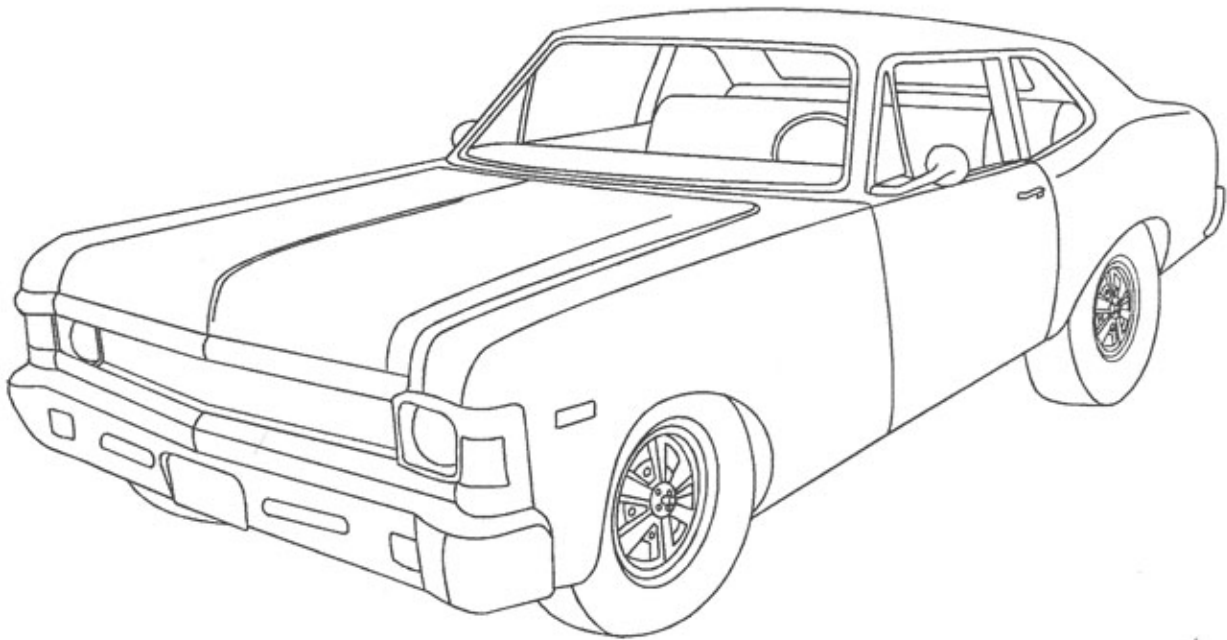


**VANTAGE
AIR**

INSTALLATION INSTRUCTIONS
1968-70 CHEVY NOVA
w/o FACTORY AIR



10305 I.H. 35 N. - SAN ANTONIO, TX. - 78233 - ph.210-654-7171 - fax 210-654-3113

BEFORE STARTING INSTALLATION

CHECK THE FUNCTION OF THE VEHICLES (HORN, LIGHTS, RADIO, ETC.) FOR PROPER OPERATION. STUDY INSTRUCTIONS, ILLUSTRATIONS, AND DIAGRAMS PRIOR TO INSTALLATION

- 1. DISCONNECT BATTERY.

REMOVE THE FOLLOWING:

- 2. GLOVE BOX DOOR
- 3. O.E.M GLOVE BOX (DISCARD)
- 4. O.E.M FIREWALL COVER (DISCARD)
- 5. O.E.M HEATER UNIT (DISCARD)
- 6. O.E.M DEFROST DUCT (DISCARD)
- 7. REMOVE O.E.M. DEFROST LOUVERS. (RETAIN LOUVER COVER & SCREWS)

NOTE: BE CAREFUL NOT TO DAMAGE THE O.E.M CONTROL CABLES WHEN REMOVING O.E.M HEATER UNIT FROM UNDER THE DASH.

NOTE: THE PASSENGER SIDE INNER FENDERWELL WILL NEED TO BE LOWERED IN ORDER TO ACCESS THE NUTS THAT SECURE THE O.E.M BLOWER MOTOR ASSEMBLY TO THE FIREWALL.

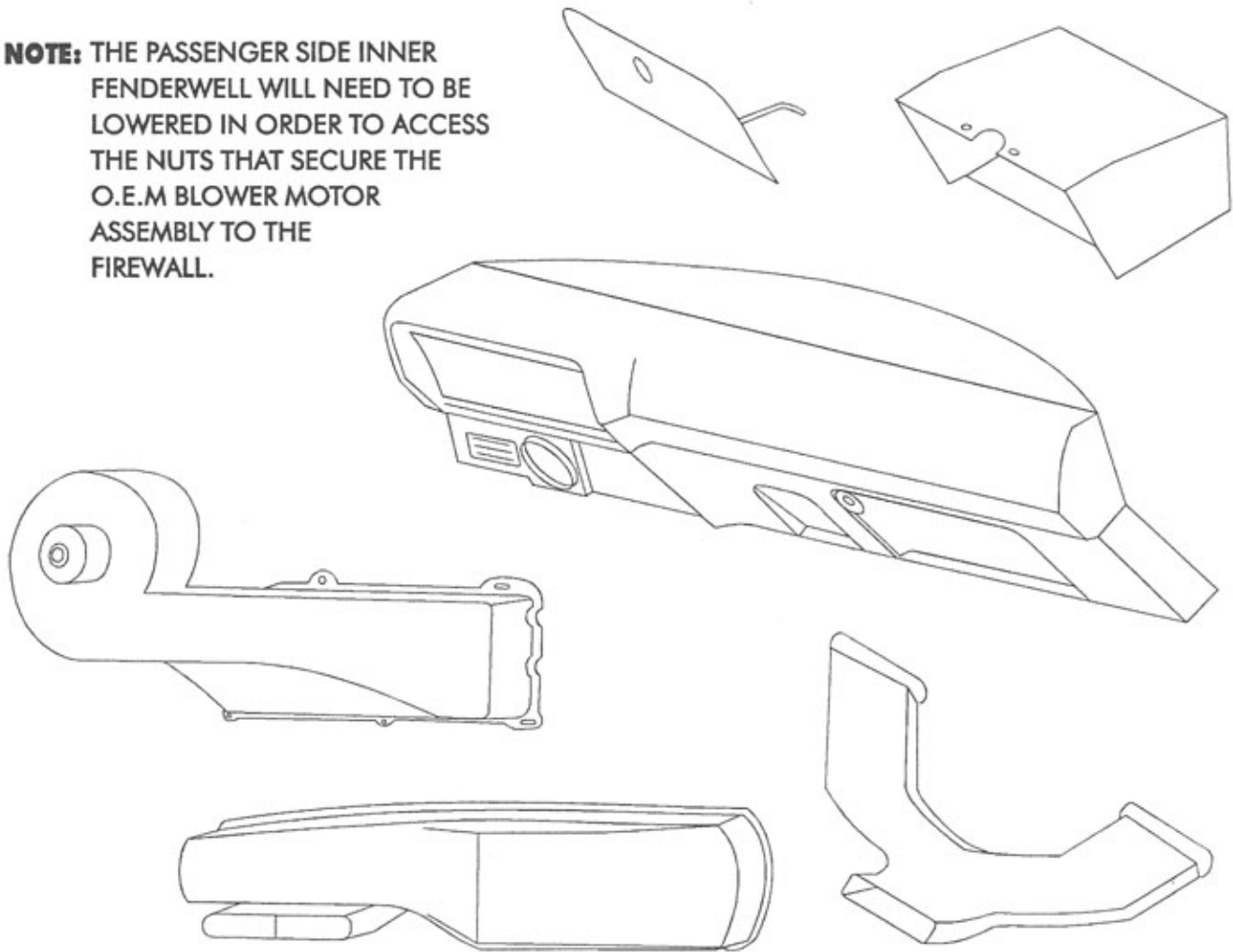


FIGURE 1

EVAPORATOR INSTALLATION

- 1. LAY EVAPORATOR UNIT ON THE PASSENGER SIDE FLOORBOARD. PASS # 6 AND # 10 A/C HOSES THRU THE FIREWALL FROM THE PASSENGER COMPARTMENT. LUBRICATE AND ATTACH THE HOSES AS SHOWN IN **FIGURE 2a BELOW**.
- 2. ATTACH THE HEATER HOSES AS SHOWN IN (**FIGURE 2a BELOW AND IN FIGURE 9 ON PAGE 10**).

BRACKET INSTALLATION

- ATTACH THE FRONT EVAPORATOR VENT PLENUM BRACKET AND THE BLOWER HOUSING BRACKET. SEE **FIGURE 2 BELOW**

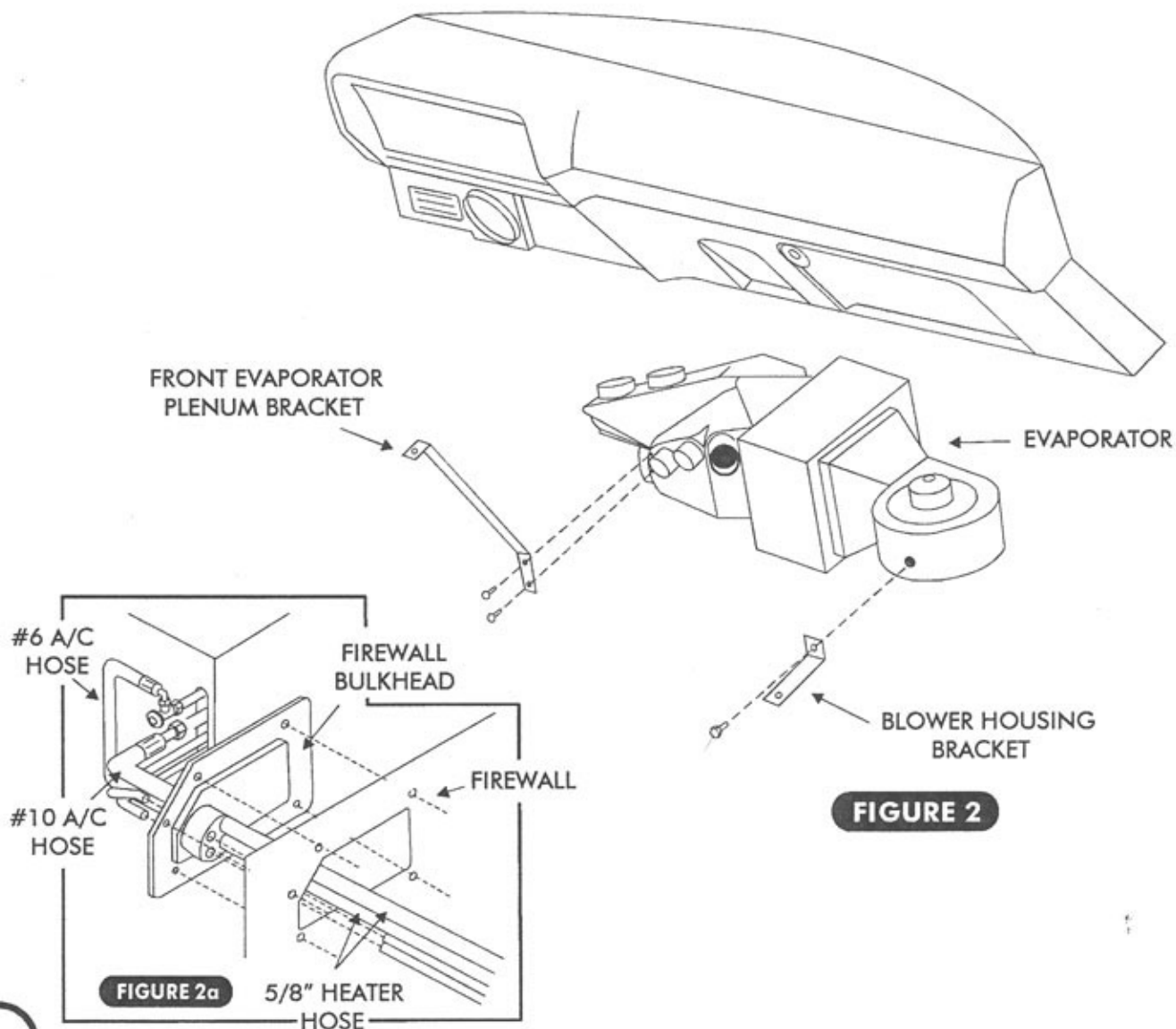


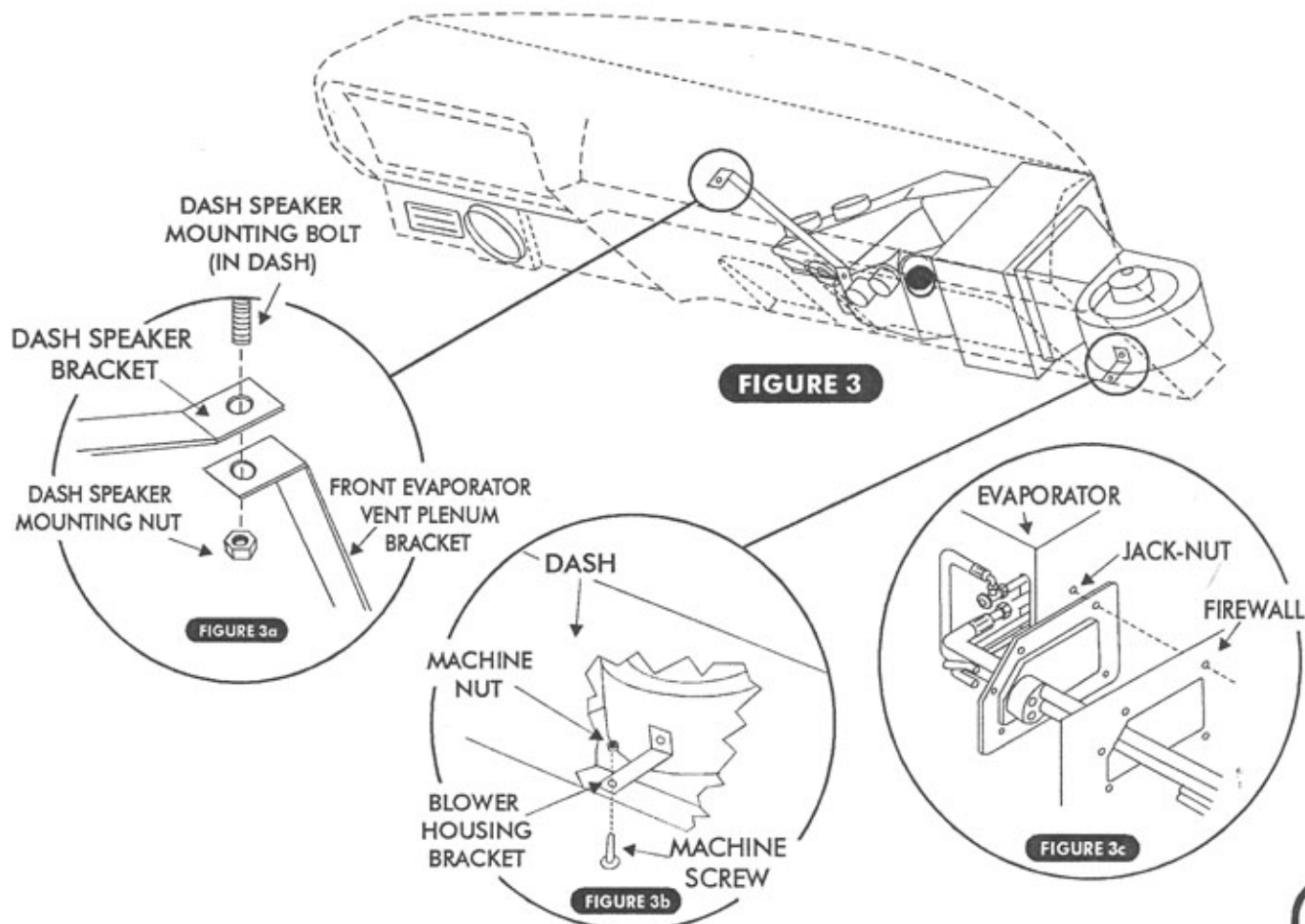
FIGURE 2

EVAPORATOR INSTALLATION *continued*

- ❑ 1. ATTACH THE FIREWALL BULKHEAD TO THE FIREWALL USING 1/4" x 1" BOLTS AND 1/4" NUTS (SUPPLIED) THRU O.E.M HOLES.
- ❑ 2. RAISE THE UNIT UP AND POSITION UNDER DASH. THE BACK OF THE UNIT IS SUPPORTED BY A BOLT THRU THE FIREWALL (AND FIREWALL BULKHEAD) TO THE JACK-NUT IN THE BACK OF THE EVAPORATOR UNIT AS SEEN IN **FIGURE 3c BELOW**.
- ❑ 3. THE BLOWER HOUSING BRACKET ATTACHES TO THE LIP UNDER THE DASH USING A MACHINE SCREW AND NUT (SUPPLIED) AS SEEN IN **FIGURE 3b BELOW**.
- ❑ 4. THE FRONT EVAPORATOR VENT PLENUM BRACKET ATTACHES UNDER THE DASH SPEAKER MOUNTING NUT AS SHOWN IN **FIGURE 3a BELOW**.

O.E.M CABLE INSTALLATION '68 DASH CONTROL LOCATION IS DIFFERENT FROM '69-'70

- ❑ 1. LOCATE THE LONGEST O.E.M CONTROL CABLE AND ATTACH TO THE A/C/HEAT PLENUM CABLE BRACKET. **SEE FIGURE 5a PAGE 5**
- ❑ 2. LOCATE THE SHORTEST O.E.M CONTROL CABLE AND ATTACH TO THE DEFROST/FLOOR OUTLET PLENUM CABLE BRACKET. **SEE FIGURE 5b PAGE 5.**
- ❑ 3. O.E.M CABLE ATTACHED TO FAN SWITCH IS DISCARDED.



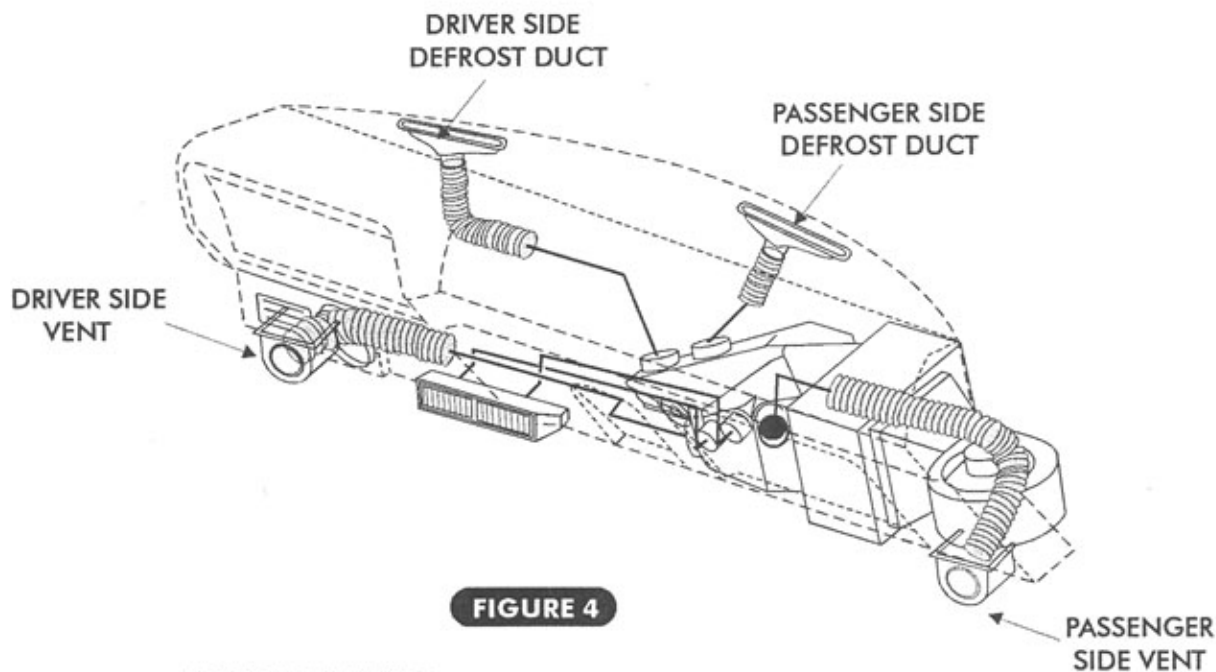
LOUVER & DUCT INSTALLATION

- 1. ATTACH DRIVER, PASSENGER SIDE, AND CENTER LOUVER VENTS UNDER THE DASH USING SHEETMETAL SCREWS (SUPPLIED). **SEE FIGURE 4 BELOW**
- 2. ATTACH THE DEFROST DUCTS DIRECTLY OVER THE DASH OUTLETS UNDER THE DASH USING SHEETMETAL SCREWS (SUPPLIED). **SEE FIGURE 4 BELOW.**
- 3. STRETCH DUCT HOSES OUT TO MAXIMUM LENGTH AND CUT THEM TO SIZES INDICATED BELOW. ROUTE ALL DUCT HOSES, AND ATTACH THEM TO THE APPROPRIATE OUTLETS AS SHOWN IN **FIGURE 4 BELOW.**

NOTE: WITH UNIT IN PLACE, STRETCH OUT THE DUCT HOSES TIGHTLY TO THEIR CORRESPONDING OUTLETS ON THE UNIT AND RE-CHECK THE LENGTH. INSURE THAT THE HOSE IS PULLED TIGHT WITH AS FEW KINKS AND BENDS AS POSSIBLE. THIS WILL INSURE MAXIMUM AIR FLOW.

DUCT HOSE LENGTHS:

DRIVER SIDE VENT	2-1/2" x 48"
DRIVER SIDE CENTER VENT	2" x 12"
PASSENGER SIDE CENTER VENT	2" x 12"
PASSENGER SIDE VENT	2-1/2" x 48"
DRIVER SIDE DEFROST VENT	2" x 24"
PASSENGER SIDE DEFROST VENT	2" x 24"



DRAIN HOSE INSTALLATION

1. DRILL A 5/8" HOLE 1" BELOW THE EVAPORATOR UNIT AND IN-LINE WITH THE DRAIN TUBE IN THE BOTTOM OF THE EVAPORATOR UNIT. INSERT THE 1/2" DRAIN HOSE (SUPPLIED) THRU THE FIREWALL AND ATTACH TO DRAIN TUBE ON THE UNIT.

O.E.M CONTROL CABLE INSTALLATION

- 1. ATTACH THE O.E.M CONTROL CABLES USING THE PLASTIC SLEEVES AND PUSH-ON O-RING (SUPPLIED)AS SEEN IN **FIGURE 5** BELOW.
- * LEVER 1 - FAN SPEED (DELETE O.E.M CABLE)
 - * LEVER 2 - A/C & HEAT
 - * LEVER 3 - FLOOR HEAT &DEFROST

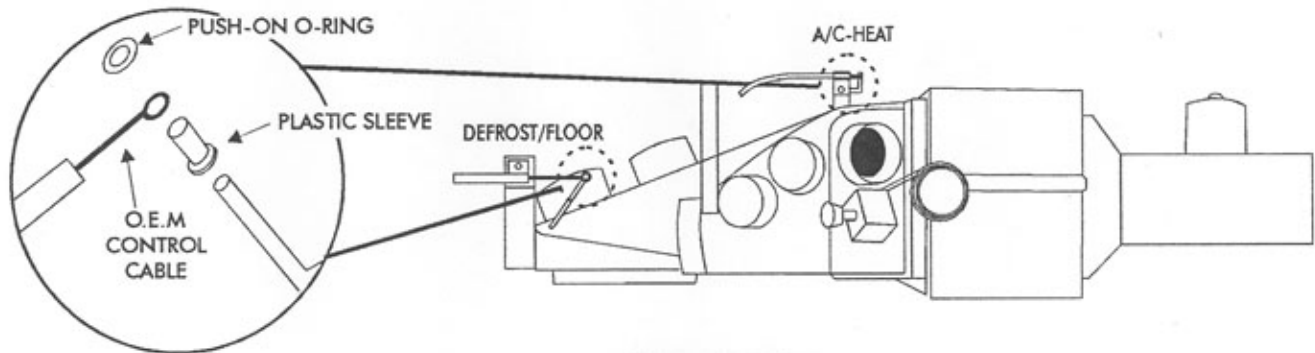


FIGURE 5

- 2. ATTACH THE FLOOR/DEFROST O.E.M CONTROL CABLE USING # 8 SCREW TO CABLE BRACKET.

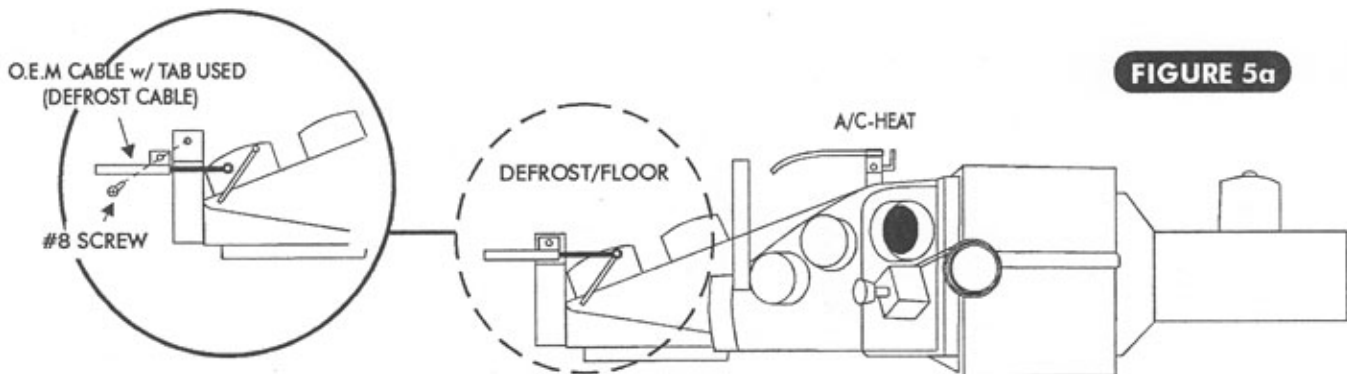


FIGURE 5a

- 3. ATTACH THE A/C-HEAT O.E.M CONTROL CABLE TO THE #2 HOLE IN CABLE BRACKET USING A # 8 SCREW.

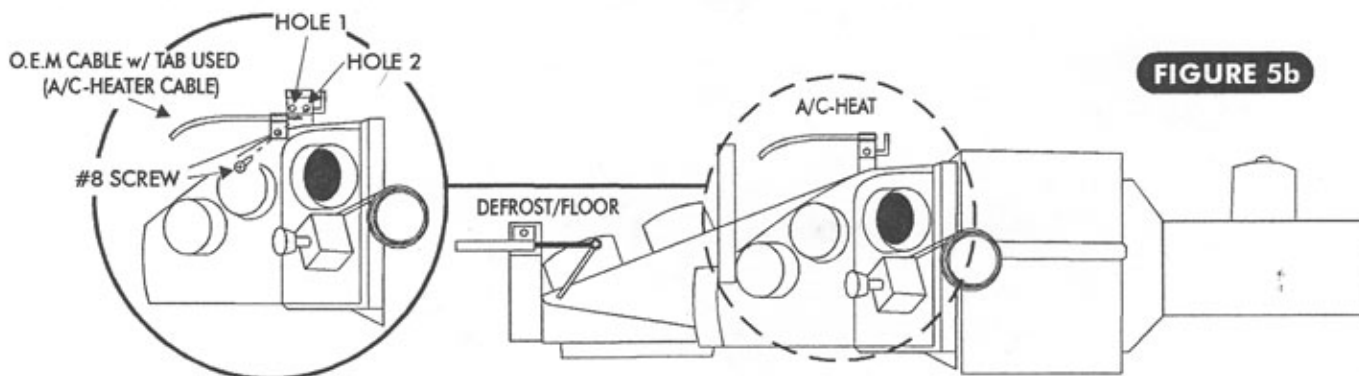
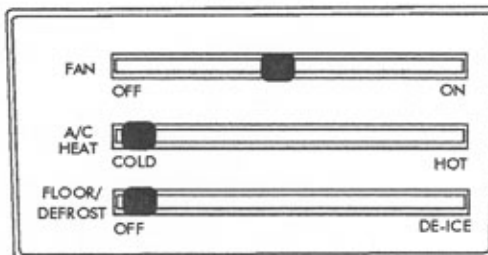
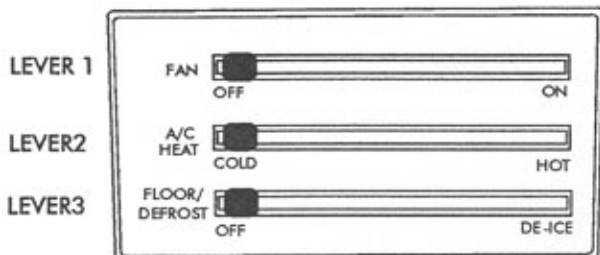


FIGURE 5b

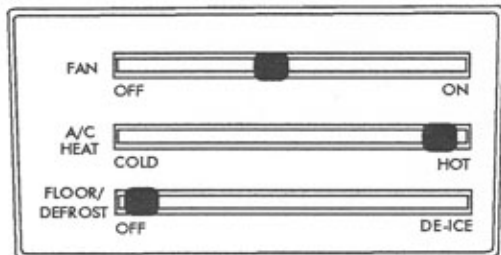
1968 NOVA CONTROLS

NOTE: '68 A/C-HEAT CONTROLS ARE LOCATED ON THE LEFT SIDE OF THE STEERING WHEEL.

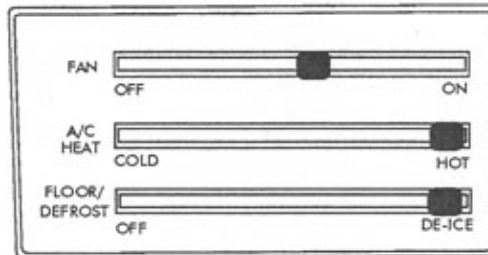
A/C ON



FLOOR HEAT



HEAT w/ DEFROST

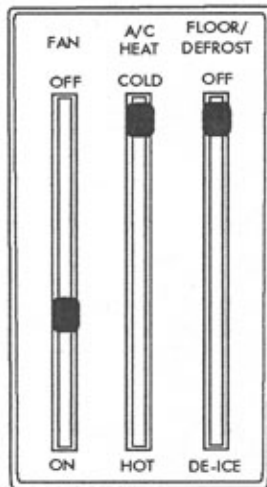
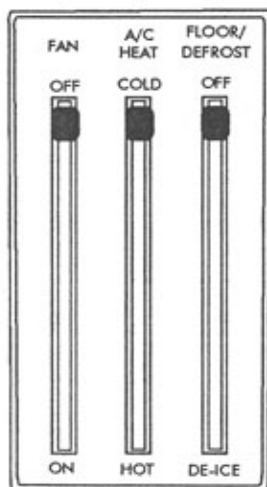


1969-'70 NOVA CONTROLS

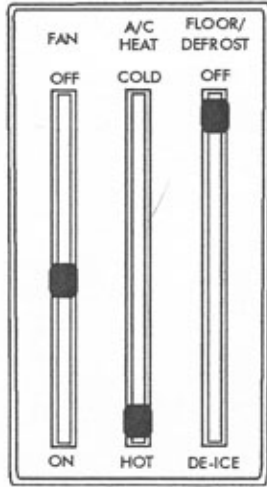
NOTE: '69-'70 A/C-HEAT CONTROLS ARE LOCATED ON THE RIGHT SIDE OF THE STEERING WHEEL.

LEVER 1
LEVER 2
LEVER 3

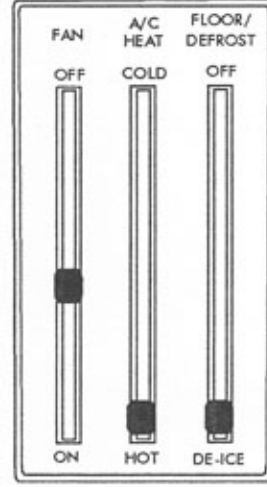
A/C ON



FLOOR HEAT

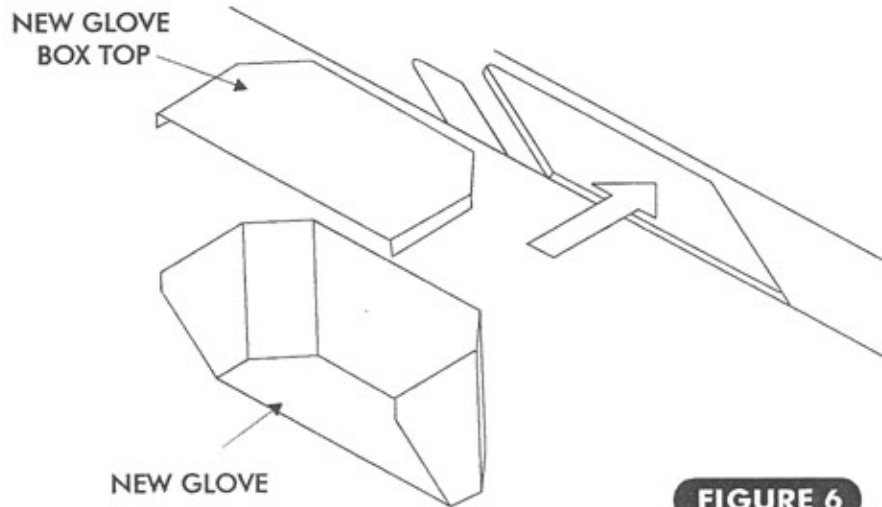


HEAT w/ DEFROST



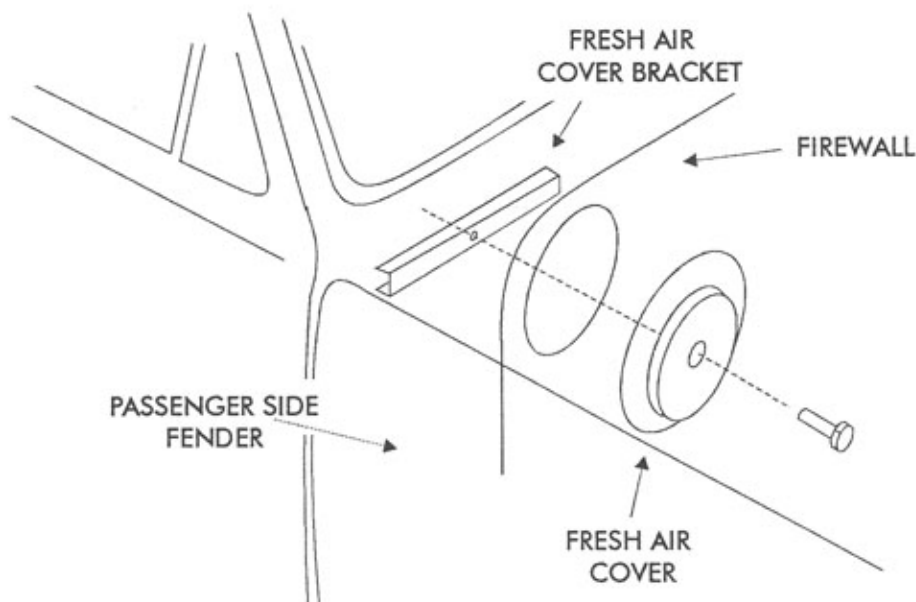
GLOVE BOX INSTALLATION

- 1. PLACE THE NEW GLOVE BOX TOP IN DASH FIRST. **SEE FIGURE 4 BELOW**
- 2. PLACE THE NEW GLOVE BOX IN THE DASH AND ATTACH THE GLOVE BOX TOP TO THE GLOVE BOX. **SEE FIGURE 4 BELOW.**
- 3. ATTACH ASSEMBLED GLOVE BOX TO O.E.M GLOVE BOX MOUNTING HOLES IN DASH.


FIGURE 6

FRESH AIR COVER INSTALLATION

- 1. ATTACH THE FRESH AIR COVER TO THE O.E.M BLOWER HOLE IN THE FIREWALL. **SEE FIGURE 7 BELOW (VIEW FROM UNDER PASSENGER SIDE FENDER)**

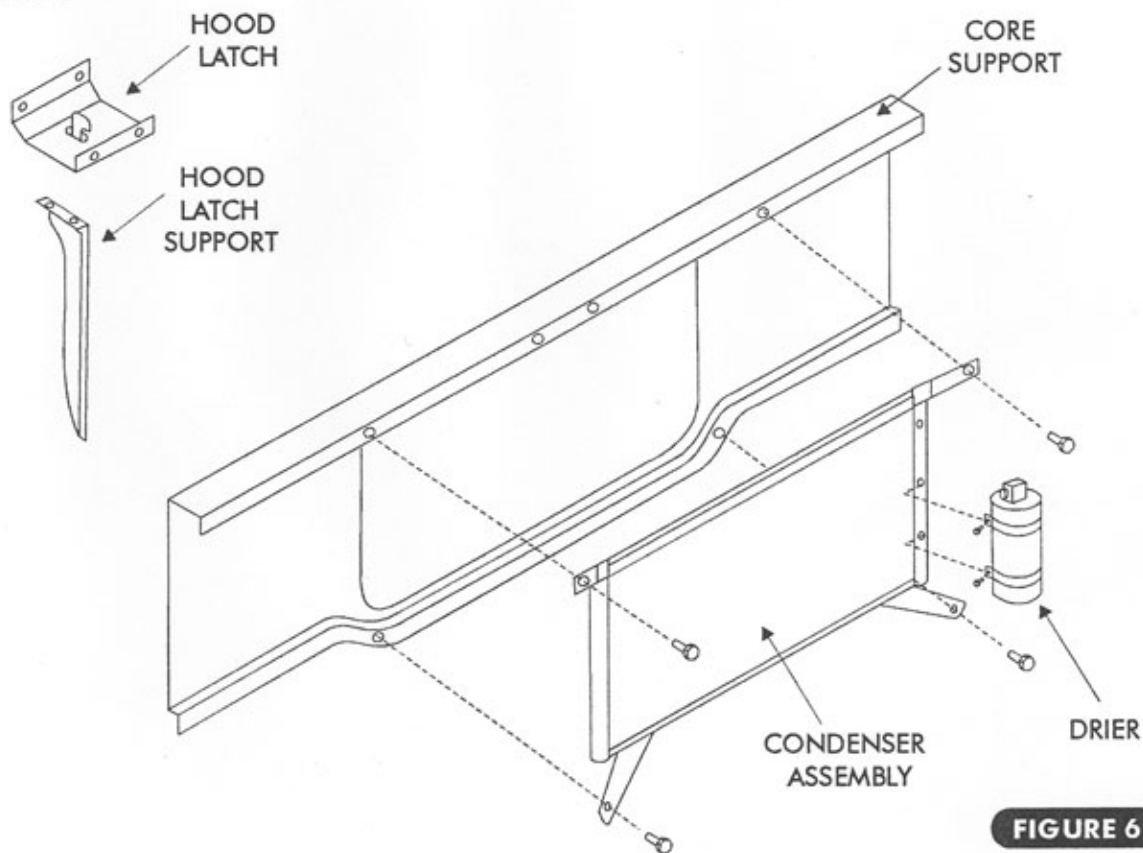

FIGURE 6

COMPRESSOR INSTALLATION

- 1. REFER TO A SEPARATE INSTRUCTIONS INCLUDED WITH THE COMPRESSOR BRACKET FOR COMPRESSOR INSTALLATION.
- 2. INSTALL COMPRESSOR AND BRACKET USING HARDWARE INCLUDED WITH BRACKET.

CONDENSER INSTALLATION

- 1. REMOVE HOOD LATCH AND THE HOOD LATCH SUPPORT.
- 2. INSERT THE CONDENSER INTO THE OPENING BETWEEN THE RADIATOR AND THE GRILLE. ATTACH THE CONDENSER TO THE O.E.M HOLES IN THE RADIATOR SUPPORT. **SEE FIGURE 6 BELOW & FIGURE 7 PAGE 9**


FIGURE 6

DRIER INSTALLATION

- 1. AFTER THE CONDENSER IS MOUNTED, ATTACH THE DRIER (**SEE FIGURE 6 ABOVE**) BE SURE THE DRIER CLEARS THE BACKSIDE OF THE GRILLE.
- 2. LUBRICATE AND ATTACH THE #6 SHORT A/C HOSE TO THE "IN" SIDE OF THE DRIER AND CONDENSER. **SEE FIGURE 7 PAGE 9**

DRIER INSTALLATION CONT.

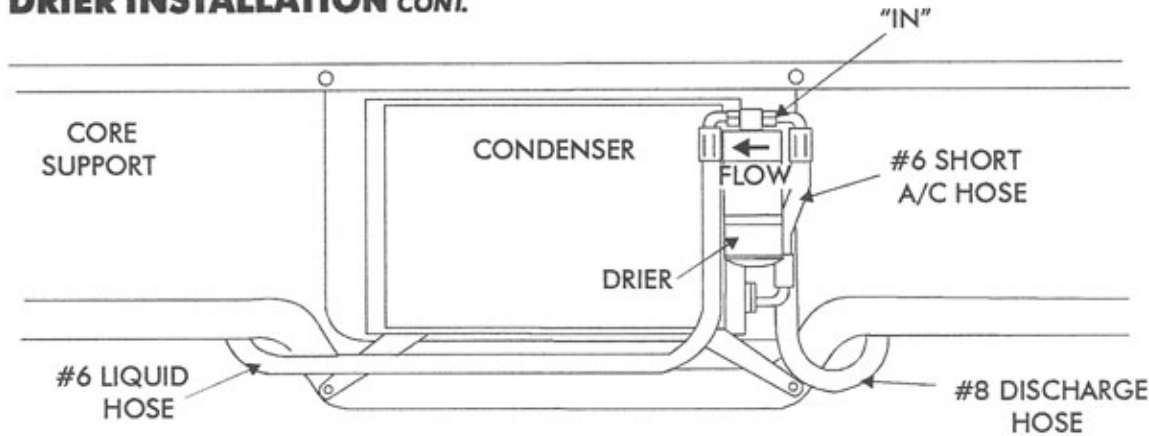
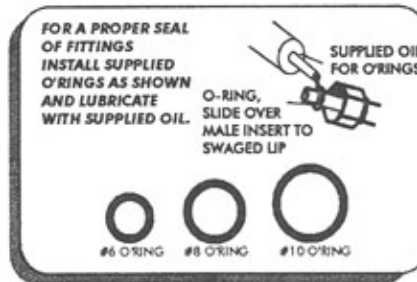


FIGURE 7



REFRIGERATION HOSE INSTALLATION

- 1. LUBRICATE AND ATTACH THE # 10 SUCTION HOSE TO THE COMPRESSOR (1/2" I.D. HOSE 60" LONG, 90° FEMALE O-RING FITTING ON THE EVAPORATOR END AND A 135° FEMALE FLARE FITTING ON THE COMPRESSOR END.) **SEE FIGURE 8 BELOW**
- 2. LUBRICATE AND ATTACH THE # 8 DISCHARGE HOSE TO THE COMPRESSOR (13/32" I.D. HOSE 48" LONG, 90° MALE O-RING FITTING ON THE CONDENSER END AND A 135° FEMALE FLARE FITTING ON THE COMPRESSOR END.) **SEE FIGURE 8 BELOW**
- 3. LUBRICATE AND ATTACH THE # 6 LIQUID HOSE FROM THE EVAPORATOR TO THE DRIER (5/16" I.D. HOSE 85" LONG, 90° FEMALE O-RING FITTING ON BOTH ENDS.) **SEE FIGURE 8 BELOW**
- 4. ATTACH BINARY SAFETY SWITCH (w/ HOSE KIT) TO SERVICE PORT ON # 6 LIQUID HOSE. **SEE FIGURE 8 BELOW**

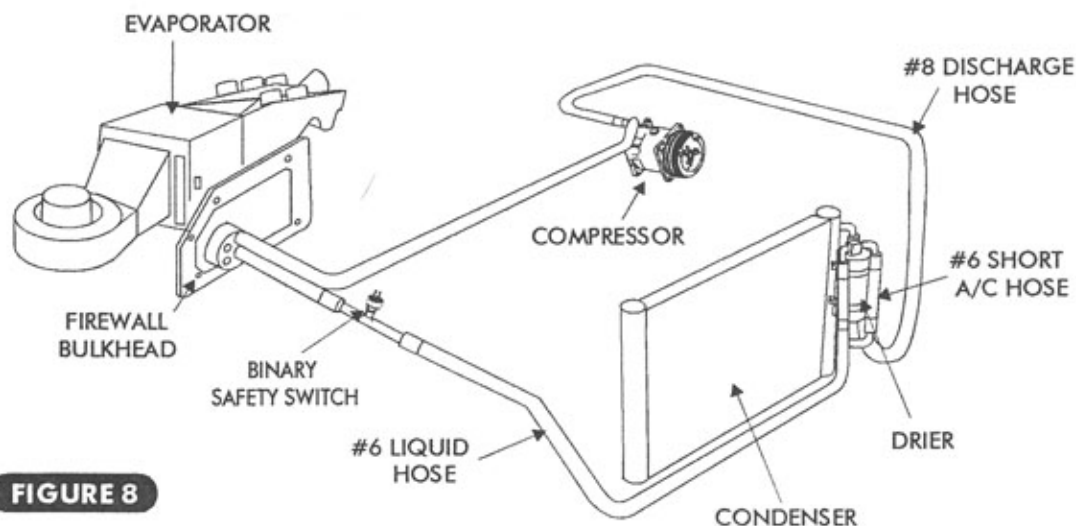


FIGURE 8

HEATER HOSE INSTALLATION

- 1. INSTALL HEATER HOSES AND HEATER VALVE. SEE FIGURE 9 BELOW

NOTE: THE HEATER HOSE FOR THIS APPLICATION NEED TO BE 5/8" x 4' EACH HEATER HOSE NOT SUPPLIED

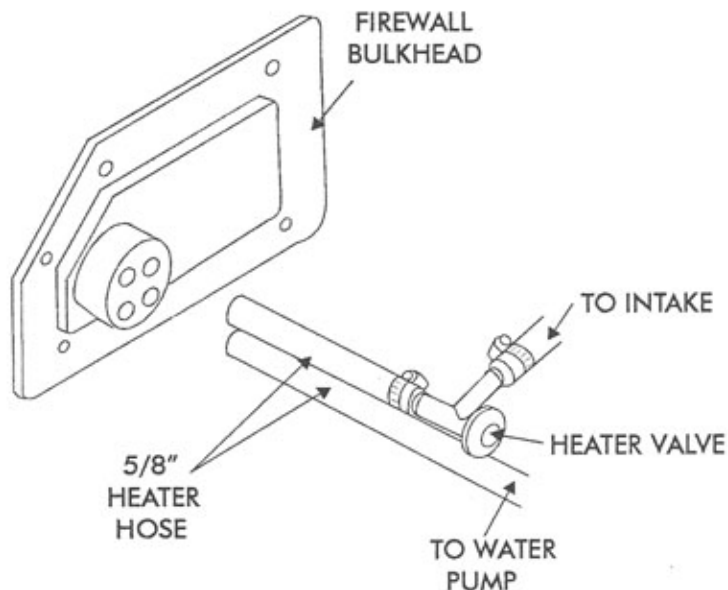
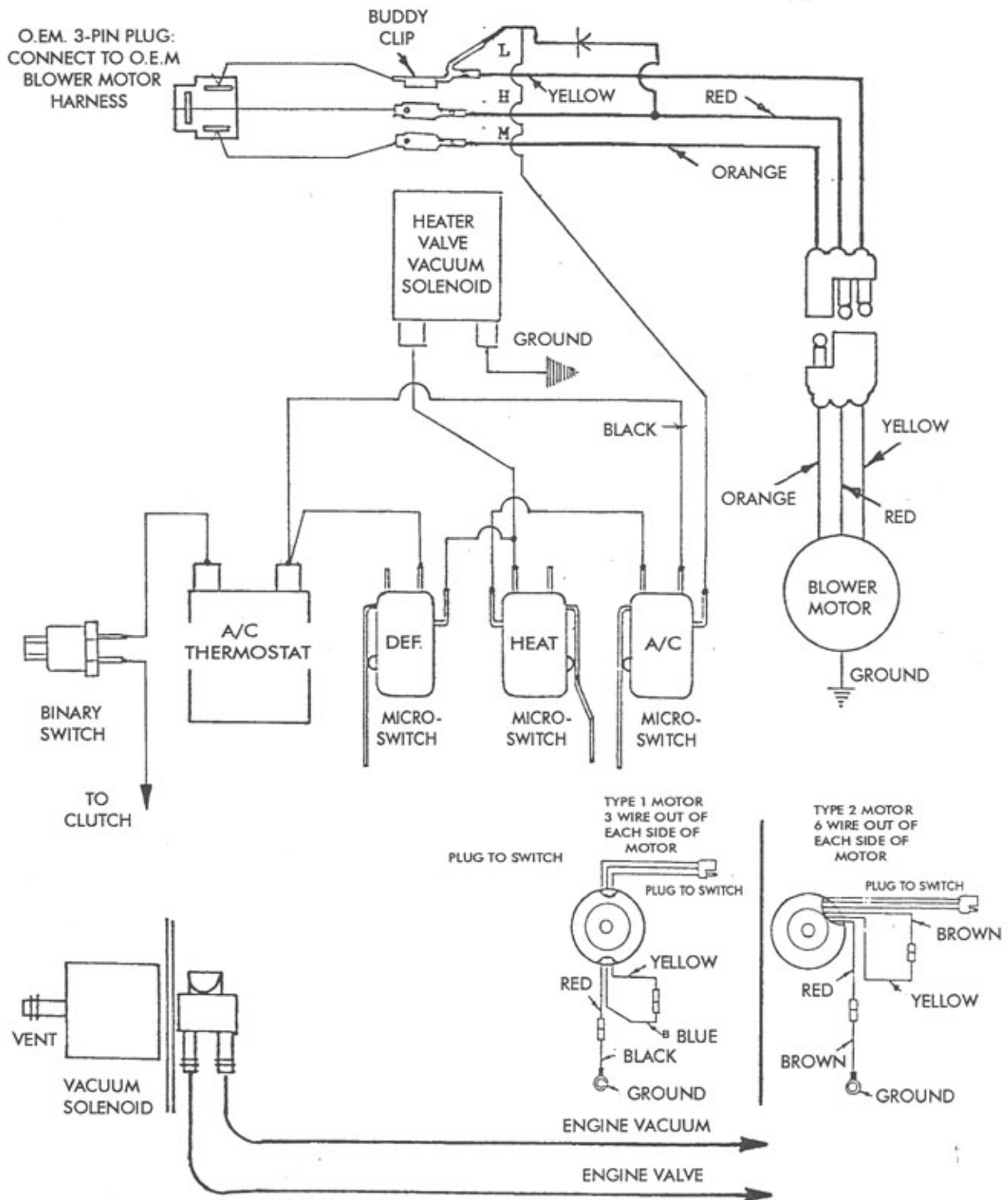
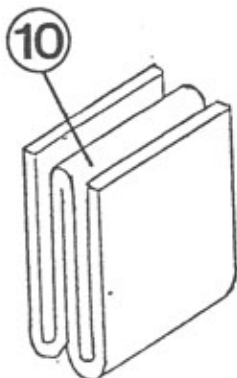
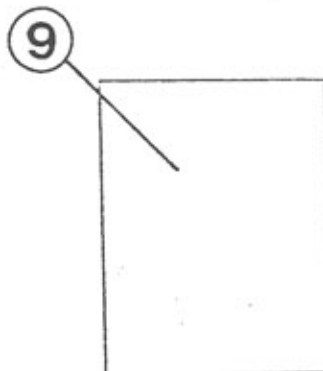
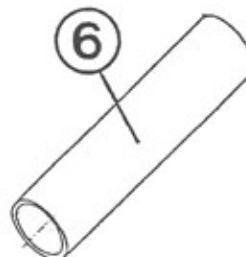
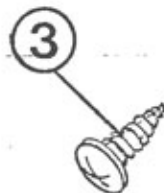
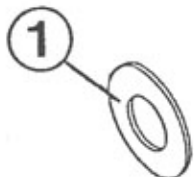


FIGURE 9

YOUR SYSTEM IS READY TO EVACUATE AND CHARGE. THIS SHOULD BE DONE ONLY BY A CERTIFIED A/C TECHNICIAN. AFTER YOUR SYSTEM IS OPERATIONAL, RE-INSTALL ANY OTHER PREVIOUSLY REMOVED ITEMS.

'68-'70 NOVA WIRING DIAGRAM



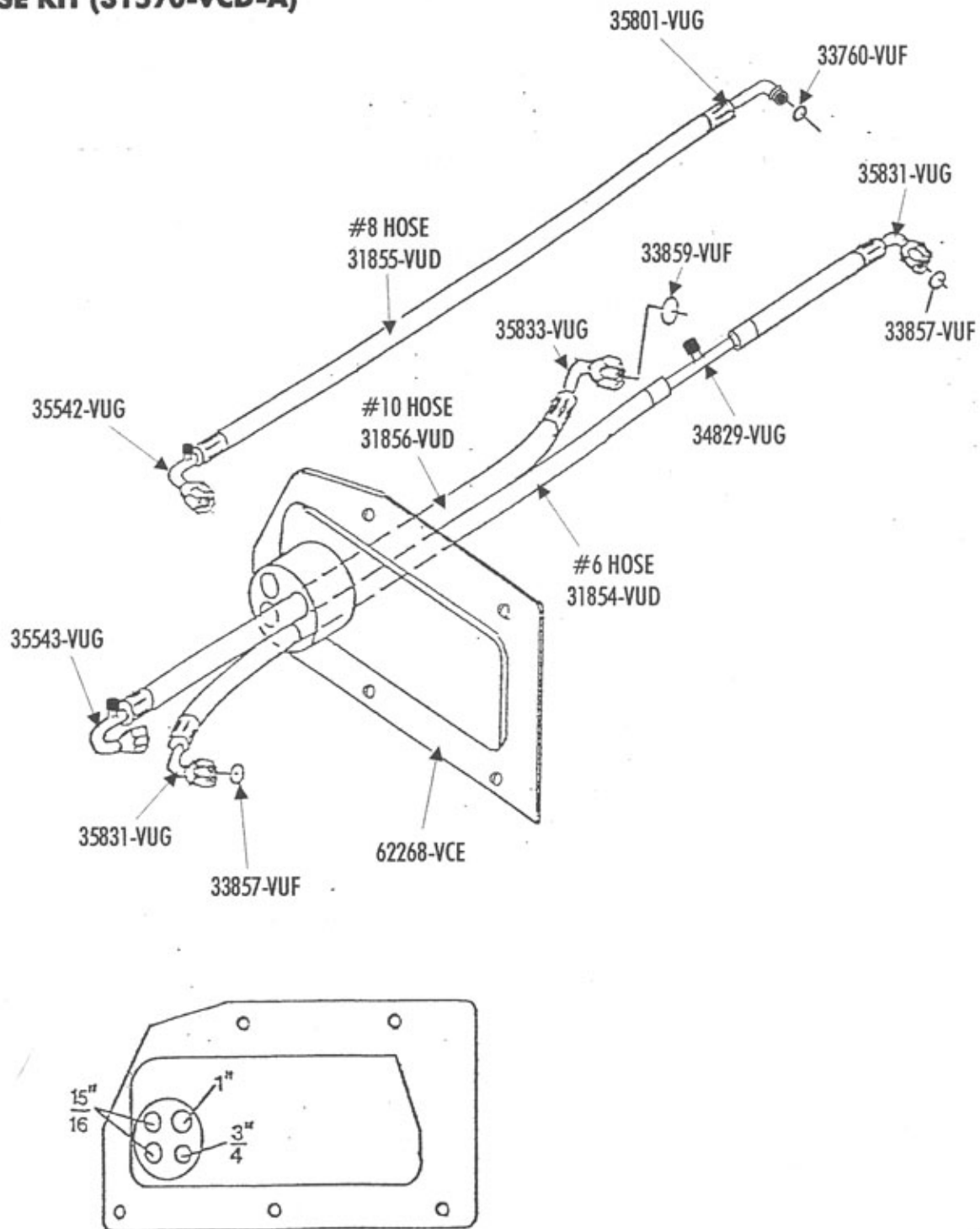


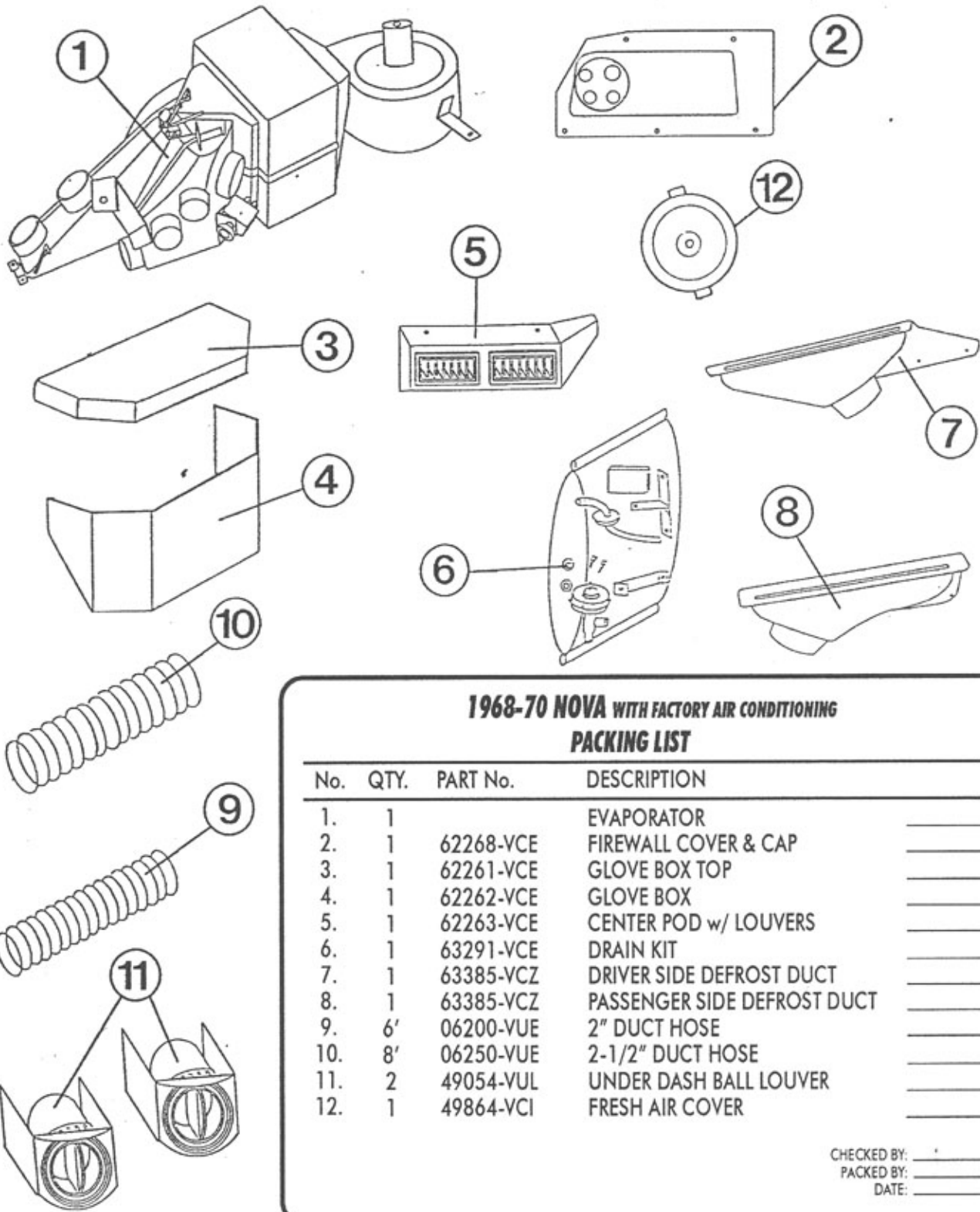
**1968-70 NOVA WITH FACTORY AIR CONDITIONING
EVAPORATOR DRAIN KIT PACKING LIST (63291-VCE)**

No.	QTY.	PART No.	DESCRIPTION
1.	5	18125-VUB	1/4" x3/4" FLATWASHER
2.	2	18152-VUB	1/4" NUT w/STAR WASHER
3.	10	18287-VUB	#8 PANHEAD SCREW
4.	2	49267-VCB	1/4" x 1/2" BOLT
5.	5	18290-VUB	1/4" x 1" BOLT
6.	8"	31050-VUD	1/2" DRAIN HOSE
7.	1	46103-VUH	HEATER CONTROL VALVE
8.	1	33136-VUI	RUBBER GROMMET
9.	1	21110-VUM	POLY BAG (18" x 24")
10.	20"	49003-VUP	PRESS TAPE

CHECKED BY: _____
 PACKED BY: _____
 DATE: _____

HOSE KIT (31570-VCD-A)

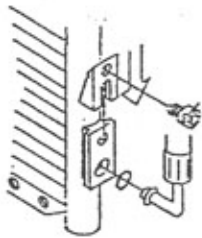
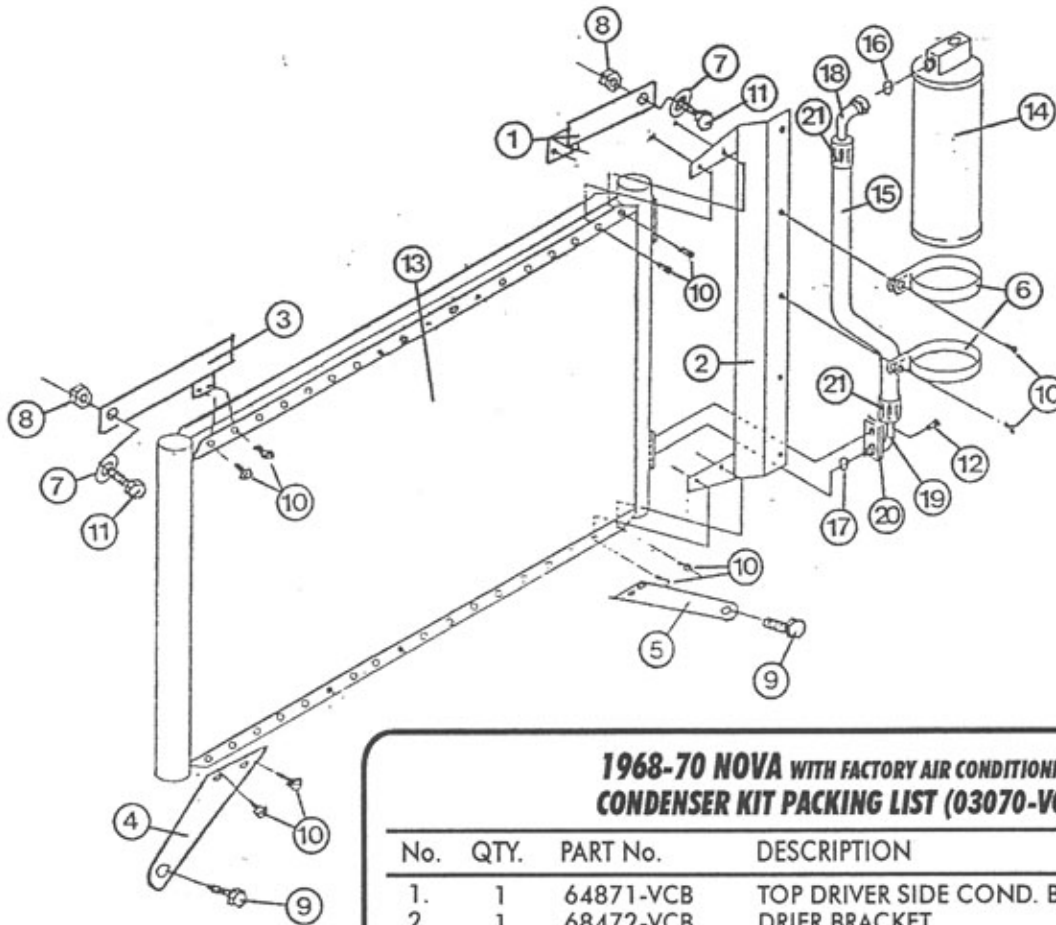




**1968-70 NOVA WITH FACTORY AIR CONDITIONING
PACKING LIST**

No.	QTY.	PART No.	DESCRIPTION
1.	1		EVAPORATOR
2.	1	62268-VCE	FIREWALL COVER & CAP
3.	1	62261-VCE	GLOVE BOX TOP
4.	1	62262-VCE	GLOVE BOX
5.	1	62263-VCE	CENTER POD w/ LOUVERS
6.	1	63291-VCE	DRAIN KIT
7.	1	63385-VCZ	DRIVER SIDE DEFROST DUCT
8.	1	63385-VCZ	PASSENGER SIDE DEFROST DUCT
9.	6'	06200-VUE	2" DUCT HOSE
10.	8'	06250-VUE	2-1/2" DUCT HOSE
11.	2	49054-VUL	UNDER DASH BALL LOUVER
12.	1	49864-VCI	FRESH AIR COVER

CHECKED BY: _____
 PACKED BY: _____
 DATE: _____



1968-70 NOVA WITH FACTORY AIR CONDITIONING CONDENSER KIT PACKING LIST (03070-VCC)

No.	QTY.	PART No.	DESCRIPTION
1.	1	64871-VCB	TOP DRIVER SIDE COND. BRKT.
2.	1	68472-VCB	DRIER BRACKET
3.	1	64873-VCB	TOP PASSENGER SIDE COND. BRKT.
4.	1	64874-VCB	BOTTOM PASS. SIDE COND. BRKT.
5.	1	64875-VCB	BOTTOM DRIVER SIDE COND. BRKT.
6.	2	07113-VUB	DRIER CAP
7.	2	18125-VUB	1/4" x 3/4" FLAT WASHER
8.	2	18152-VUB	1/4" NUT w/ STAR WASHER
9.	2	18236-VUB	3/8" SHEETMETAL SCREW
10.	10	18247-VUB	#10 x 1/2" SHEETMETAL SCREW
11.	2	18290-VUB	1/4" x 1" BOLT
12.	1	18510-VUB	8mm x 12mm HEX HEAD BOLT
13.	1	03245-VUC	CONDENSER
14.	1	07330-VUC	DRIER
15.	8"	31854-VUD	#6 A/C HOSE
16.	1	33857-VUF	#6 O-RING
17.	1	33957-VUF	#8 CAPTURE O-RING
18.	1	34431-VUG	#6 90° FEMALE O-RING FITTING
19.	1	35400-VUG	#6 90° MALE O-RING FITTING
20.	1	35402-VUG	FITTING CLAMP LOCK
21.	2	35453-VUG	#6 FERRULES

CHECKED BY: _____
 PACKED BY: _____
 DATE: _____