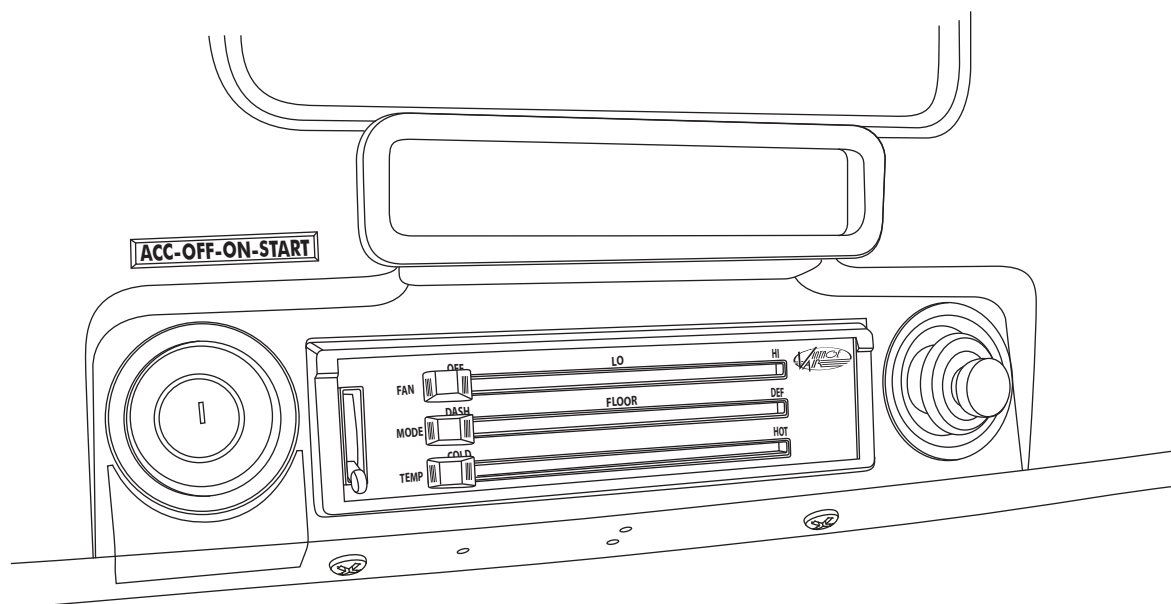




an ISO 9001: 2008 Registered Company

1967-72 CHEV PICK-UP

WITH AC CONTROL PANEL
CONVERSION KIT
473267



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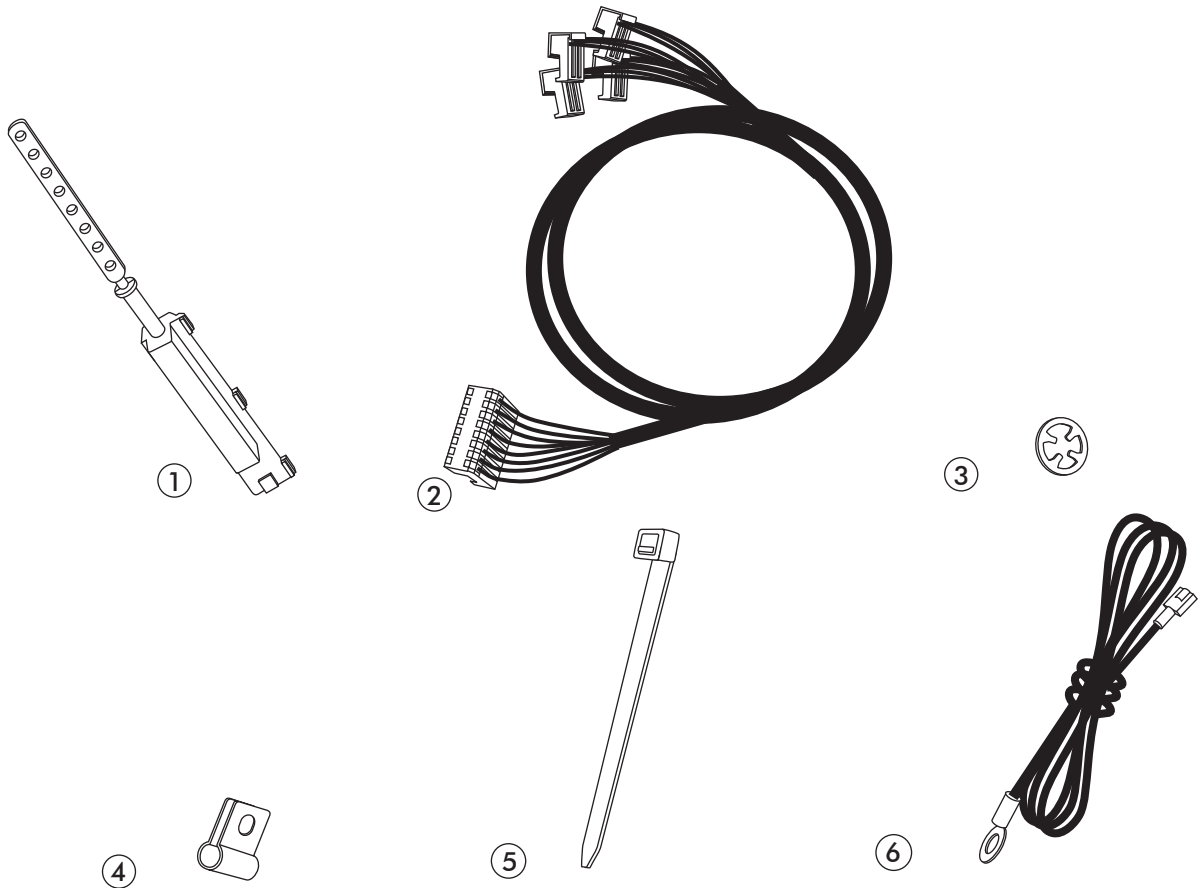


CONTROL KIT PACKING LIST

CONTROL KIT
473267

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
7.	1	484171	67-72 CHEV P-UP w/ AC FACEPLATE LENS

**** 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

- ☐ 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.

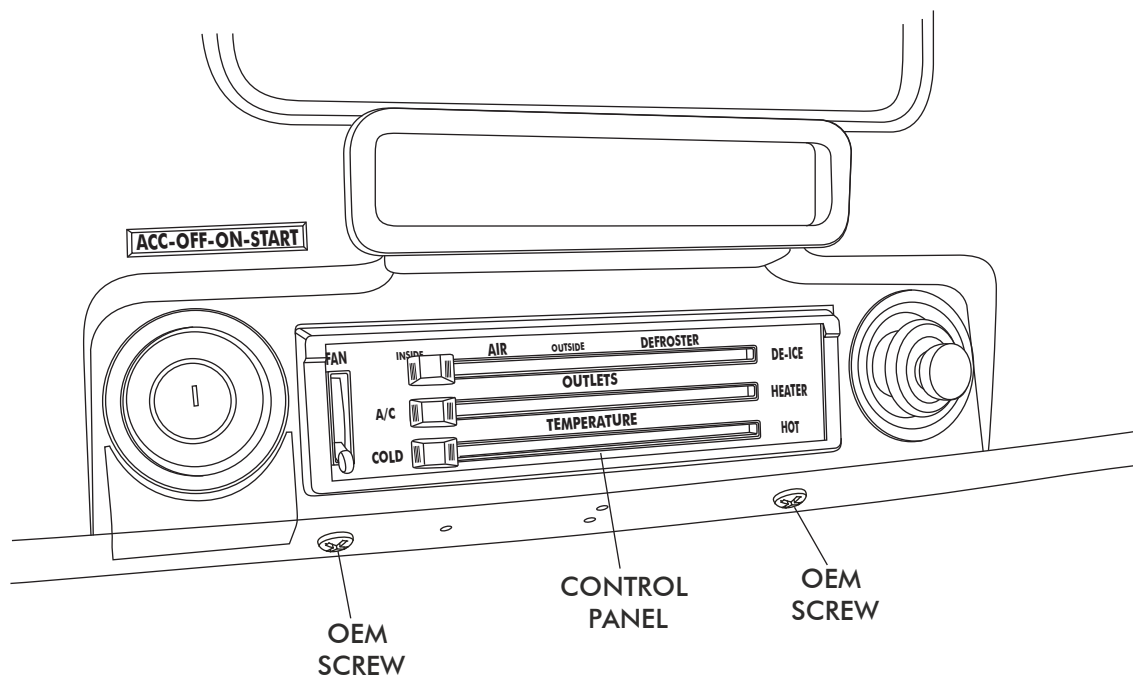


FIGURE 1



FACEPLATE LENS INSTALLATION

- ☐ REMOVE (3) LEVER KNOBS (RETAIN)
- ☐ REMOVE CONTROL PANEL FACEPLATE USING A SCREW DRIVER AS SHOWN IN FIGURE 2 BELOW.
- ☐ REMOVE OEM FACEPLATE LENS (DISCARD)
- ☐ CONTROL BACKING PLATE MODIFICATION (SEE PAGE 6.)
- ☐ INSTALL NEW FACEPLATE LENS. (SEE FIGURE 2 BELOW.)
- ☐ RE-INSTALL CONTROL PANEL FACEPLATE AND KNOBS.
- ☐ REMOVE DASH FLOOR DEF LEVER TAB AS SHOWN BELOW IN FIGURE 2a.

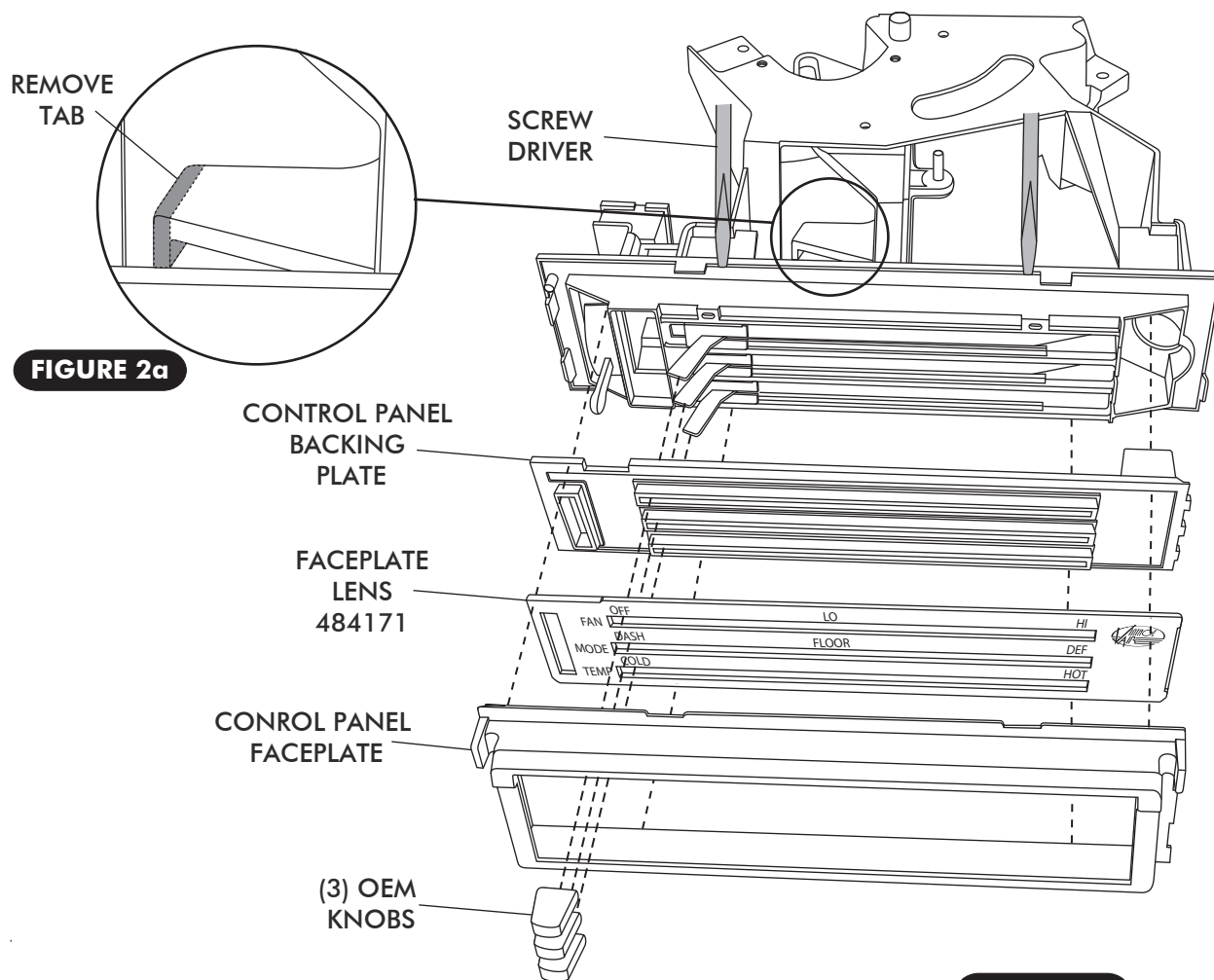


FIGURE 2



CONTROL PANEL BACKING PLATE MODIFICATION

- ❑ **PLEASE READ THE FOLLOWING CAREFULLY BEFORE MAKING ANY MODIFICATIONS.**
- ❑ THE ASSEMBLY CONSISTING OF THE CONTROL PANEL BACKING PLATE AND THE CLEAR FACEPLATE LENS MAY REQUIRE MODIFICATION TO ENSURE THAT AN ADEQUATE AMOUNT OF LIGHT ENTERS THE CLEAR FACEPLATE LENS. THE REASON FOR THESE MODIFICATIONS IS THAT THE ORIGINAL OPTICAL DESIGN OF THIS ASSEMBLY DID NOT ACCOUNT FOR THE MANUFACTURING VARIABILITY OF THE MATING PARTS. TO DETERMINE WHETHER MODIFICATIONS ARE NECESSARY, PLACE THE FACEPLATE LENS ONTO THE CONTROL PANEL BACKING PLATE AND VIEW FROM THE BACK SIDE AS SHOWN IN FIGURE 3, BELOW. YOU WILL SEE 5 GREEN LIGHT APERTURES, (SHADED AREAS IN FIGURE 3, BELOW), WHERE LAMP LIGHT ENTERS THE FACEPLATE LENS.
- ❑ CLEAR ALL APERTURES OF ANY DIRT OR FOREIGN OBJECTS. USE ONLY ISOPROPYL ALCOHOL AS A CLEANING AGENT. THE FACEPLATE LENS MAY BE DAMAGED BY OTHER SOLVENTS OR HOUSEHOLD CLEANERS. BE CAREFUL NOT TO REMOVE, SCRATCH, OR OTHERWISE DAMAGE THE GREEN FILTER PAINT ON THE BEVELED EDGES.
- ❑ SECURE THE FACEPLATE LENS IN ITS MOST FAVORABLE POSITION, (MAXIMUM APERTURE WIDTH), WITH FOIL TAPE. CLEAN SURFACES TO BE TAPED WITH ISOPROPYL ALCOHOL. THE TAPE SHOULD BE APPLIED TO THE EDGE OF THE FACEPLATE LENS AND WRAP AROUND TO THE BACKSIDE OF THE CONTROL PANEL BACKING PLATE AS SHOWN IN FIGURE 3, BELOW.
- ❑ IF REQUIRED, FILE DOWN EACH SURFACE OF THE BACKING PLATE THAT FORMS THE LIMITING EDGE OF AN UNDERSIZED APERTURE. (SEE FIGURE 3a & 3b, BELOW), FOR EXAMPLES OF WHERE TO FILE ON EACH APERTURE. THE APERTURE WIDTH SHOULD BE $1/16"$.
- ❑ CONTROL PANEL LIGHTING MAY ALSO BE IMPROVED BY REPLACING THE TWO FACTORY BACKLIGHT LAMPS WITH SYLVANIA LAMP #1895.

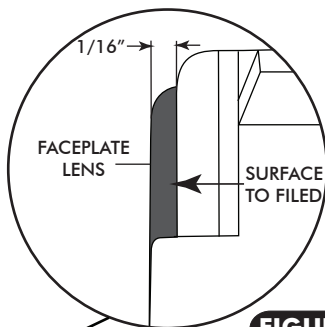


FIGURE 3a

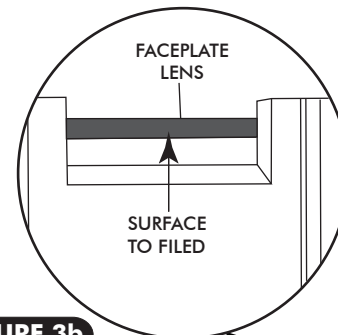


FIGURE 3b

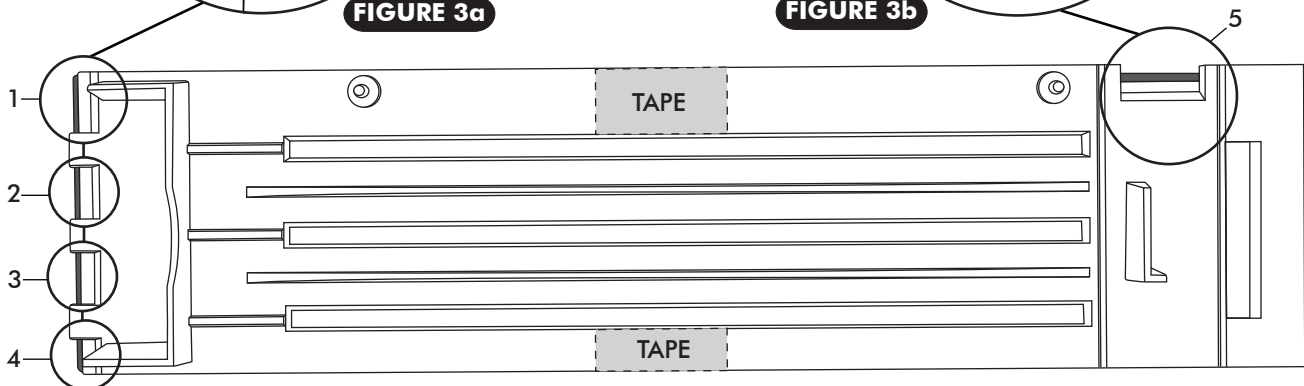


FIGURE 3



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 4.

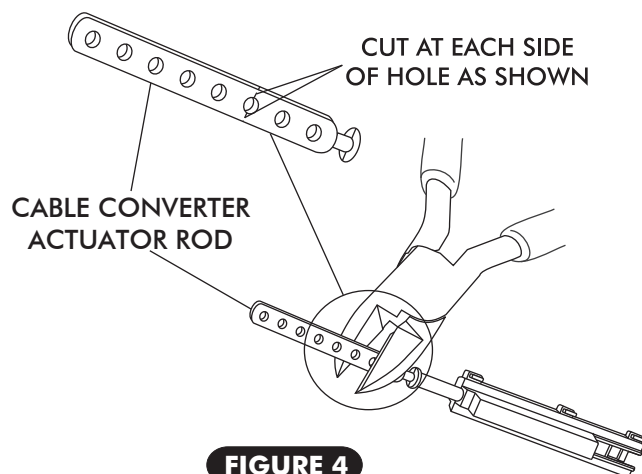
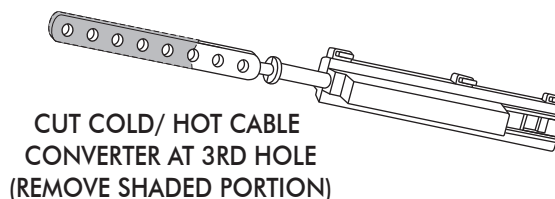
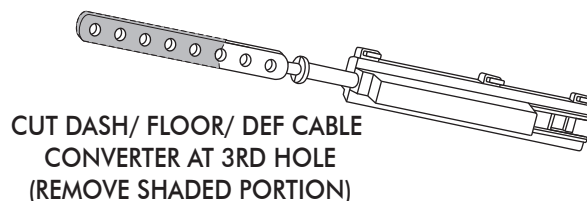
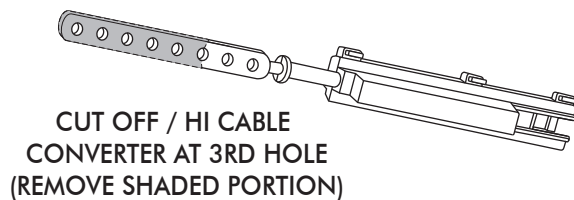


FIGURE 4



CABLE CONVERTER ASSEMBLY MOUNTING CLAMP INSTALLATION

- INSTALL CABLE CONVERTER ASSEMBLY MOUNTING CLAMPS. (SEE FIGURE 5 BELOW)

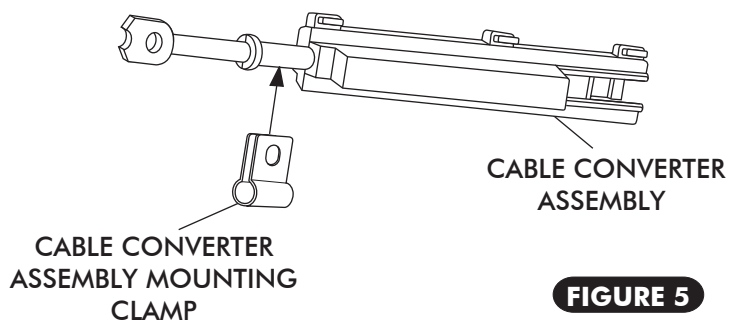
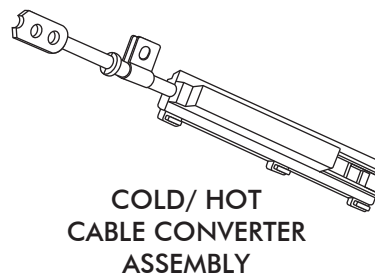
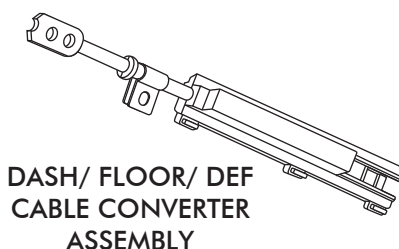
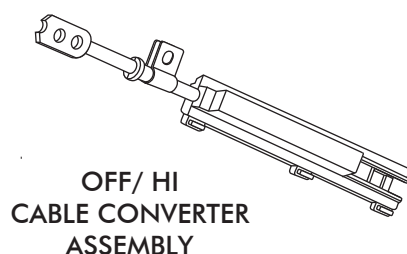


FIGURE 5



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

OFF/ HI CABLE CONVERTER ASSEMBLY

- INSTALL CABLE CONVERTER ASSEMBLY ON THE OFF/ HI LEVER. (SEE FIGURE 6 BELOW.)
- INSTALL CABLE CONVERTER PUSH ROD ONTO OFF/ HI LEVER. (SEE FIGURE 6 BELOW.)
- SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL PANEL 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 6a BELOW.)
- SECURE CABLE CONVERTER LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 6 BELOW.

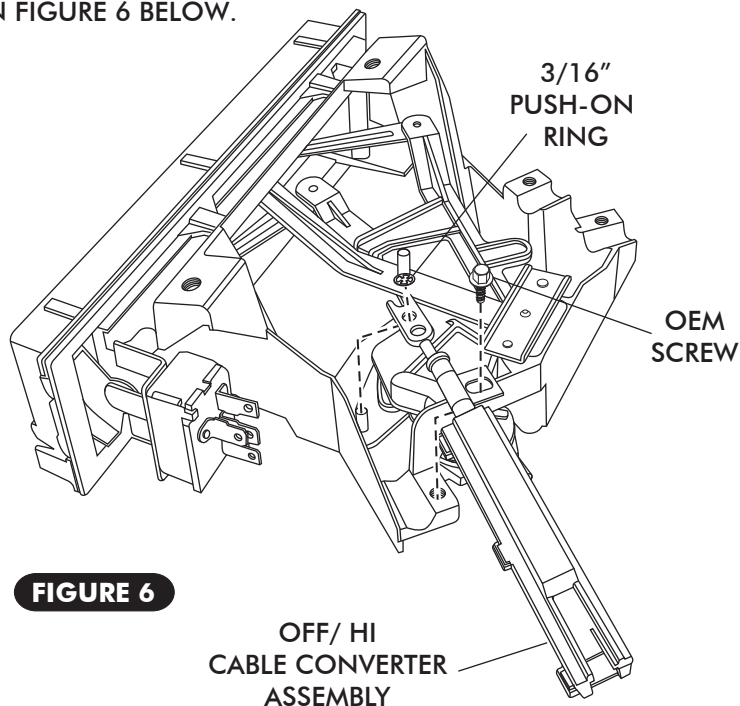


FIGURE 6

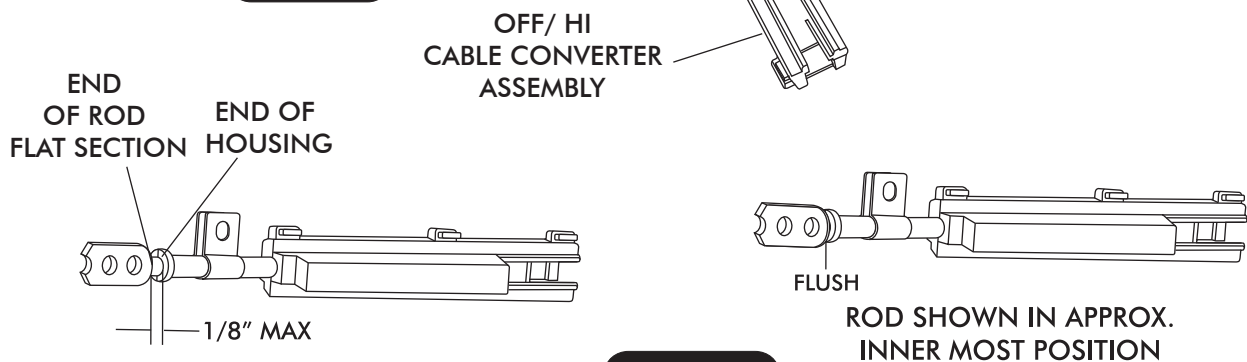
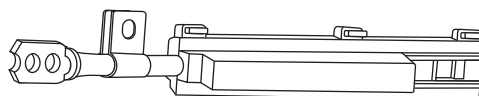


FIGURE 6a



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



CONTROL HARNESS

OFF/ HI 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 7 BELOW.

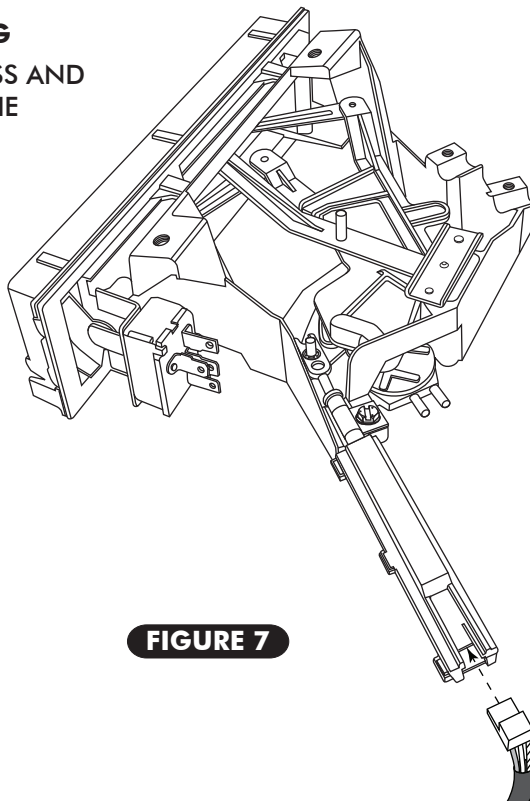
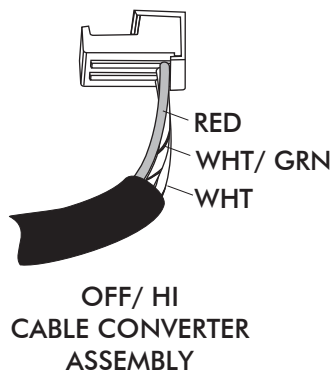


FIGURE 7

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 8 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 8 BELOW.)

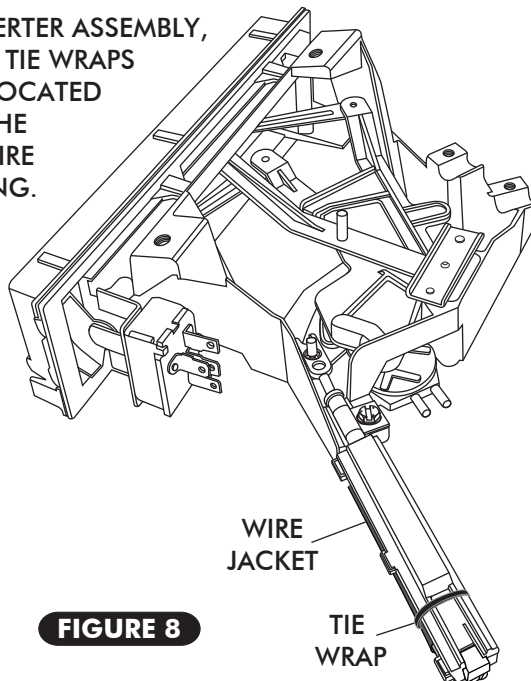
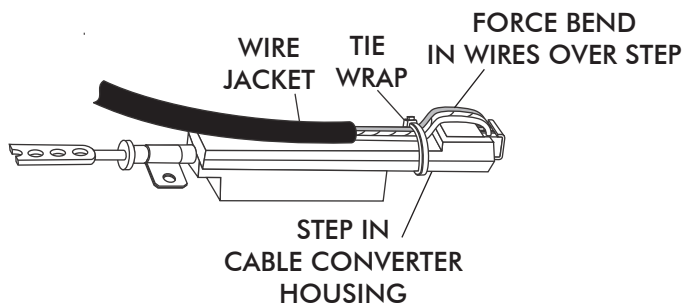


FIGURE 8



CABLE CONVERTER ASSEMBLY INSTALLATION

DASH/ FLOOR/ DEF CABLE CONVERTER ASSEMBLY

- INSTALL CABLE CONVERTER ASSEMBLY ON THE DASH/ FLOOR/ DEF LEVER.
(SEE FIGURE 9 BELOW.)
- INSTALL CABLE CONVERTER PUSH ROD ONTO DASH/ FLOOR/ DEF LEVER.
(SEE FIGURE 9 BELOW.)
- SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL
PANEL 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 6a.)
- SECURE CABLE CONVERTER LEVER PUSH ROD
ONTO OEM CABLE MOUNTING STUD USING
3/16" PUSH-ON RING AS SHOWN IN
FIGURE 9 BELOW.

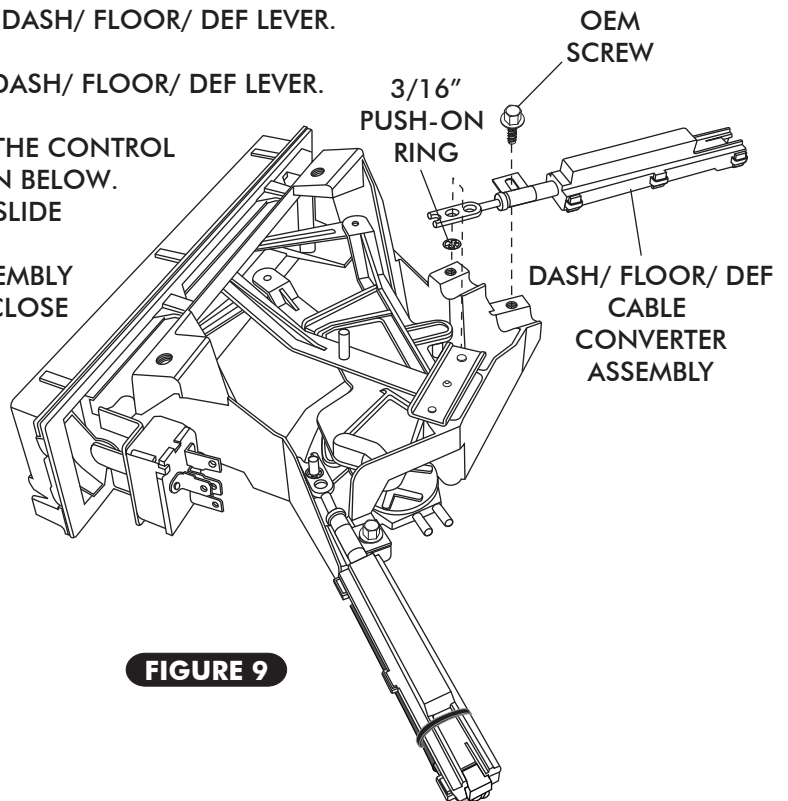


FIGURE 9

CONTROL HARNESS

DASH/ FLR/ DEF CABLE CONVERTER ASSEMBLY WIRING

- LOCATE THE CONTROL PANEL WIRE HARNESS,
PLUG THE CORRESPONDING WIRES INTO THE
CORRECT CABLE CONVERTER ASSEMBLY AS
SHOWN IN FIGURE 10 BELOW.

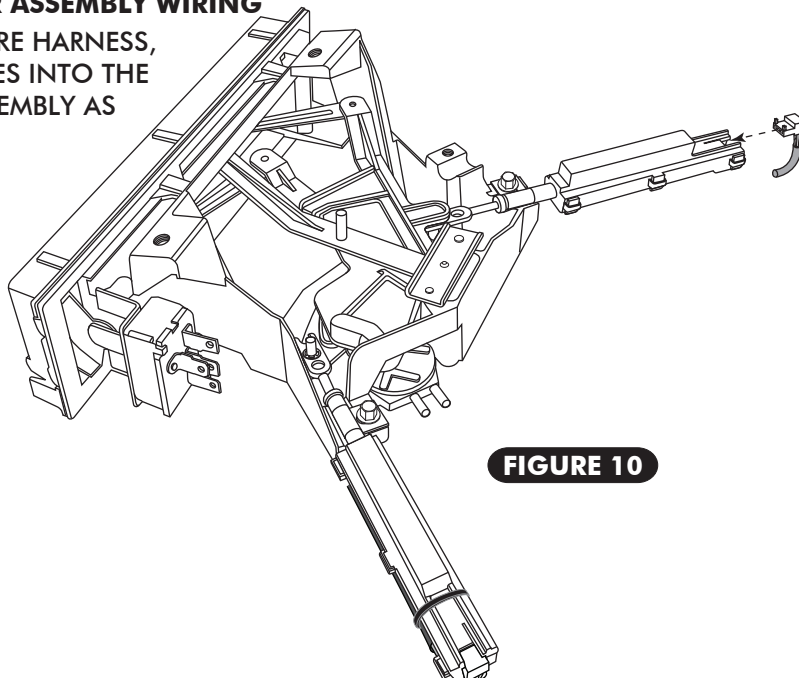
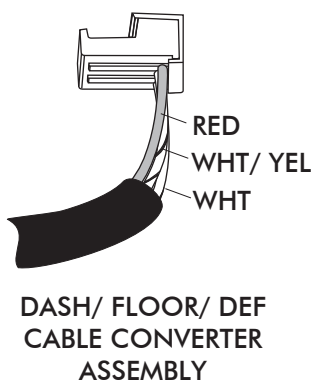


FIGURE 10



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 11 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 11 BELOW.)

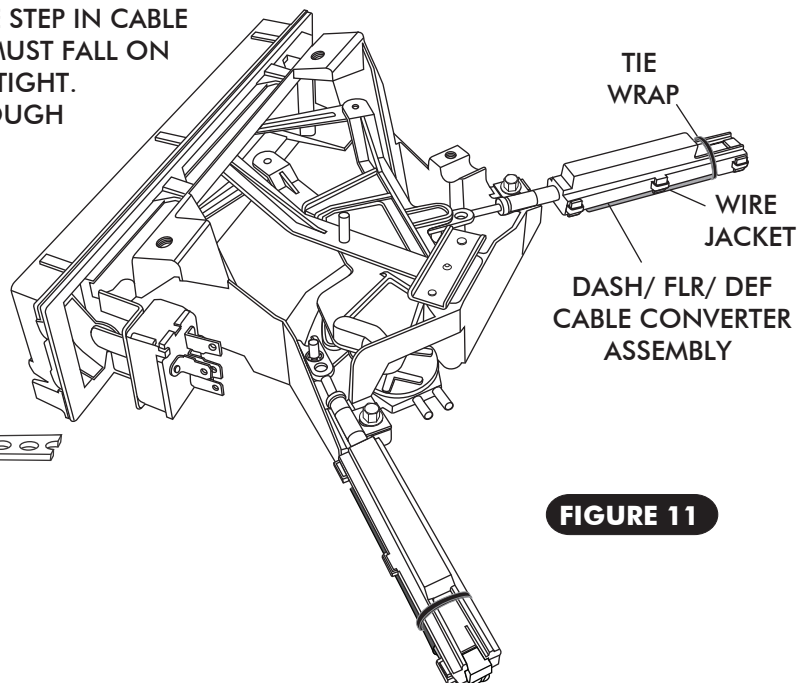
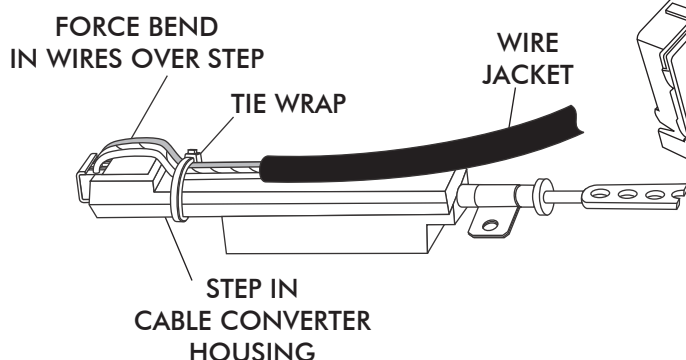


FIGURE 11

CABLE CONVERTER ASSEMBLY INSTALLATION

COLD/ HOT CABLE CONVERTER ASSEMBLY

- INSTALL CABLE CONVERTER ASSEMBLY ON THE COLD/ HOT LEVER. (SEE FIGURE 12 BELOW.)
- INSTALL CABLE CONVERTER PUSH ROD ONTO COLD/ HOT LEVER. (SEE FIGURE 12 BELOW.)
- SECURE THE CABLE CONVERTER ASSEMBLY TO THE CONTROL PANEL 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 6a.)
- SECURE CABLE CONVERTER LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 12 BELOW.

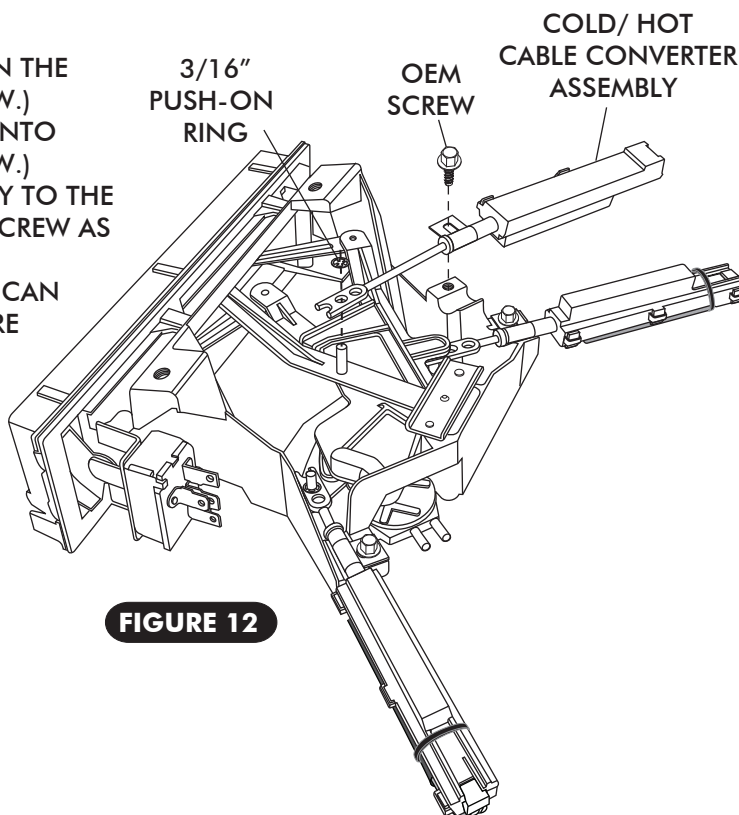


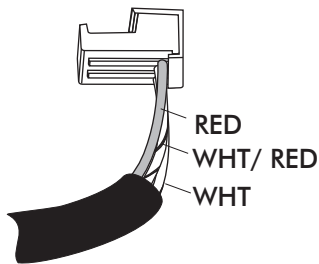
FIGURE 12



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 13 BELOW.



COLD/ HOT
CABLE CONVERTER
ASSEMBLY

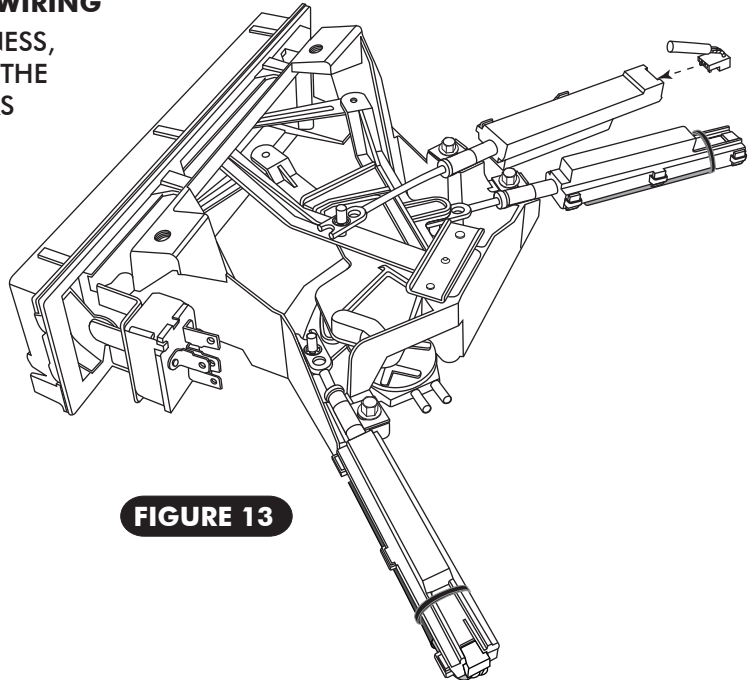


FIGURE 13

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 14 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 14 BELOW.)

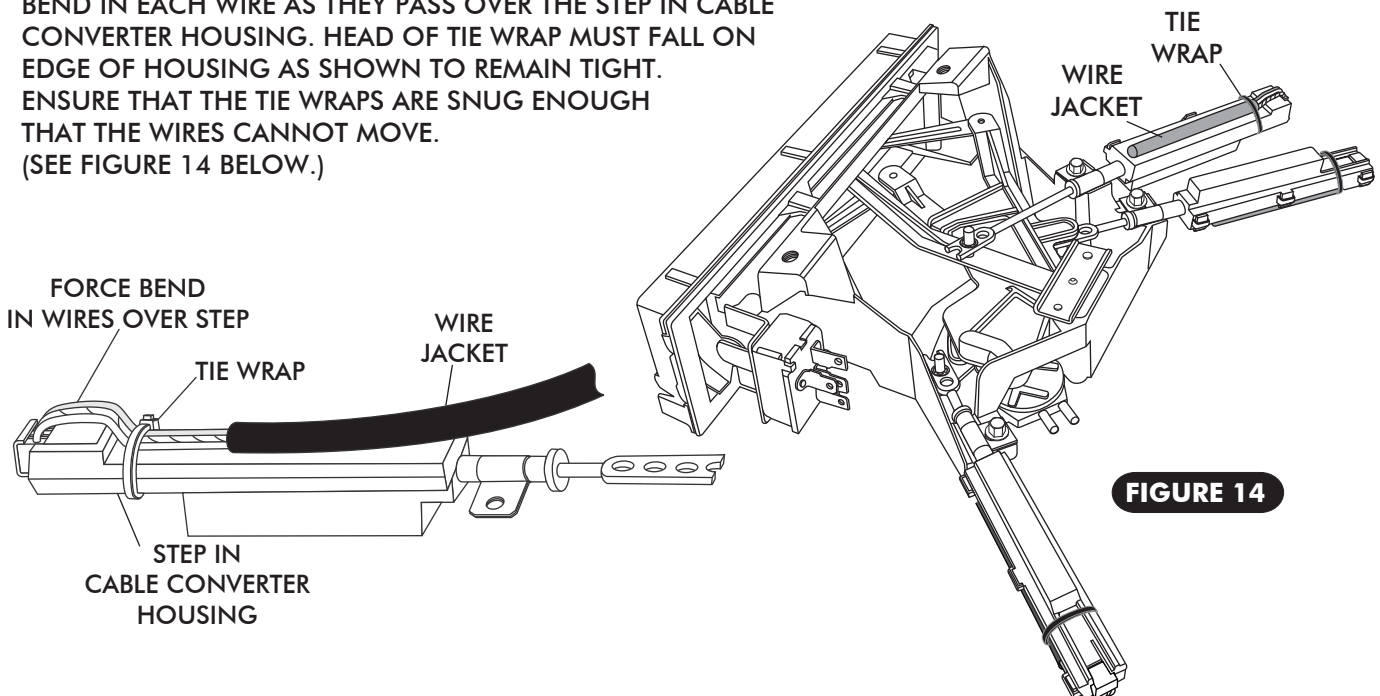


FIGURE 14



FINAL STEPS

- ❑ REINSTALL CONTROL PANEL IN DASH.
- ❑ PLUG THE WIRING HARNESS INTO THE ECU MODULE ON THE SUB CASE. (SEE FIGURE 15 BELOW.)
- ❑ WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 17.

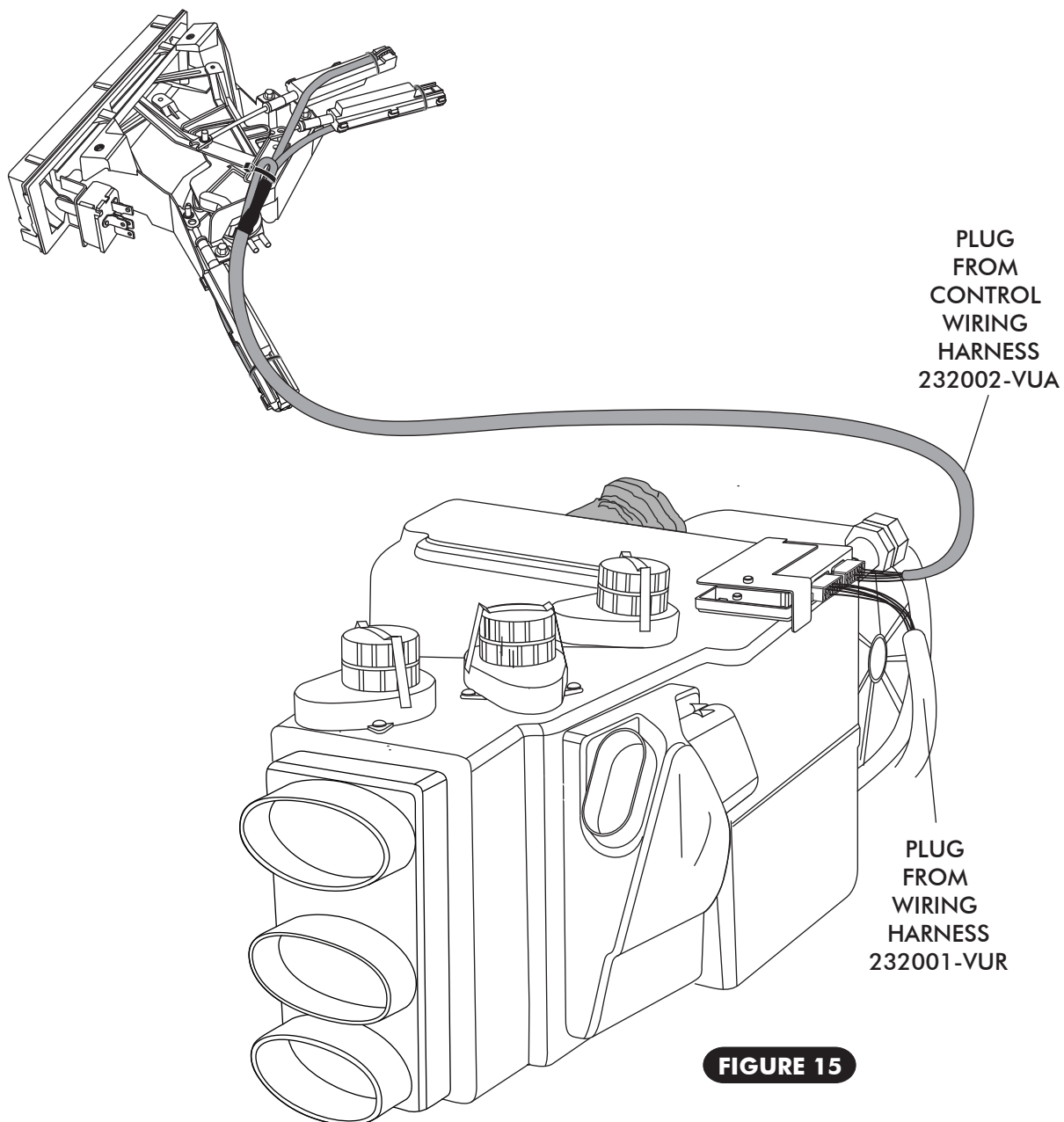


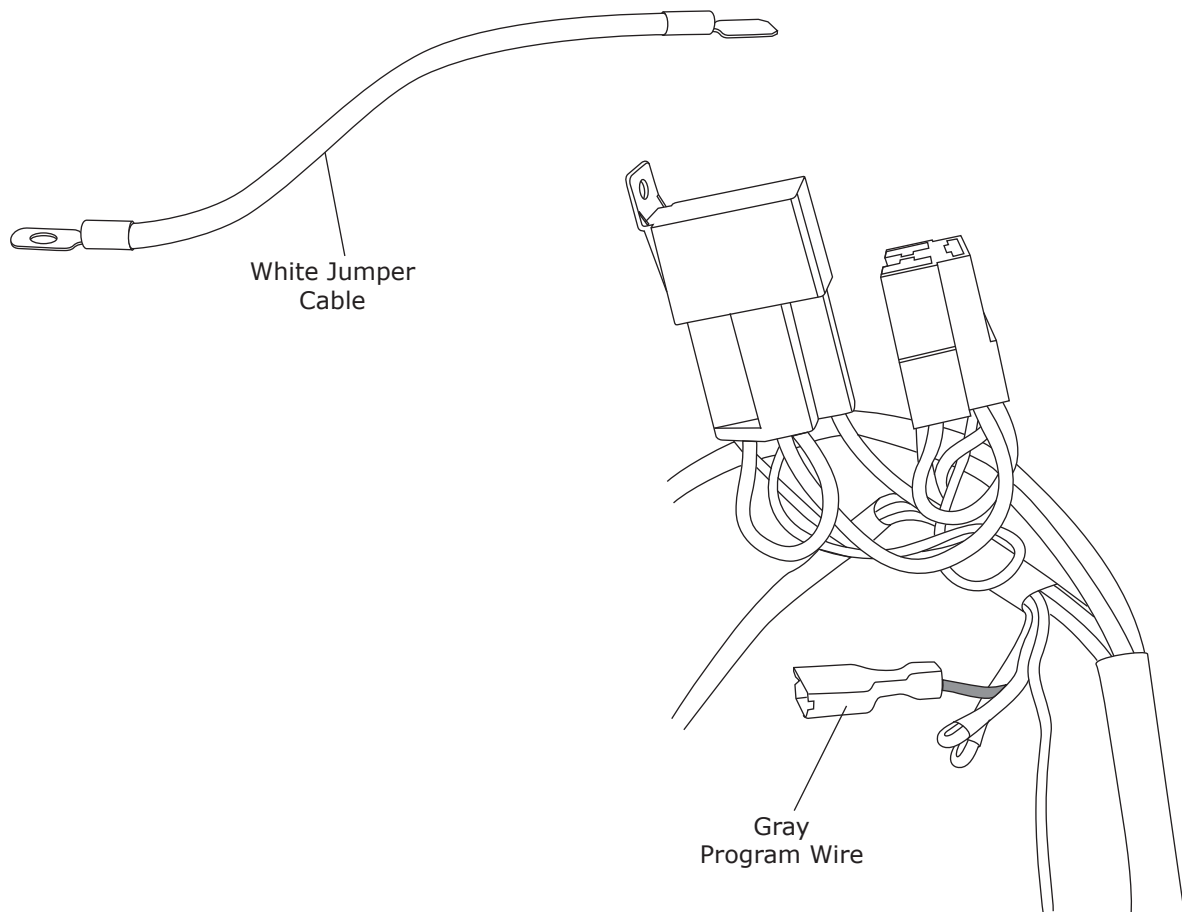
FIGURE 15



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.

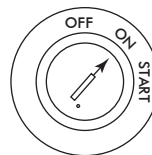
In preparation for calibration, you will need to attach the supplied white ground jumper wire to a suitable chassis ground. This jumper wire must be easily connected to the gray programming wire located in the main Gen IV wiring harness next to the relays. During the calibration procedure, you will connect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



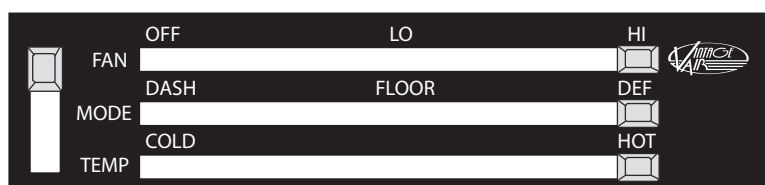


Control Panel Calibration Procedure (Cont.)

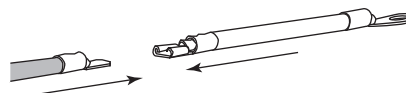
1. Turn on the ignition switch (Do not start the engine).



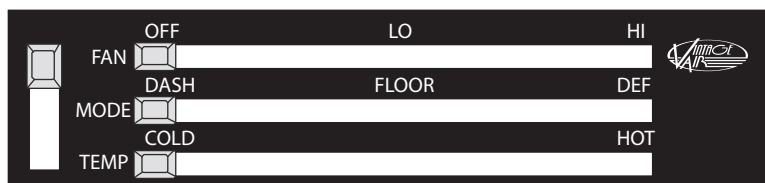
2. Move the control levers/knobs to the position shown.



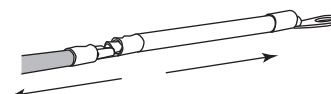
3. Connect the white jumper wire to the gray program wire. Wait for the blower speed to change (Approximately 5 seconds).



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.

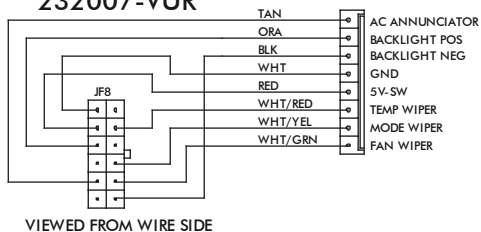


6. Confirm proper operation of controls. Repeat procedure if necessary. When finished, tape over program wire connector with electrical tape to prevent accidental contact with chassis ground.

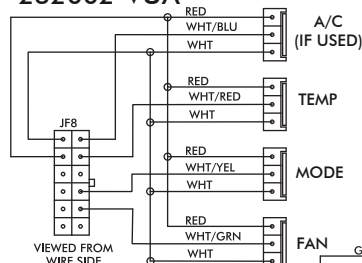


Wiring Diagram

232007-VUR

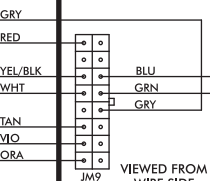


232002-VUA

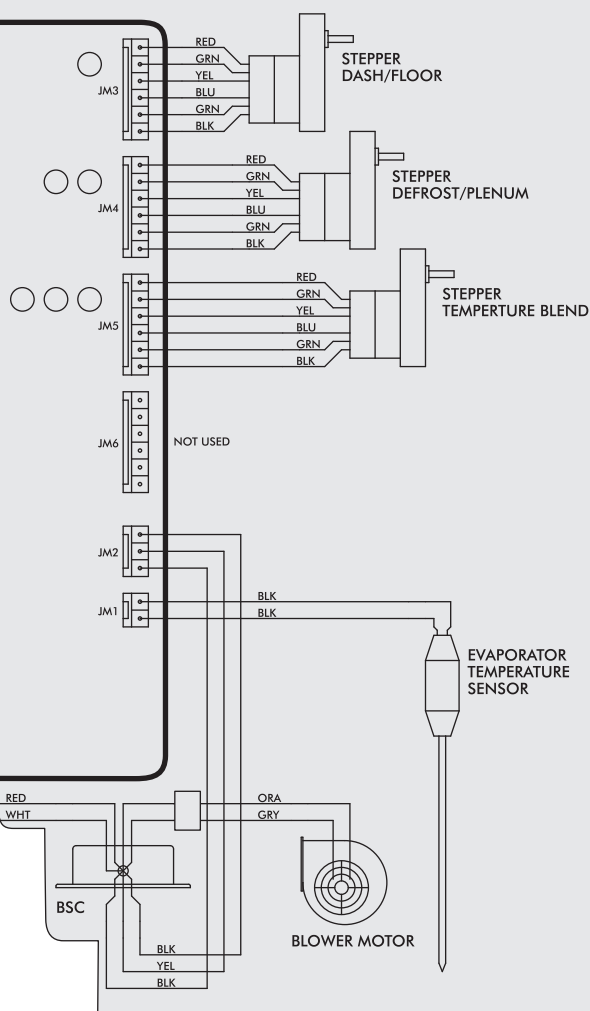


GEN IV ECU

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



PRE-WIRED



PROGRAM
N/A
* DASH LAMP (IF USED)
*** WIDE OPEN THROTTLE SWITCH (OPTIONAL)

IGNITION SWITCH
+ 12v

** CIRCUIT BREAKER 30 AMP

COMPRESSOR RELAY

BINARY OR TRINARY SAFETY SWITCH

CMPR

HEATER CONTROL VALVE

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 Routd to Avoid a Short Circuit).
- Wide Open Throttle Switch Contacts Close Only at Full Throttle, Which Disables A/C Compressor.



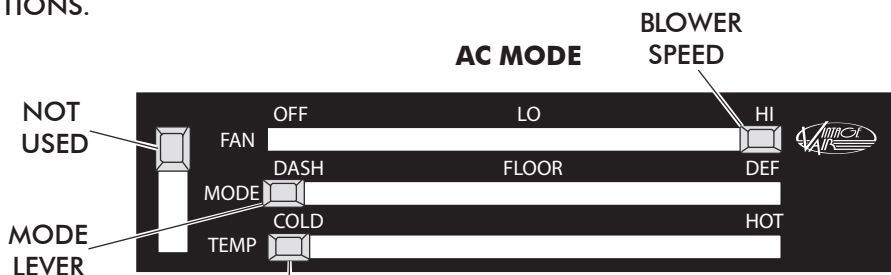
OPERATION OF CONTROLS

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.

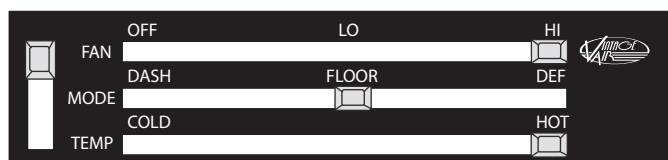


BLOWER SPEED
ADJUST TO DESIRED
SPEED

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
473267

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	_____
7.	1	484171	67-72 CHEV P-UP w/ AC FACEPLATE LENS	_____

