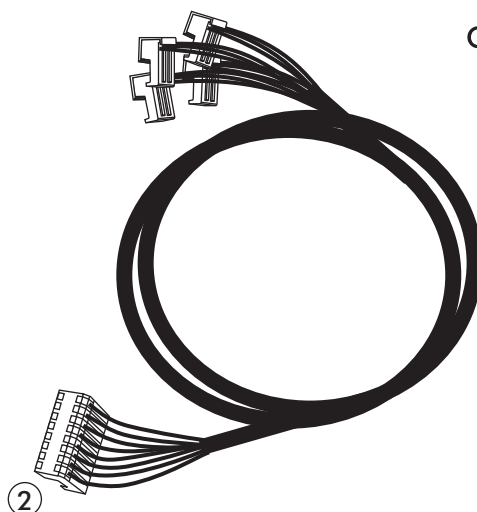
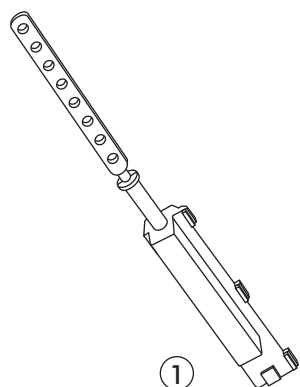
**TEMPERATURE LEVER**  
ADJUST LEVER TO  
DESIRED TEMPERATURE.  
(COMPRESSOR IS  
AUTOMATICALLY  
ENGAGED)



## CONTROL KIT PACKING LIST

CONTROL KIT  
473266

No	QTY	PART No.	DESCRIPTION	
1.	3	112002-SUA	CABLE CONVERTER ASSEMBLY	_____
2.	1	232002-VUA	GEN IV UNIVERSAL CONTROL HARNESS	_____
3.	3	65976-VUE	3/16" PUSH-ON RING	_____
4.	3	491010-VUR	CABLE CONVERTER CLAMP	_____
5.	5	21301-VUP	4" TIE WRAP	_____
6.	1	231520	GROUND WIRE	_____



CHECKED BY: \_\_\_\_\_  
PACKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

