an ISO 9001: 2008 Registered Company

1966-67 CHEVELLE

WITHOUT AC
CONTROL PANEL CONVERSION KIT
473066

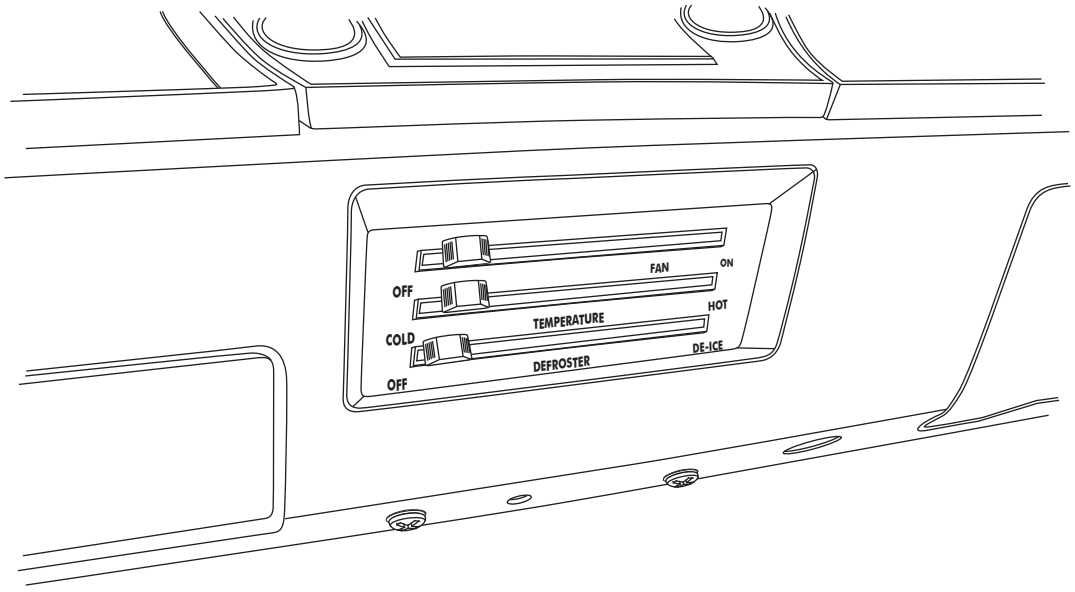

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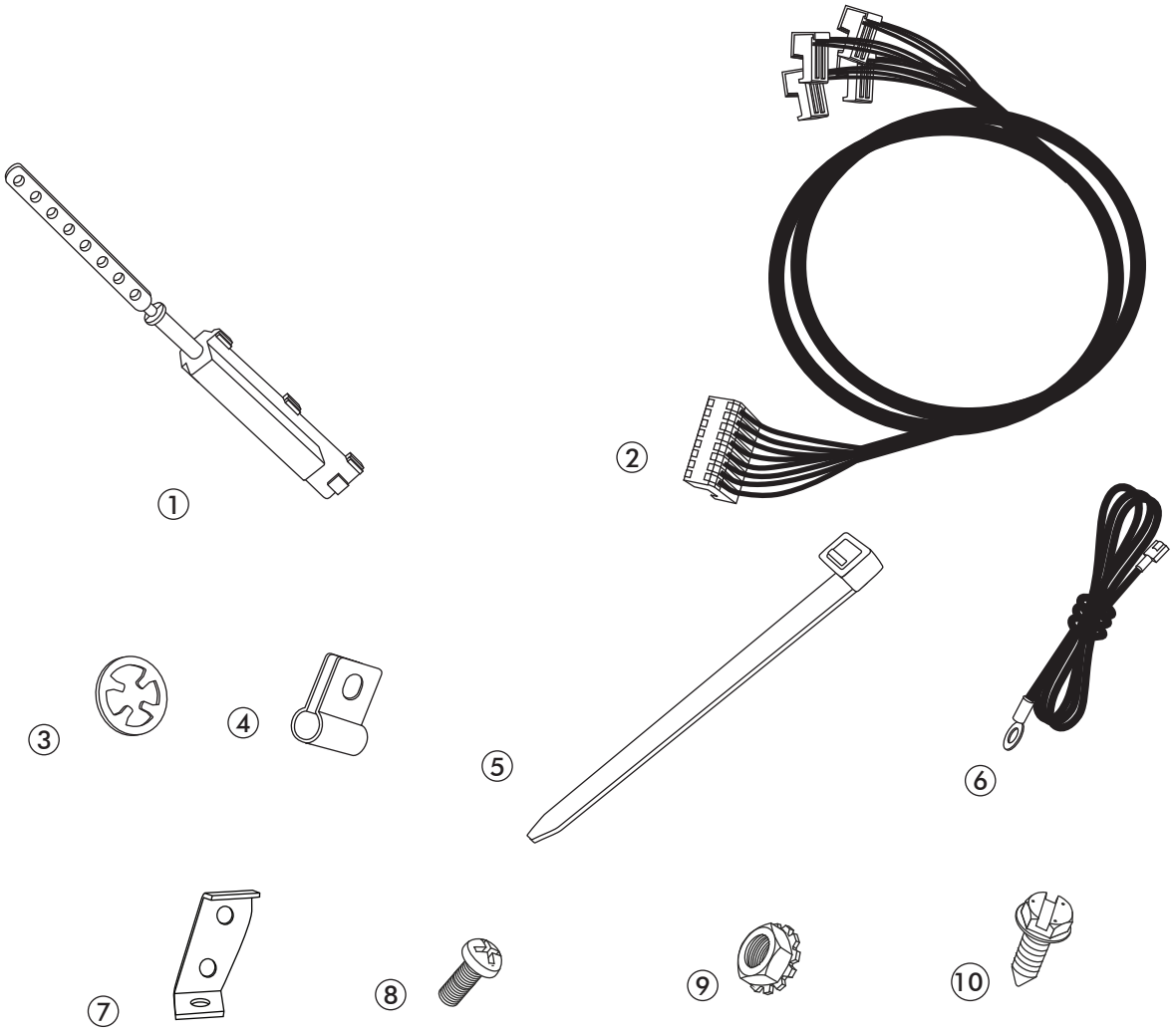
Table of Contents

CONTROL KIT PACKING LIST

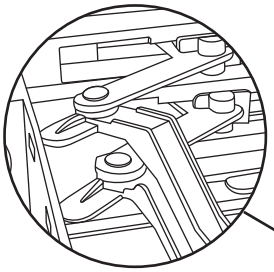
CONTROL KIT
473066

No.	QTY.	PART No.	DESCRIPTION
1.	3	112002-SUA	SLIDE POT ASM
2.	1	232002-VUA	GEN IV UNIVERSAL CONTROL HARNESS
3.	3	65976-VUE	3/16" PUSH-ON RING
4.	3	491010-VUR	SLIDE POT CLAMP
5.	5	21301-VUP	4" TIE WRAP
6.	1	231520	GROUND WIRE
7.	1	643061	66-67 CHEVELLE SLIDE POT MOUNTING BRKT
8.	2	18237-VUB	6/32 x 3/8 PH PAN HEAD SCREW
9.	2	18107-VUB	6/32 LOCK NUT
10.	2	18247-VUB	#10 x 1/2 HEX SHEET METAL SCREW

**** 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.**



CONTROL PANEL CONVERSION INSTRUCTIONS FOR 1966-67 CHEVELLE wo AC



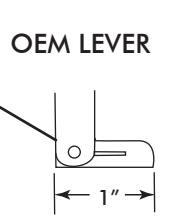


FIGURE A

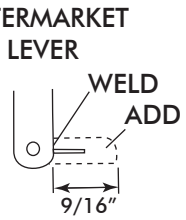


FIGURE B

NOTE: THIS KIT WAS DESIGN TO BE USED WITH OEM LEVERS SEE FIGURE A. IF USING AFTERMARKET LEVERS USE MUST MODIFIED LEVER TO OEM SPEC AS SHOWN IN FIGURE B.

REMOVING OEM CONTROL PANEL

- ☐ REMOVE (2) OEM MOUNTING SCREWS FROM BOTTOM OF DASH (RETAIN SCREWS). SEE FIGURE 1 BELOW.
- ☐ DISCONNECT CABLES, WIRES FROM BACK OF CONTROL PANEL.
- ☐ REMOVE THE CONTROL PANEL.

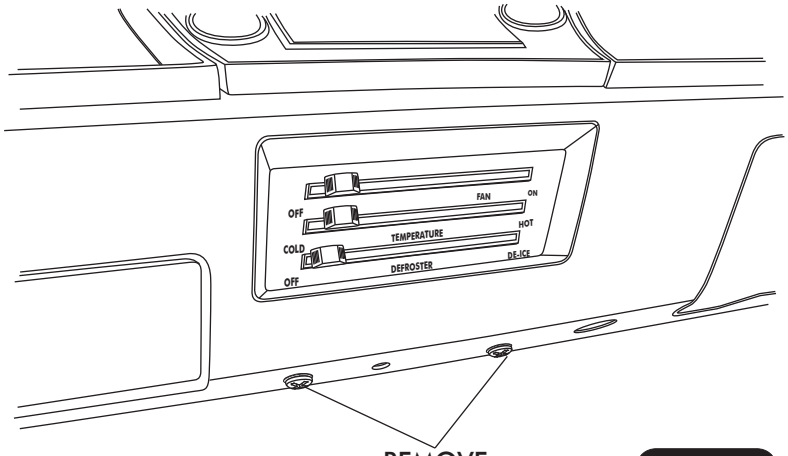


FIGURE 1

REMOVE OEM BLOWER SWITCH

- ☐ REMOVE THE (2) OEM MOUNTING SCREWS FROM BLOWER SWTCH (DISCARD).
- ☐ REMOVE THE PUSH-ON RING AND REMOVE OEM BLOWER SWITCH (DISCARD).

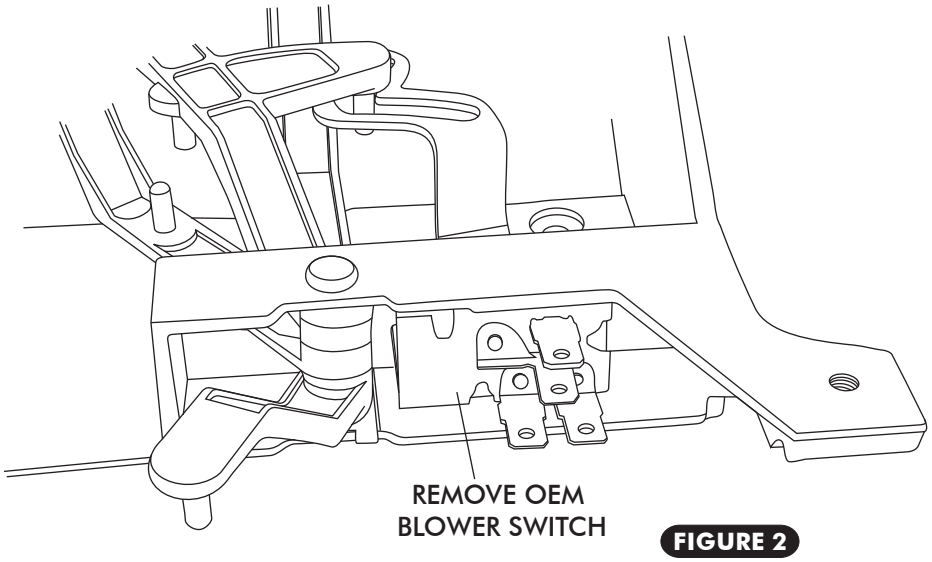


FIGURE 2

CONTROL PANEL SLIDE POT MODIFICATION

- ☐ CUT OUT SLIDE PLOT MOUNTING BRKT TEMPLATE PROVIDED ON PAGE 16.
- ☐ ALIGN TEMPLATE ON CONTROL PANEL AND DRILL (2) 3/8 HOLES AND (2) 9/64 HOLES IN CONTROL PANEL AS SHOWN IN FIGURE 3 BELOW.

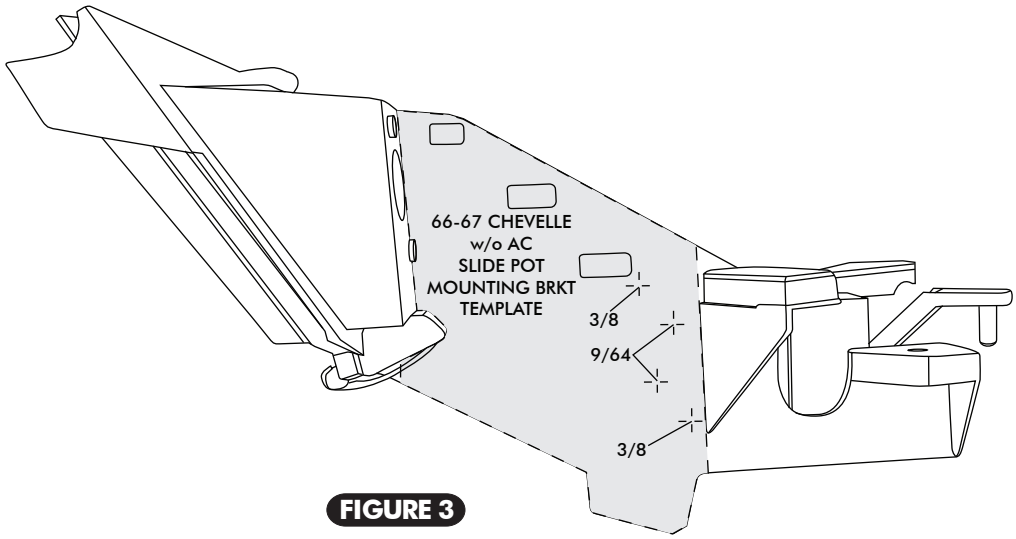


FIGURE 3

SLIDE POT MOUNTING BRKT INSTALLATION

- ☐ INSTALL SLIDE POT MOUNTING BRACKET ON CONTROL PANEL USING (2) 6/32 PH PAN HEAD SCREWS w/ LOCK NUTS AS SHOWN IN FIGURE 4, BELOW.

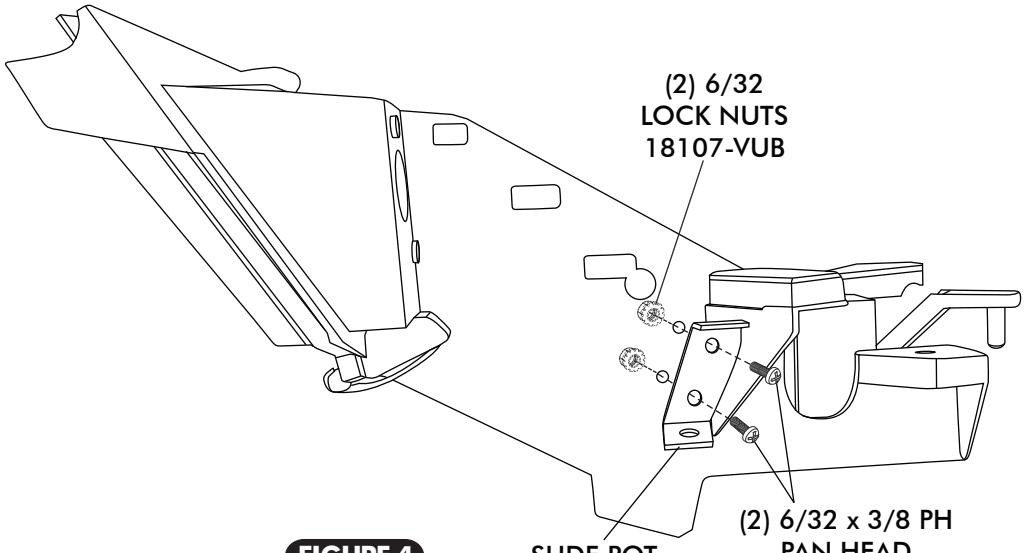


FIGURE 4

SLIDE POT ASSEMBLY MODIFICATIONS

☐ LOCATE THE (3) SLIDE POT ASSEMBLIES, AND USING A PAIR OF WIRE CUTTERS, CUT SLIDE POT ACTUATOR RODS AS SHOWN IN FIGURE 5 BELOW.

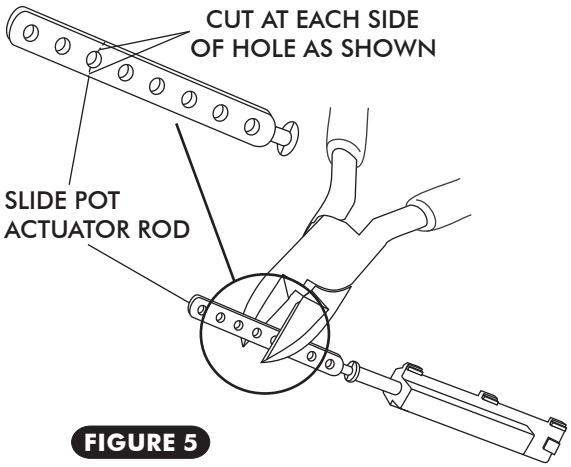
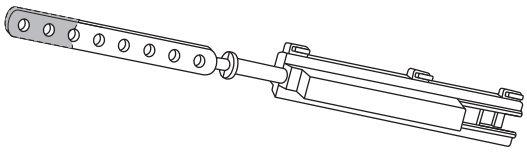


FIGURE 5



CUT ALL (3) CABLE CONVERTER ASSEMBLIES AT 6TH HOLE (REMOVE SHADED PORTION)

SLIDE POT ASSEMBLY MOUNTING CLAMP INSTALLATION

☐ INSTALL SLIDE POT ASM MOUNTING CLAMPS, SEE FIGURE 6 BELOW.

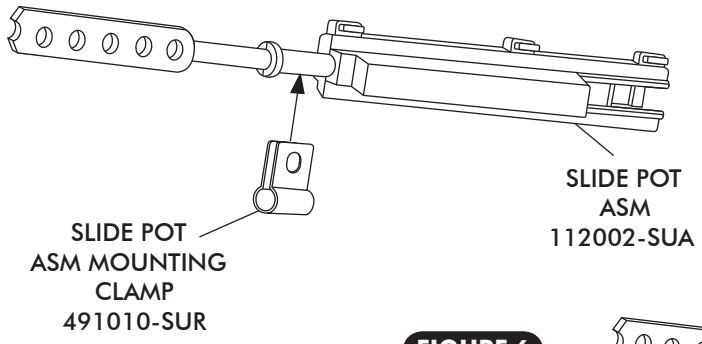
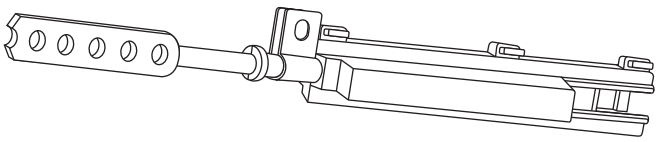


FIGURE 6



ORIENT SLIDE POT ASSEMBLIES AS SHOWN AND INSTALL MOUNTING CLAMPS AS SHOWN. (NOTE: ORIENT CLAMPS IN RELATION TO THE (3) HOUSING SNAPS ON SLIDE POT ASSEMBLY)

SLIDE POT ASSEMBLY INSTALLATION

OFF/HI SLIDE POT ASSEMBLY

- ☐ INSTALL SLIDE POT ASM ON THE OFF/HI LEVER. SEE FIGURE 7 BELOW
- ☐ INSTALL SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD ON LEVER. SEE FIGURE 7 BELOW.
- ☐ SECURE THE SLIDE POT ASM TO THE SLIDE POT MOUNTING BRKT USING #10 x 1/2 SHEET METAL SCREW.
- ☐ SINCE THE SLIDE POT ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION SLIDE POT 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 7a BELOW.
- ☐ SECURE SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16 PUSH-ON RING AS SHOWN IN FIGURE 7 BELOW.

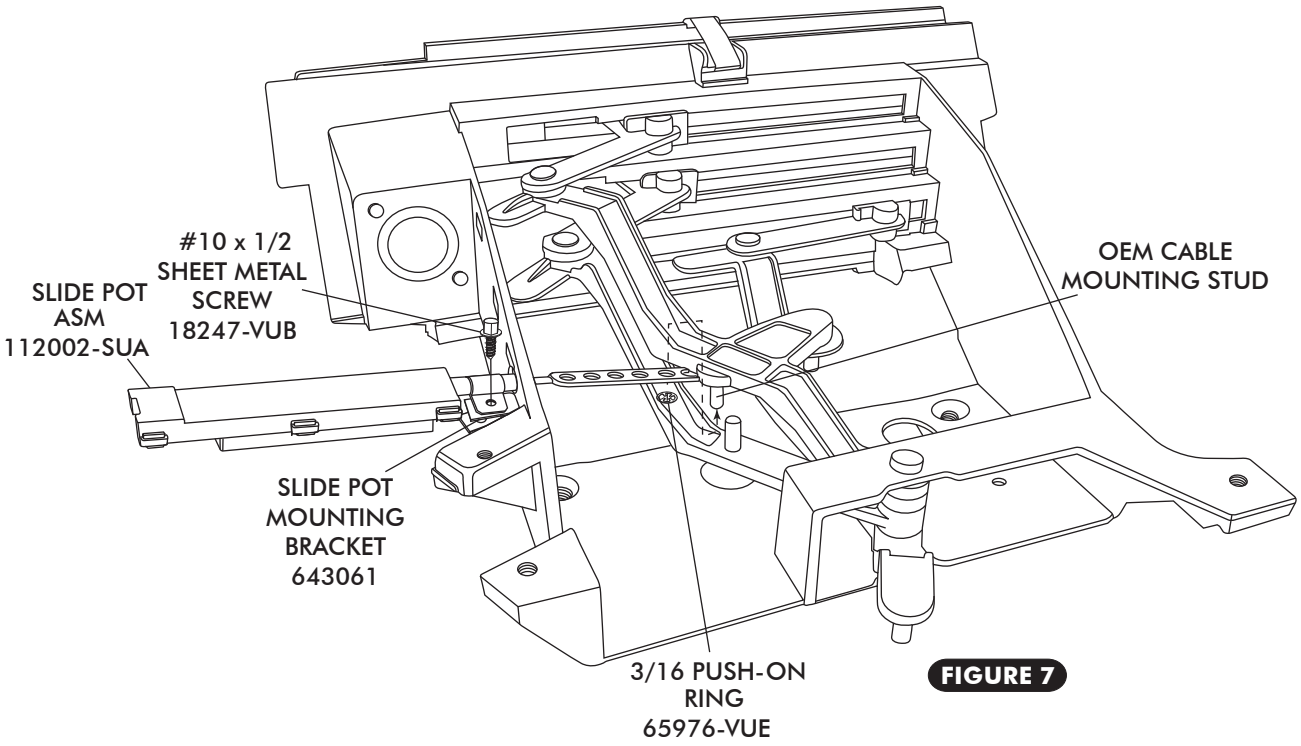
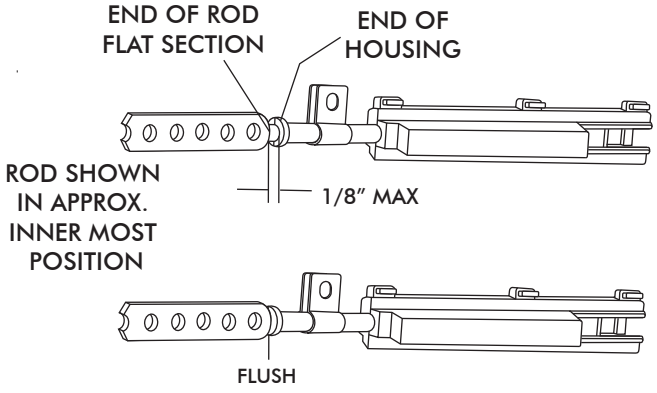
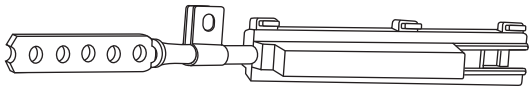


FIGURE 7





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

FIGURE 7a

CONTROL HARNESS

☐ LOCATE THE CONTROL PANEL WIRE HARNESS AND PLUG THE CORRESPONDING WIRES INTO THE CORRECT SLIDE POT ASSEMBLY AS SHOWN IN FIGURE 8 BELOW.

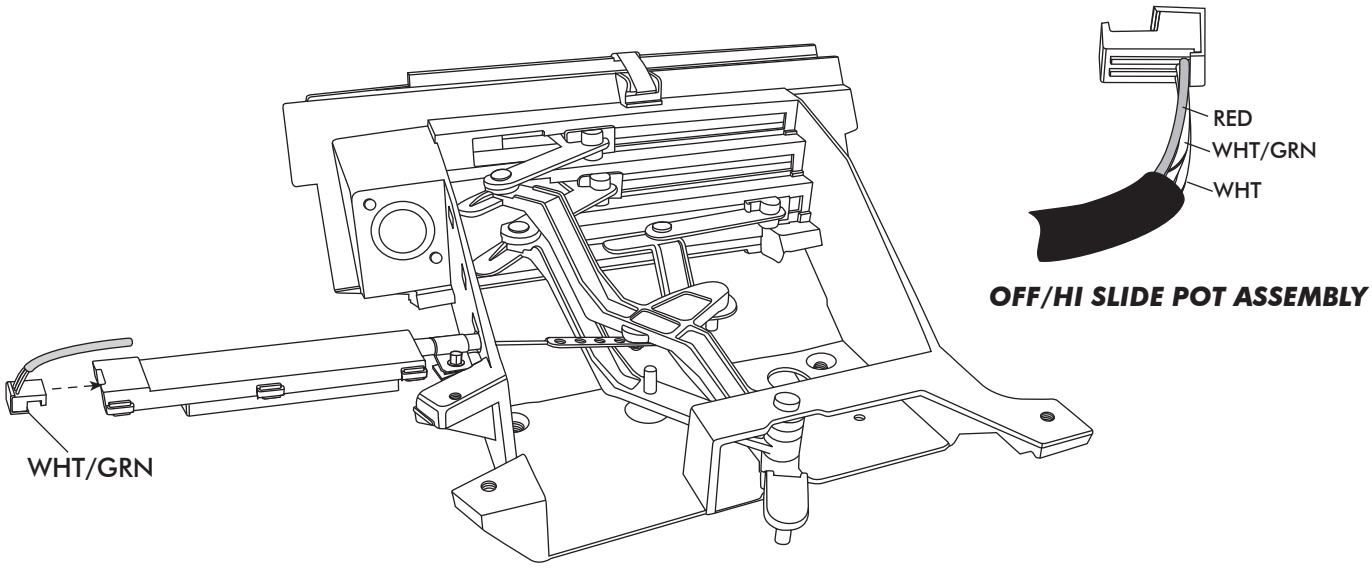


FIGURE 8

☐ ONCE WIRES ARE CORRECTLY PLUGGED INTO SLIDE POT ASSEMBLY, SECURE WIRES TO THE SLIDE POT 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 SLIDE POT HOUSING FORCING A BEND IN EACH WIRE AS THEY PASS OVER THE STEP IN SLIDE POT 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.

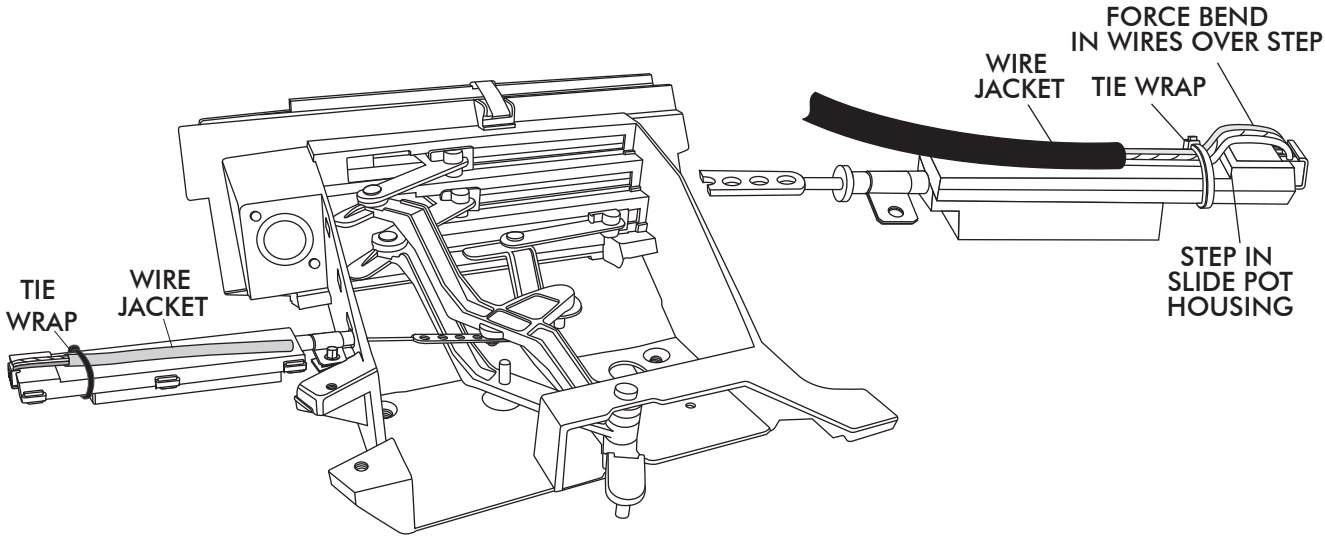


FIGURE 9

COLD/HOT SLIDE POT ASSEMBLY

- ☐ INSTALL SLIDE POT ASM ON THE COLD/HOT LEVER. SEE FIGURE 10 BELOW.
- ☐ INSTALL SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD ON LEVER. SEE FIGURE 10 BELOW.
- ☐ SECURE THE SLIDE POT ASM TO THE SLIDE POT MOUNTING BRKT USING #10 x 1/2 SHEET METAL SCREW, SEE FIGURE 10 BELOW.
- ☐ SINCE THE SLIDE POT ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION SLIDE POT 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 7a, PAGE 7.
- ☐ SECURE SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 10 BELOW.

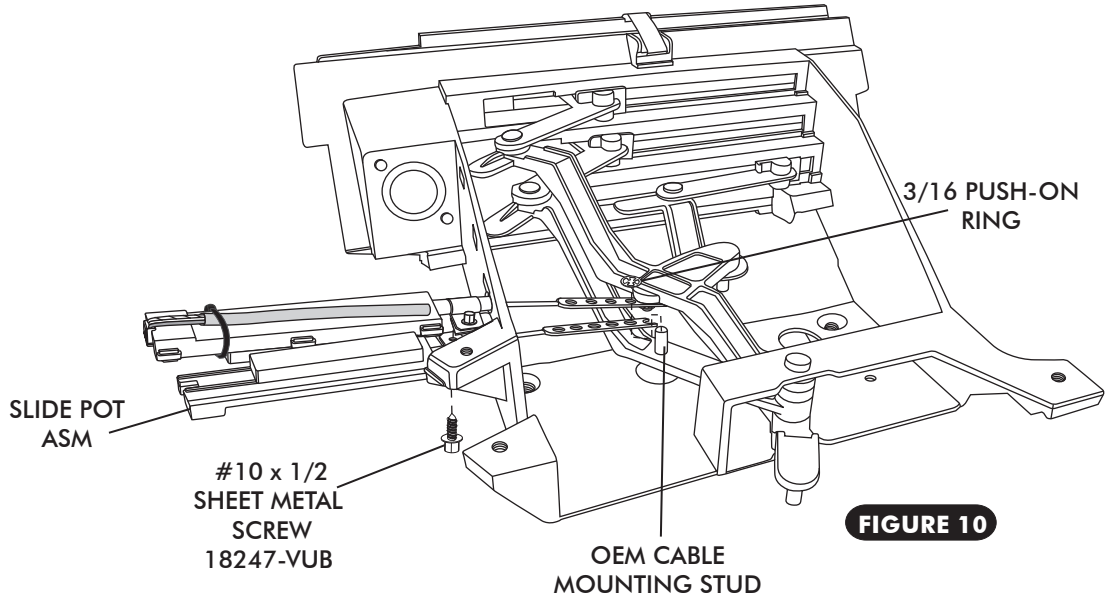
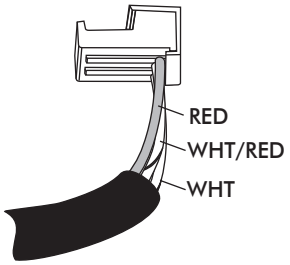


FIGURE 10

CONTROL HARNESS

- ☐ LOCATE THE CONTROL PANEL WIRE HARNESS AND PLUG THE CORRESPONDING WIRES INTO THE CORRECT SLIDE POT ASSEMBLY AS SHOWN IN FIGURE 11 BELOW.



COLD/HOT SLIDE POT ASSEMBLY

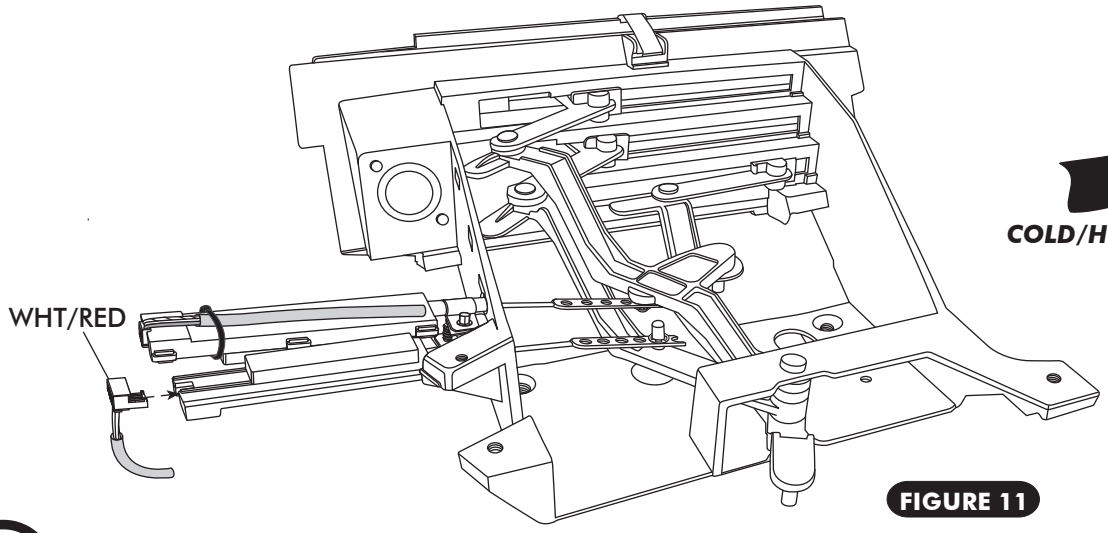


FIGURE 11

CONTROL HARNESS CONT.

☐ ONCE WIRES ARE CORRECTLY PLUGGED INTO SLIDE POT ASSEMBLY, SECURE WIRES TO THE SLIDE POT 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 SLIDE POT HOUSING FORCING A BEND IN EACH WIRE AS THEY PASS OVER THE STEP IN SLIDE POT 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 12 BELOW.

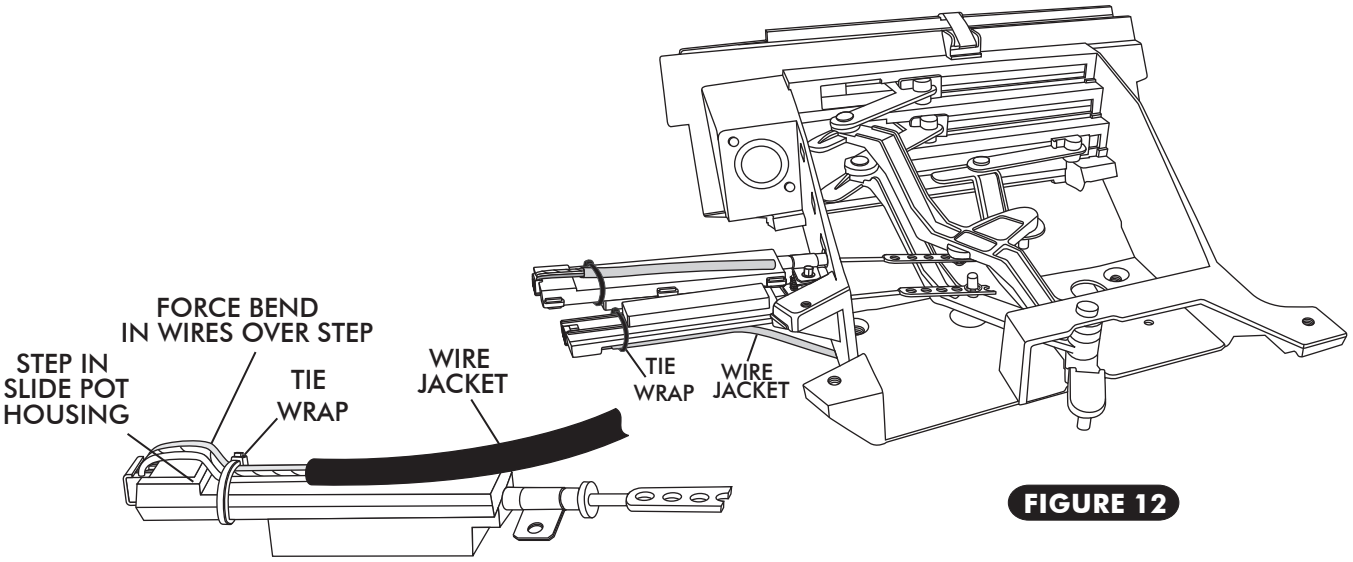


FIGURE 12

DASH/FLR/DEFROST SLIDE POT ASSEMBLY

☐ INSTALL SLIDE POT ASM ON THE DEFROSTER LEVER. SEE FIGURE 13 BELOW

☐ INSTALL SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD ON LEVER. SEE FIGURE 13 BELOW.

☐ SECURE THE SLIDE POT ASM TO THE CONTROL PANEL USING THE OEM SCREW IN THE OEM CABLE CLAMP MOUNTING LOCATION. SEE FIGURE 13 BELOW.

☐ SINCE THE SLIDE POT ASSEMBLY CAN SLIDE BACK AND FORTH IN CLAMP BEFORE SCREW IS TIGHTENED, POSITION SLIDE POT 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 7a, PAGE 7.

☐ SECURE SLIDE POT LEVER PUSH ROD ONTO OEM CABLE MOUNTING STUD USING 3/16" PUSH-ON RING AS SHOWN IN FIGURE 13 BELOW.

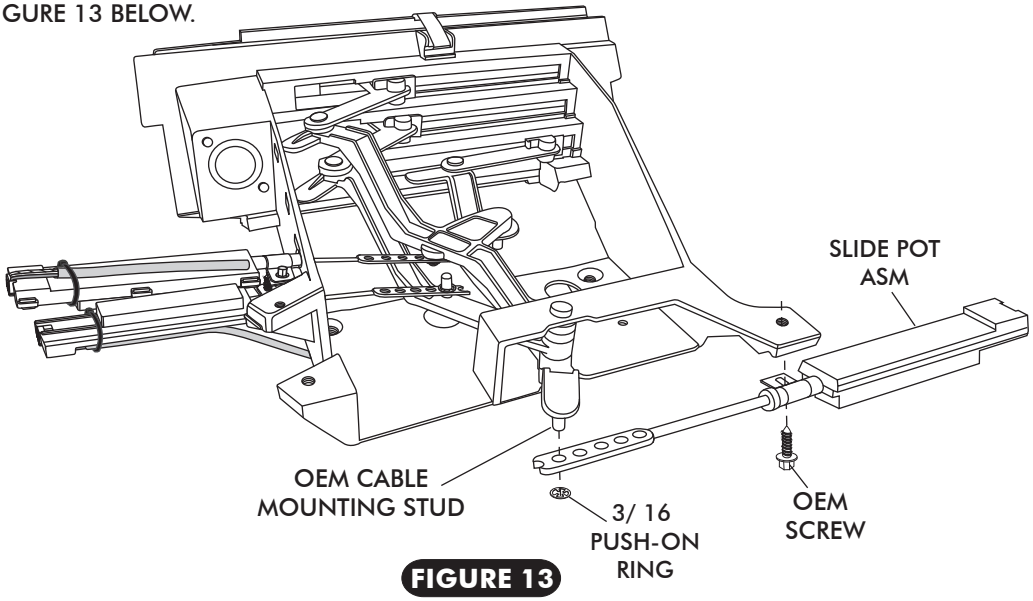


FIGURE 13

CONTROL HARNESS

☐ LOCATE THE CONTROL PANEL WIRE HARNESS AND PLUG THE CORRESPONDING WIRES INTO THE CORRECT SLIDE POT ASSEMBLY AS SHOWN IN FIGURE 14 BELOW.

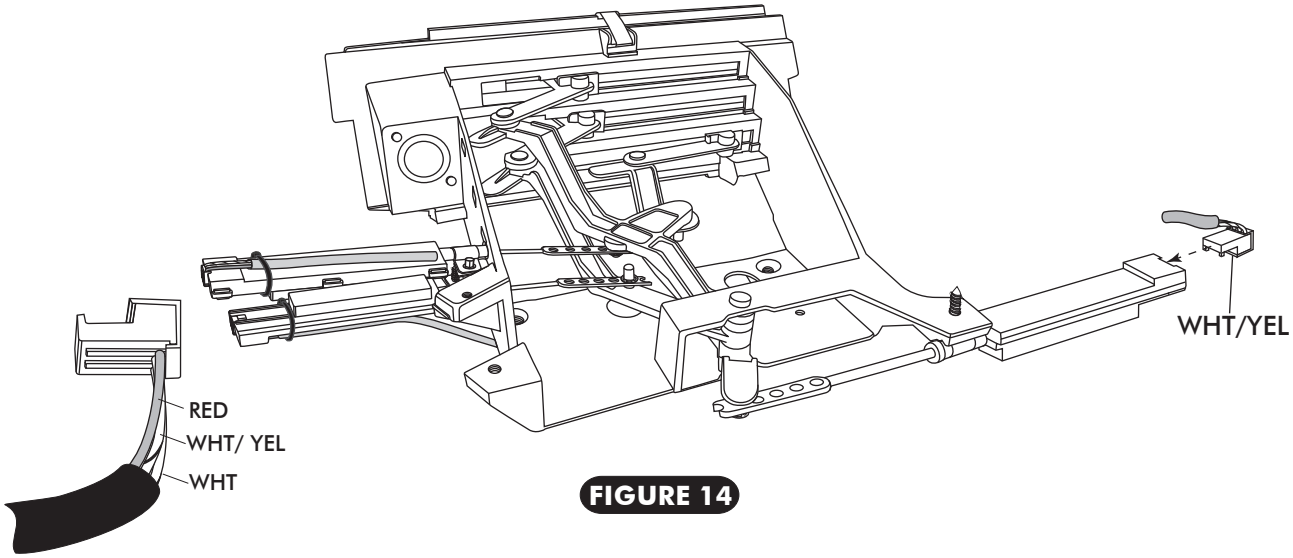


FIGURE 14

DASH/FLR/DEFROST SLIDE POT ASSEMBLY

☐ ONCE WIRES ARE CORRECTLY PLUGGED INTO SLIDE POT ASSEMBLY, SECURE WIRES TO THE SLIDE POT ASSEMBLY USING TIE WRAPS (SUPPLIED). SEE FIGURE 15 BELOW. THE TIE WRAP MUST BE LOCATED BETWEEN THE END OF THE WIRE JACKET AND THE STEP IN THE SLIDE POT HOUSING FORCING A BEND IN EACH WIRE AS THEY PASS OVER THE STEP IN SLIDE POT 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 15 BELOW.

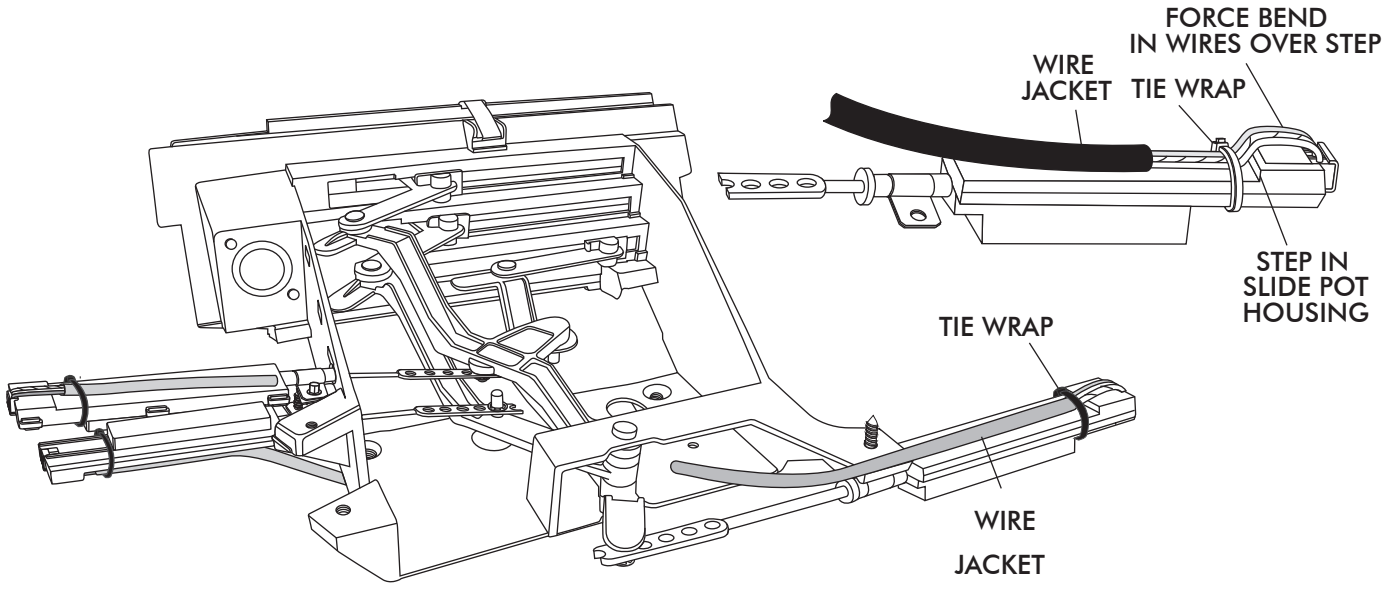
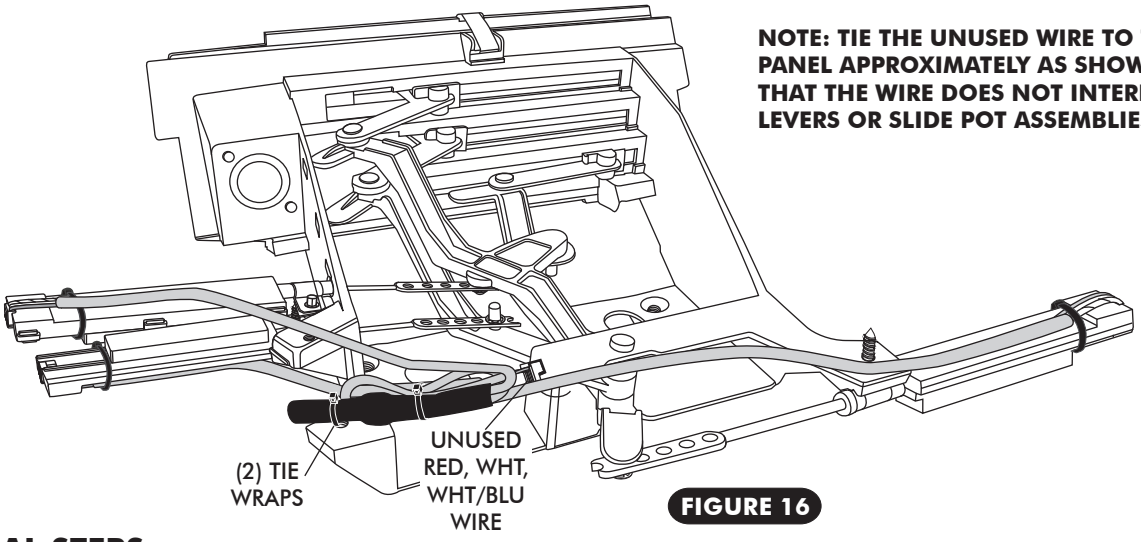


FIGURE 15

CONTROL HARNESS CONT.

☐ USING THE SUPPLIED TIE-WRAPS, TIE THE WIRES TO THE CONTROL PANEL AS SHOWN IN FIGURE 16 BELOW. CONFIRM THAT WIRES ARE SECURED AND DO NOT INTERFERE WITH LEVER OPERATION OR SLIDE POT ASSEMBLIES.



NOTE: TIE THE UNUSED WIRE TO THE CONTROL PANEL APPROXIMATELY AS SHOWN, ENSURE THAT THE WIRE DOES NOT INTERFERE WITH LEVERS OR SLIDE POT ASSEMBLIES.

FIGURE 16

FINAL STEPS

☐ REINSTALL CONTROL PANEL IN DASH.

☐ PLUG THE WIRING HARNESS INTO THE ECU MODULE ON SUB CASE. SEE FIGURE 17.

☐ WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 14.

☐ CONTROL PANEL CALIBRATION PROCEDURE AND OPERATION INSTRUCTIONS:

CALIBRATING THE CONTROL PANEL WILL SET THE RANGE OF TRAVEL FOR THE SLIDE POTS CONNECTED TO THE OEM CONTROL PANEL LEVERS. PERFORMING THIS PROCEDURE WILL SET THE LIMITS OF THE SLIDE 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. THIS WIRE IS LABELED *PRGM* ON THE WIRING DIAGRAM ON PAGE 14.

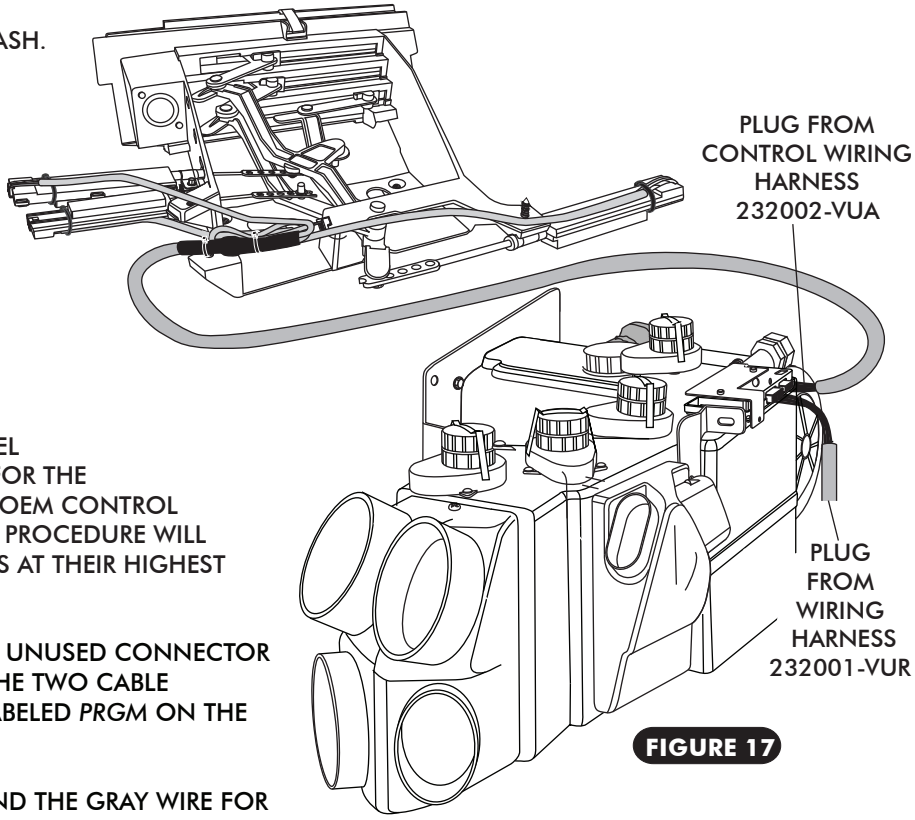


FIGURE 17

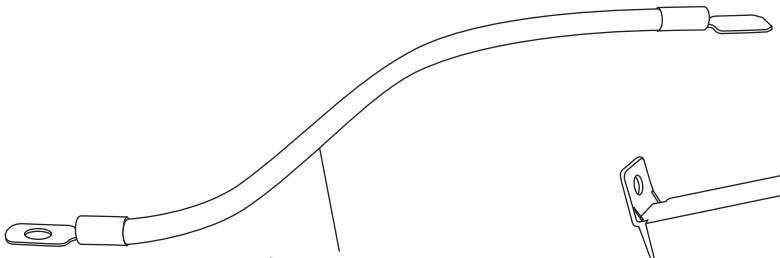
IT WILL BE NECESSARY TO GROUND THE GRAY WIRE FOR APPROXIMATELY FIVE SECONDS WHILE MOVING THE CONTROLS SO IT IS SOMETIMES HELPFUL TO ATTACH ONE END OF THE WHITE JUMPER WIRE TO THE VEHICLE'S GROUND (FOR EXAMPLE THE CHASSIS) AND HAVE THE OTHER END READY TO CONNECT TO THE GRAY *PRGM* WIRE WHEN THE PROCEDURE REQUIRES IT.

TO CALIBRATE THE CONTROL PANEL FOLLOW THE CALIBRATION PROCEDURES ON PAGE 13.

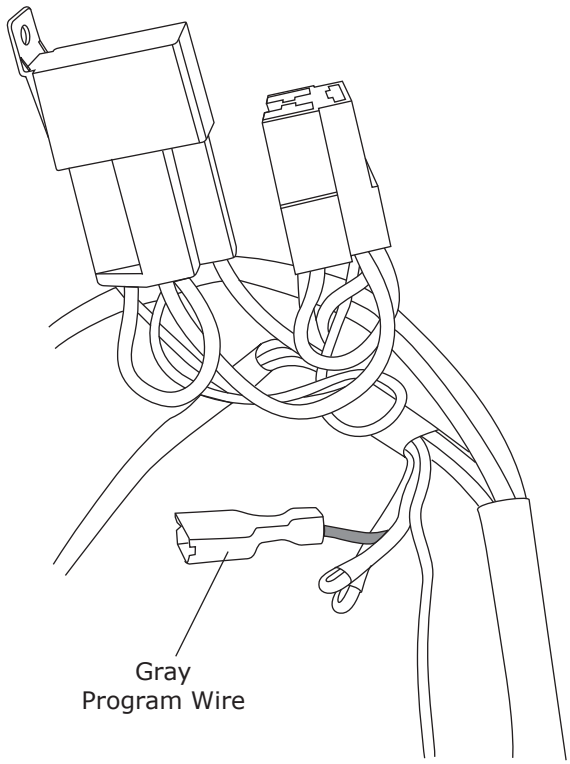
Control Panel Calibration Procedure

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.



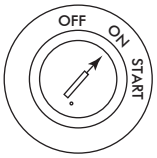
White Jumper Cable



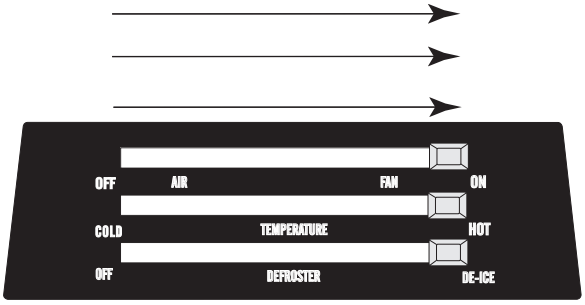
Gray Program Wire

Control Panel Calibration Procedure (Cont.)

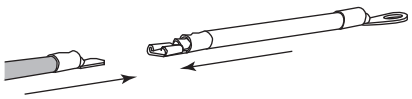
1. Turn on the ignition switch (Do not start the engine).



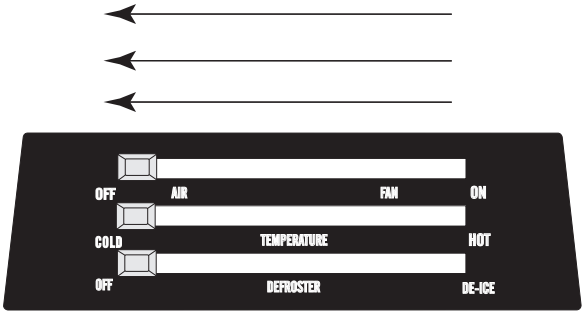
2. Move the control levers/knobs to the position shown.



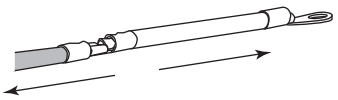
3. Connect the white jumper wire to the gray program wire. Wait for the blower speed to change (Approximately 5 seconds).



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

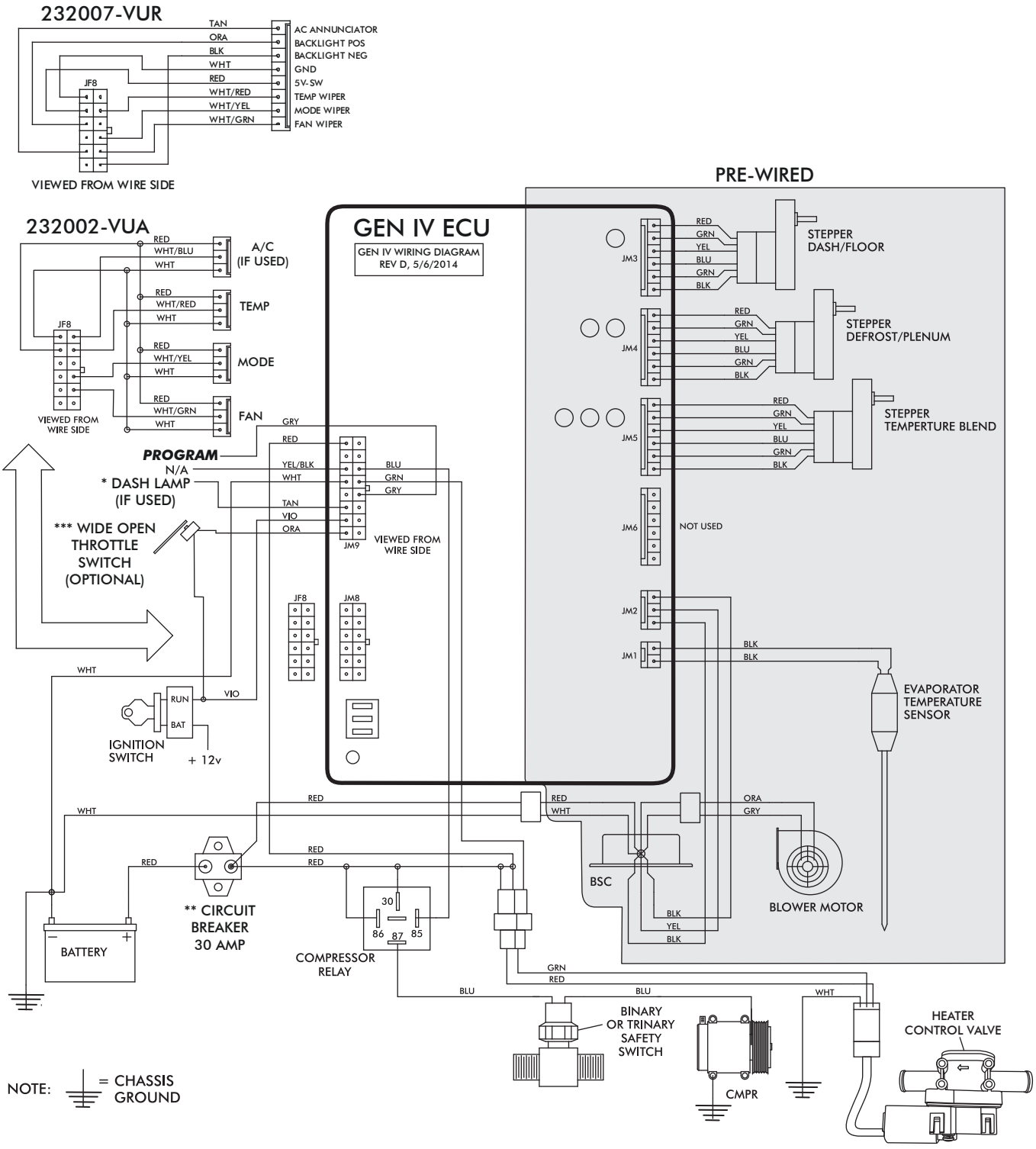


5. Disconnect the white jumper wire from the gray program wire. The blower speed will change, indicating completion of the calibration procedure.



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

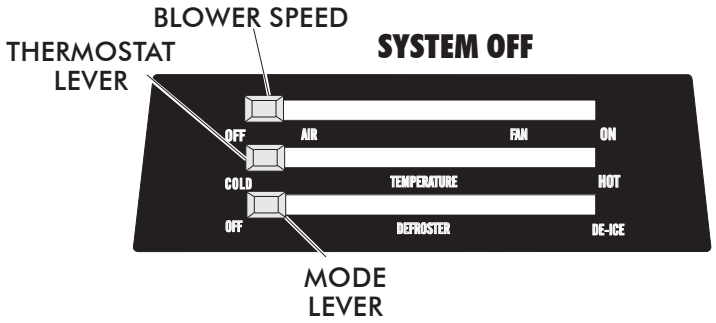
NOTE:

WHEN BATTERY POWER IS FIRST CONNECTED TO THE ECU, THE COMPUTER GOES THROUGH AN INITIALIZATION SEQUENCE. THIS INITIALIZATION MAY TAKE UP TO 30 SECONDS. DURING INITIALIZATION THE BLOWER WILL NOT OPERATE, BUT THE DOORS INSIDE THE UNIT WILL BE OPERATING. A LOW BATTERY OR DISCONNECTING THE BATTERY MAY ALSO TRIGGER A RE-INITIALIZATION. DURING START UP, A LOW BATTERY MAY DROP BELOW 7 VOLTS, TRIGGERING RE-INITIALIZATION.

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

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

SYSTEM OFF

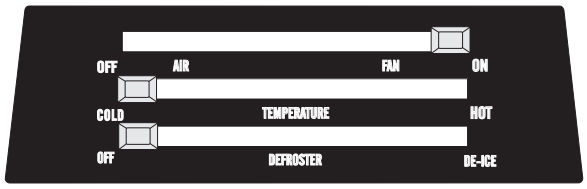


BLOWER SPEED
THIS LEVER CONTROLS THE BLOWER SPEED, FROM OFF TO HI

THERMOSTAT LEVER
IN A/C MODE SLIDE THE THERMOSTAT LEVER ALL THE WAY LEFT TO THE COLD POSTION, FOR MAXIMUM COOLING (SLIDE LEVER LEFT OR RIGHT TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE LEVER TO THE "DASH" POSITION

A/C MODE

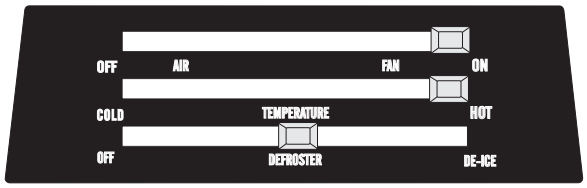


BLOWER SPEED
SLIDE LEVER RIGHT TO DESIRED BLOWER SPEED, FROM OFF TO HI

THERMOSTAT LEVER
IN A/C MODE SLIDE THE THERMOSTAT LEVER ALL THE WAY LEFT TO THE COLD POSITION TO ENGAGE COMPRESSOR, FOR MAXIMUM COOLING (SLIDE LEVER LEFT OR RIGHT TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE LEVER TO THE LEFT FOR "DASH" POSTION

HEAT MODE

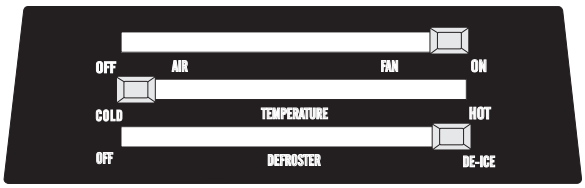


BLOWER SPEED
SLIDE LEVER RIGHT TO DESIRED BLOWER SPEED, FROM OFF TO HI

THERMOSTAT LEVER
IN HEAT MODE SLIDE THE THERMOSTAT LEVER ALL THE WAY RIGHT TO THE HOT POSITION, FOR MAXIMUM HEATING ((SLIDE LEVER LEFT OR RIGHT TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE LEVER TO THE CENTER FOR "FLR" POSTION

DEFROST/ DE-FOG MODE

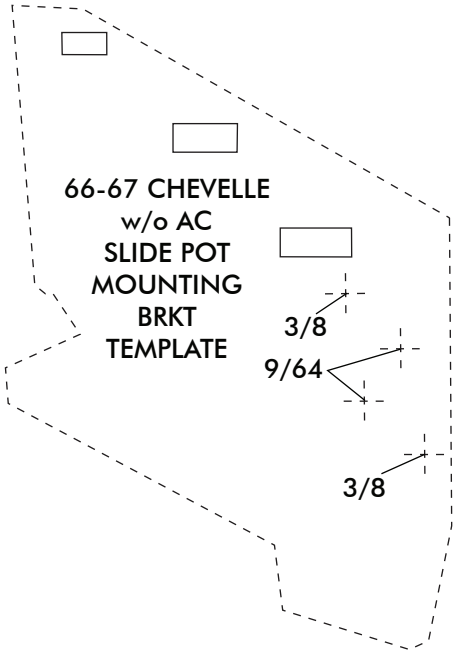


BLOWER SPEED
SLIDE LEVER RIGHT TO DESIRED BLOWER SPEED, FROM OFF TO HI

THERMOSTAT LEVER
IN DEF MODE SLIDE THE THERMOSTAT LEVER ALL THE WAY LEFT TO THE COLD POSITION TO ENGAGE COMPRESSOR. FOR MAXIMUM COOLING (SLIDE LEVER LEFT OR RIGHT TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE LEVER TO THE RIGHT FOR "DEF" POSTION

SLIDE POT MOUNTING BRKT TEMPLATE



CONTROL KIT PACKING LIST

CONTROL KIT
473066

No.	QTY.	PART No.	DESCRIPTION	
1.	3	112002-SUA	SLIDE POT ASM	_____
2.	1	232002-VUA	GEN IV UNIVERSAL CONTROL HARNESS	_____
3.	3	65976-VUE	3/16" PUSH-ON RING	_____
4.	3	491010-VUR	SLIDE POT CLAMP	_____
5.	5	21301-VUP	4" TIE WRAP	_____
6.	1	231520	GROUND WIRE	_____
7.	1	643061	66-67 CHEVELLE SLIDE POT MOUNTING BRKT	_____
8.	2	18237-VUB	6/32 x 3/8 PH PAN HEAD SCREW	_____
9.	2	18107-VUB	6/32 LOCK NUT	_____
10.	2	18247-VUB	#10 x 1/2 HEX SHEET METAL SCREW	_____

**** 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.**