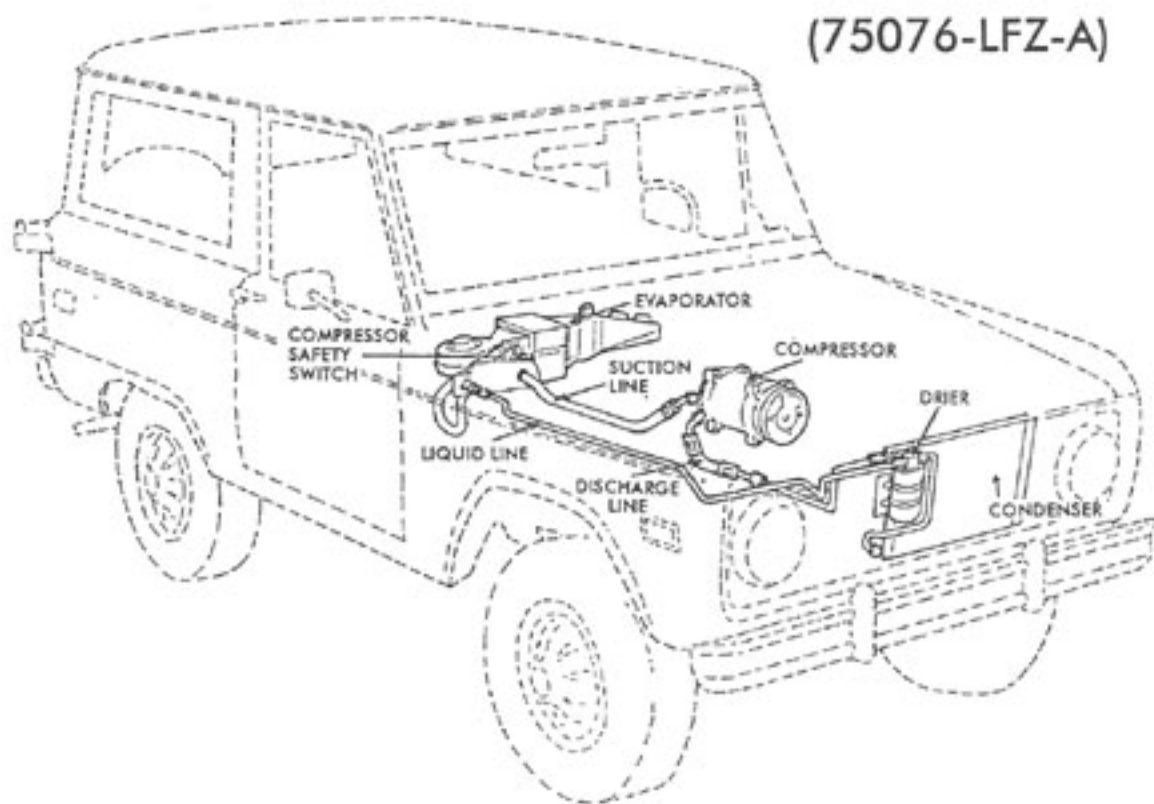


VANTAGE
AIR

Installation Instructions for
**1966-77 FORD
BRONCO** V-8 ONLY

(75076-LFZ-A)



1966-77 FORD BRONCO

— V-8 —

IMPORTANT NOTICE ~ Please Read

For MAXIMUM system performance
Vintage Air recommends the following:

- 1966-77 HD BRONCO RADIATOR - 70066-LFR
- 1966-77 BRONCO V/8 FAN SHROUD - 32067-LFF

SERVICE INFO:

EVACUATE THE SYSTEM FOR 30-45 MINUTES WITH SYSTEM COMPONENTS (DRIER, COMPRESSOR, EVAPORATOR, CONDENSER) AT A TEMPERATURE OF AT LEAST 85°F.

ON A COOL DAY THE COMPONENTS CAN BE HEATED WITH A HEAT GUN OR BY RUNNING THE ENGINE WITH THE HEATER ON BEFORE EVACUATING.

LEAK CHECK AND CHARGE TO SPECS.

REFRIGERANT CAPACITIES

134a SYSTEM

CHARGE WITH 1.8 LBS. OF REFRIGERANT

R-12 SYSTEM

CHARGE WITH 2.0 LBS. OF REFRIGERANT

LUBRICANT CAPACITIES

NEW COMPRESSOR - NO ADDITIONAL OIL NEEDED
USED COMPRESSOR - CONSULT VINTAGE AIR

INSTALLATION INSTRUCTIONS FOR 1966-77 FORD BRONCO V8

NOTE:

BEFORE STARTING THE AIR CONDITIONER INSTALLATION, CHECK FOR PROPER OPERATION OF ALL COMPONENTS (RADIO, LIGHTS, WIPERS, ETC.). STUDY THE INSTRUCTIONS, ILLUSTRATIONS AND DIAGRAMS.

REMOVE

ENGINE COMPARTMENT

- DISCONNECT AND REMOVE BATTERY (RETAIN).
- DRAIN RADIATOR AND REMOVE (RETAIN).
- REMOVE FAN BLADE, SHROUD IF EQUIPPED, AND RADIATOR HOSES (RETAIN).

PASSENGER COMPARTMENT

- GLOVE BOX (RETAIN SCREWS, DISCARD BOX).
- GLOVE BOX DOOR (RETAIN).
- OEM CABLE CONTROLS AND KNOBS (DISCARD).
- RADIO (RETAIN).
- HEATER DUCT ASSEMBLY UNDERDASH (DISCARD).

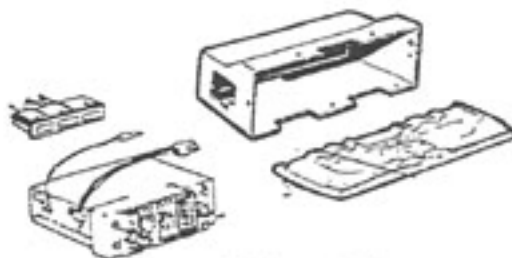


FIGURE 1



ASSEMBLE

ENGINE COMPARTMENT

COMPRESSOR AND BRACKET

- REFER TO SEPERATE INSTRUCTIONS INCLUDED WITH COMPRESSOR BRACKET TO INSTALL A/C COMPRESSOR TO ENGINE.
- INSTALL COMPRESSOR AND BRACKET USING HARDWARE INCLUDED WITH BRACKET.
- ORIENT COMPRESSOR ON MOUNT SO THAT THE OUTLET FITTINGS POINT TOWARD THE PASSENGER SIDE FENDER. TABS "A,E" & "B,F" ARE UP. REFER TO SEPERATE BRACKET INSTALLATION INSTRUCTIONS.

CONDENSER

- IT IS NECESSARY TO TRIM THE CORNERS OF THE RADIATOR OPENING TO ALLOW CONDENSER CLEARANCE. APPROXIMATELY 12-3/8" HIGH BY 21-1/2" LONG OPENING REQUIRED.
- REMOVE THE INDICATED MATERIAL AT ALL FOUR CORNERS OF THE RADIATOR OPENING. SEE FIGURE 2. FOLLOW BODY LINE AND TRIM FLUSH TO THE VERTICAL REINFORCEMENT.

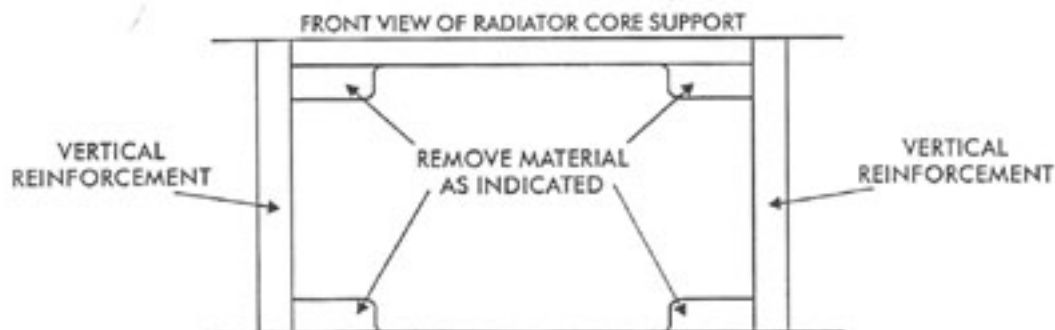


FIGURE 2

- INSTALL THE CONDENSER ASSEMBLY INTO OPENING FROM RADIATOR (BACK) SIDE. CENTER CONDENSER IN OPENING AND TEMPORARILY CLAMP IN PLACE. CHECK FOR CLEARANCE AT THE POINTS WHERE THE CORE SUPPORT WAS TRIMMED. SEE FIGURE 3.
- LOCATE ON THE FRONT SIDE OF THE CORE SUPPORT IN THE VERTICAL REINFORCEMENT, TWO (2) SMALL INDENTATIONS APPROXIMATELY 1/4" IN DIAMETER. SEE FIGURE 3. DRILL FOUR (4) 5/16" DIAMETER HOLES AT THESE LOCATIONS AND ATTACH CONDENSER BRACKETS TO THE REAR OF THE CORE SUPPORT WITH FOUR (4) 1/4" x 20 x 1/2" BOLTS, NUTS AND WASHERS PROVIDED.

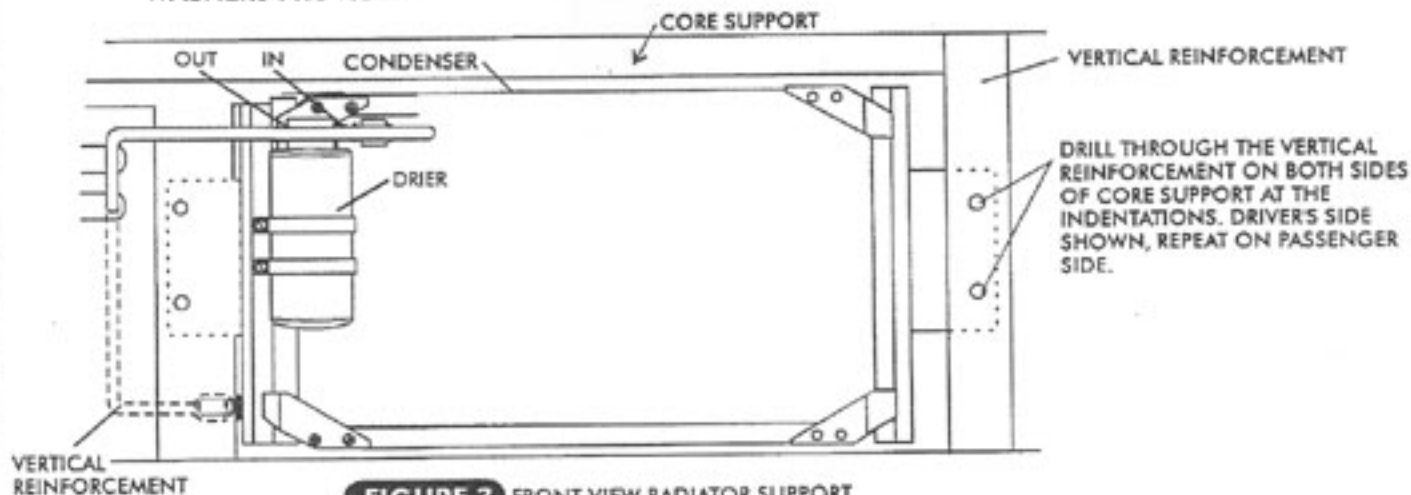


FIGURE 3 FRONT VIEW RADIATOR SUPPORT

IMPORTANT NOTE:

ENTIRE CONDENSER MOUNTS **BEHIND** THE CORE SUPPORT AND THE DRIER GOES THROUGH OPENING TO THE FRONT.

- LOCATE HOLES FOR AIR BOX (LOCATED ON PASSENGER SIDE OF COWL) WITH TEMPLATE PROVIDED (FIGURE 5) ON PAGE 3. DRILL FOUR (4) 1-1/4" DIAMETER HOLES IN THE AIR BOX. SEE FIGURE 4. INSTALL RUBBER GROMMETS PROVIDED.

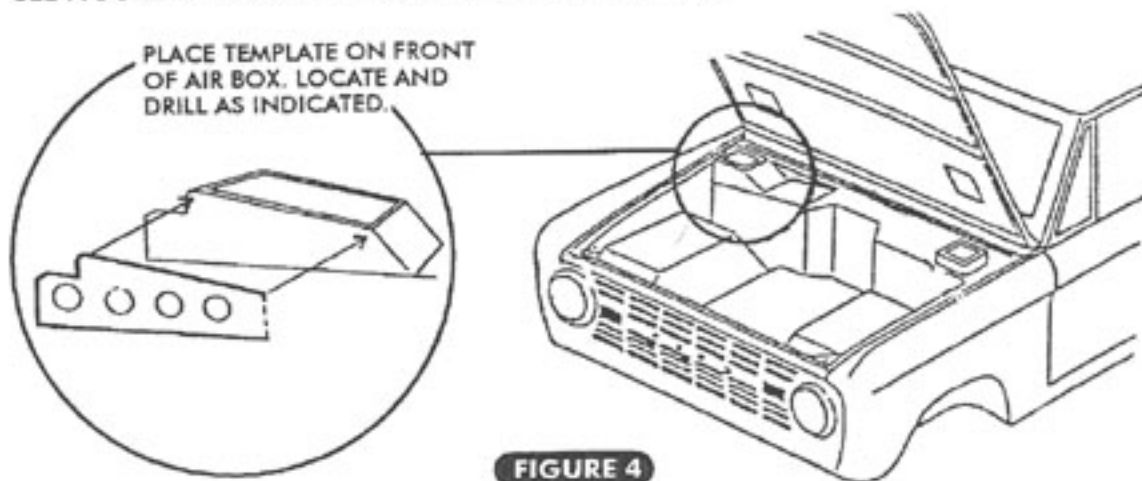
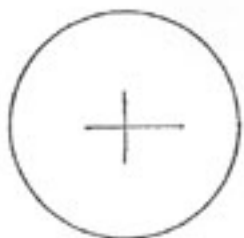


FIGURE 4

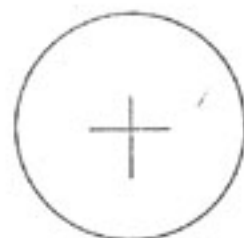
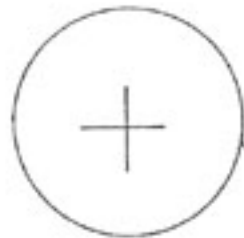
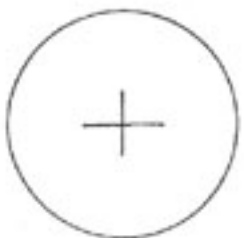


FIGURE 5

TEMPLATE
FOR
AIR BOX HOLES



CUT OUT TEMPLATE
AND ATTACH TO AIR BOX
TO LOCATE HOLES.



← PASSENGER FENDER

FIT INTO CORNER AT PASSENGER SIDE FENDER PANEL

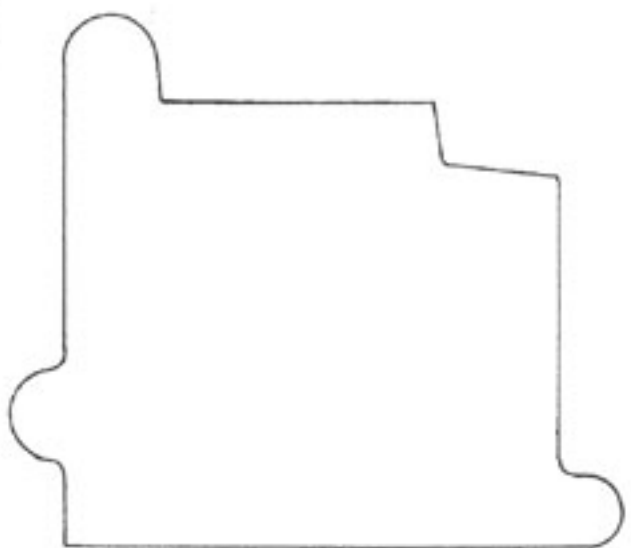


FIGURE 6

TEMPLATE
FOR
GLOVE BOX CUT OUT
(1972-77 ONLY)

SEE PAGE 12 INSTRUCTIONS

ASSEMBLY INTERIOR

- LOCATE THE LARGE HOLE IN THE PASSENGER SIDE KICK PANEL. REACH INTO ENCLOSED AREA AND ENSURE DRAIN IS CLEAR. TRIAL FIT KICK PANEL COVER (SEE FIGURE 7) AND SECURE AFTER A/C HOSES ARE ALIGNED (SEE NEXT TWO STEPS).

ROUTE HOSES THROUGH KICK PANEL AS SHOWN

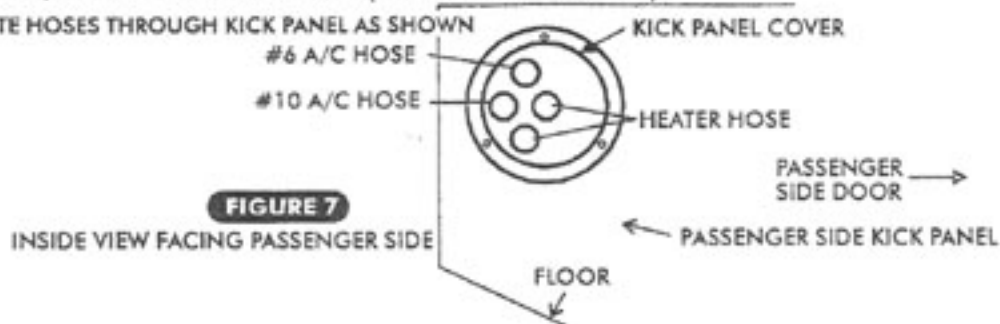


FIGURE 7

INSIDE VIEW FACING PASSENGER SIDE

- IT IS NECESSARY TO INSTALL AND ALIGN THE A/C AND HEATER HOSES BEFORE INSTALLING THE EVAPORATOR. SEE HOSE KIT INSTALLATION SECTION (PAGE 9) FOR ADDITIONAL INFORMATION. SEE FIGURES 7, 8 (PG. 4) & FIGURE 9 (PG. 5).
- LOCATE O'RING PACKAGE. THERE IS A SPECIFIC SIZE AND THICKNESS O'RING FOR EACH CONNECTION (SEE FIGURE 16 ON PG.7). THE SMALL WHITE TUBE IS A SPECIFIC OIL FOR O'RINGS AND THREADS. O'RINGS SHOULD NOT BE REUSED ONCE A FITTING IS TIGHTENED.

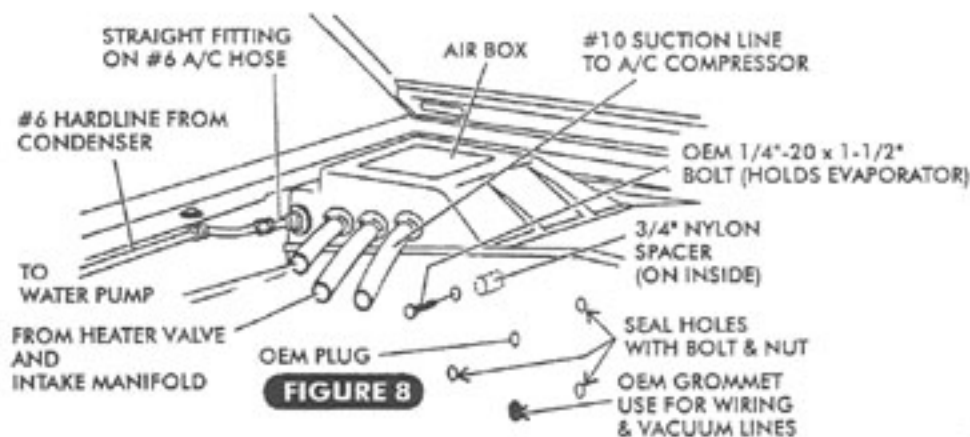


FIGURE 8

- LOCATE THE (SMALL) #6 HOSE. LUBRICATE 90 DEGREE FITTING AND O'RING (SEE FIGURE 16 ON PG. 7) AND CONNECT TO THE LIQUID LINE ADAPTER FITTING (WITH COMPRESSOR SAFETY SWITCH) FROM THE EXPANSION VALVE ON THE EVAPORATOR (SEE FIGURE 9). TIGHTEN FINGER TIGHT. ROUTE THE STRAIGHT END THROUGH THE PROPER HOLE IN KICK PANEL COVER (SEE FIGURE 7).
- LIFT THE EVAPORATOR INTO PLACE (SEE FIGURE 15 ON PG.7). VERIFY THAT THE #6 HOSE IS CENTERED THROUGH THE TOP HOLE IN THE KICK PANEL COVER (SEE FIGURE 7). LOWER THE EVAPORATOR AND TIGHTEN THE PROPERLY ALIGNED 90 DEGREE FITTING.
- LOCATE THE (LARGE) #10 HOSE. ROUTE END WITH STRAIGHT FITTING THROUGH THE PROPER HOLE IN THE AIR BOX COVER (SEE FIGURE 8) THEN THROUGH THE PROPER HOLE IN THE KICK PANEL COVER (SEE FIGURE 7). LUBRICATE FITTING AND O'RING (SEE FIGURE 16 ON PG.7) AND ATTACH TO THE EVAPORATOR COIL (SEE FIGURE 9, PG. 5).

- WRAP THE FITTINGS AND EXPANSION VALVE WITH PRESS TAPE PROVIDED PRIOR TO MOUNTING EVAPORATOR INTO PLACE. SEE FIGURE 9.

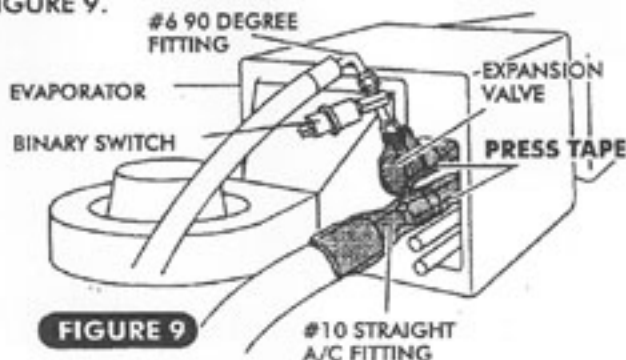


FIGURE 9

HEATER HOSES

- ROUTE THE 5/8" HEATER HOSES (NOT INCLUDED) FROM THE PROPER HOLES IN THE AIR BOX THROUGH THE CORRESPONDING HOLES IN THE KICK PANEL COVER AND ATTACH TO THE HEATER COIL.
- INSTALL HEATER CONTROL VALVE IN PRESSURE LINE FROM MANIFOLD. SEE FIGURE 18 ON PG. 9.
- ROUTE VACUUM LINE, HOT WIRE FROM CIRCUIT BREAKER AND COMPRESSOR CLUTCH WIRE THROUGH EXISTING HOLE IN THE FIREWALL ABOUT 10" BELOW THE #10 SUCTION LINE. SEE FIGURE 8 (PG. 4).

DEFROST DUCT ADAPTER

- INSTALL DEFROST DUCT HOSE ADAPTERS TO EXISTING FACTORY DEFROSTER OUTLETS USING TWO (2) "S" CLIPS EACH. SEE FIGURE 10.

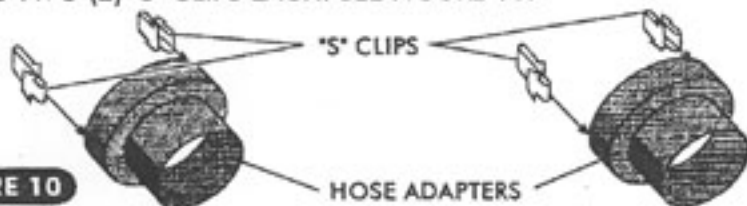


FIGURE 10

DEFROST HOSE INSTALLATION

- CONNECT THE 2" x 12" DEFROST DUCTS TO THE PREVIOUSLY INSTALLED DEFROST DUCT ADAPTERS. SEE DUCT HOSE INSTALLATION SECTION AND FIGURE 15 (PG.7) FOR MORE INFORMATION.

VENT INSTALLATION

- INSTALL CENTER AND SIDE VENTS (AT LOCATIONS INDICATED) WITH TWO (2) #8 SHEET METAL SCREWS (EACH) PROVIDED SEE FIGURE 11. DRILL 7/64" HOLES AS NECESSARY.

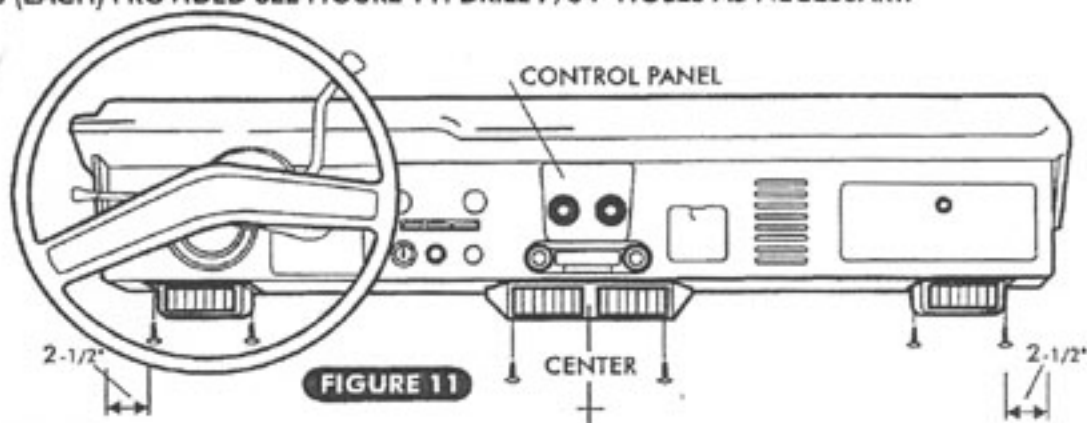
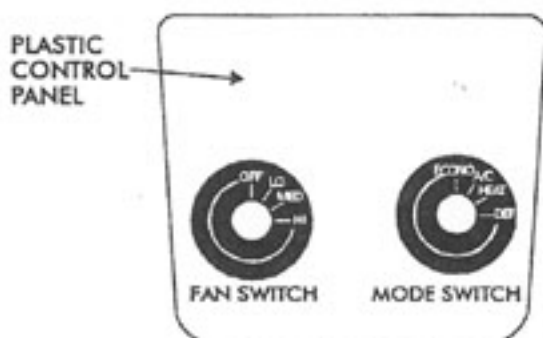
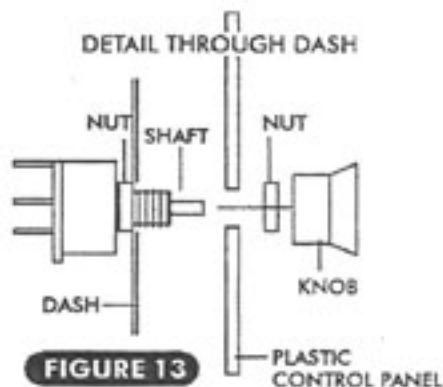


FIGURE 11

CONTROL PANEL INSTALLATION

- MOUNT THE CONTROL PANEL TO THE CENTER OF THE DASH AND OVER THE OEM HOLES WHERE THE STOCK CONTROLS HAVE BEEN REMOVED (SEE FIGURE 11-PG. 5). ATTACH THE PANEL BY INSERTING THE SWITCH SHAFTS THROUGH THE DASH AND NEW PANEL FROM THE REAR. SECURE THE SHAFTS WITH NUTS AGAINST THE PLASTIC PANEL & INSTALL KNOBS. SEE FIGURES 12 & 13.

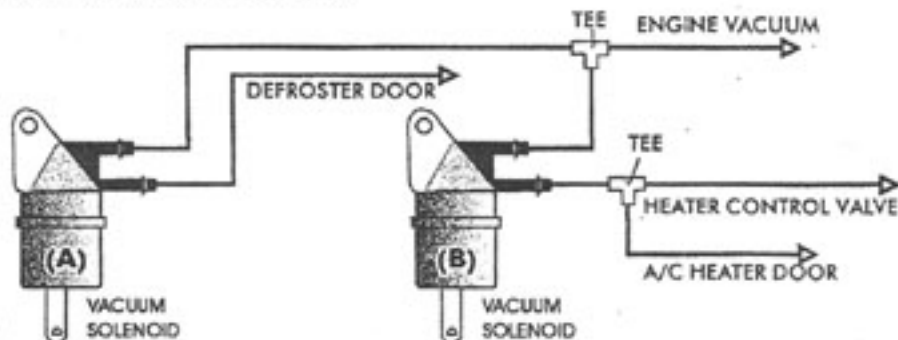

FIGURE 12

FIGURE 13

WIRING

- CONTROL PANEL IS PRE-WIRED FOR EASE OF INSTALLATION. CONNECT THE WIRING AS SHOWN ON PAGE 10 AND CAREFULLY VERIFY PROPER OPERATION.

VACUUM HOSE

- CONNECT THE VACUUM LINES AS SHOWN IN FIGURE 14, ROUTE THROUGH FIREWALL (FIGURE 8) AND CAREFULLY VERIFY PROPER OPERATION.


FIGURE 14

EVAPORATOR INSTALLATION

- RUN BEAD OF SILICONE AROUND PERIMETER OF KICK PANEL COVER. SECURE WITH 3 (EACH) OEM BOLTS.
- LIFT EVAPORATOR INTO PLACE (SEE FIGURE 15, PG.7) AND START 1/4" x 20" x 1-1/2" BOLT FROM FIREWALL SIDE THROUGH EXISTING HOLE (SEE FIGURE 8, PG. 4). INSTALL 3/4" SPACER ONTO BOLT ON INTERIOR SIDE OF FIREWALL AND THEN INTO JACKNUT LOCATED ON EVAPORATOR CASE. THIS WILL POSITION THE UNIT INTO PLACE AND ALIGN THE REMAINING ATTACHMENT POINTS.
- ATTACH THE 2" x 12" DEFROST HOSES TO THE EVAPORATOR (SEE FIGURE 15, PG.7) WHILE IT IS LOOSE.
- ATTACH THE BLOWER MOUNTING BRACKET TO THE UNDER SIDE OF THE DASH. THE PROPER LOCATION IS 3/4" IN FROM OEM BOLT AT THE OUTSIDE EDGE OF THE DASH. DRILL A 9/32" HOLE AND USE THE SUPPLIED 1/4 x 1/2" BOLT.
- THE DRIVER'S SIDE MOUNTING BRACKET ATTACHES TO THE TRANSMISSION HOUSING TO THE RIGHT OF THE GAS PEDAL. REMOVE THE OEM INSULATION AND ATTACH WITH THE OEM BOLT THROUGH EXISTING HOLE.

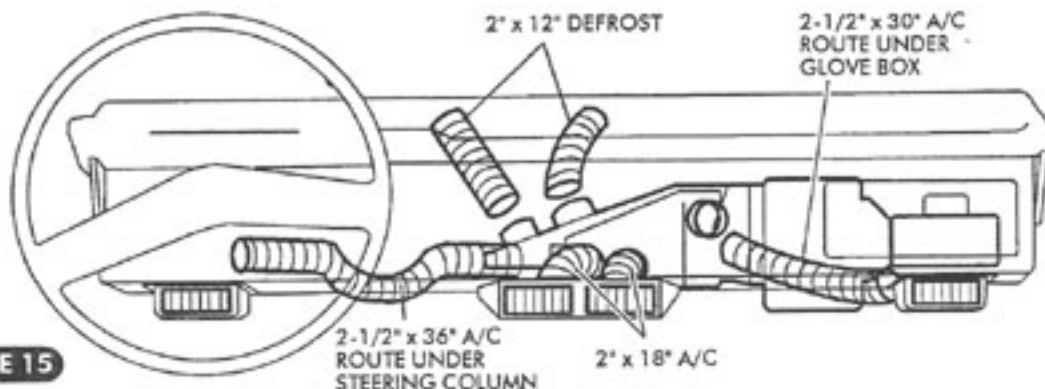


FIGURE 15

DUCT HOSE INSTALLATION

- STRETCH THE DUCT HOSES OUT TO THEIR MAXIMUM LENGTH AND CUT TO SIZES SHOWN:

PASSENGER SIDE DEFROST	2" x 12"
DRIVER SIDE DEFROST	2" x 12"
PASSENGER SIDE A/C	2-1/2" x 30"
DRIVER SIDE A/C	2-1/2" x 36"
CENTER A/C (TWO EACH)	2" x 18"

NOTE: WITH THE UNIT IN PLACE, STRETCH THE DUCT HOSES TIGHTLY TO THEIR CORRESPONDING OUTLETS ON UNIT AND RECHECK THE LENGTH. INSURE THAT THE HOSES ARE PULLED TIGHTLY WITH A MINIMUM OF KINKS OR SHARP BENDS. THIS WILL INSURE MAXIMUM AIR FLOW. SEE FIGURE 15.

- ROUTE ALL DUCT HOSES AND ATTACH TO DEFROST AND A/C VENTS.

HOSE KIT INSTALLATION

- LOCATE O-RING PACKAGE. THERE IS A SPECIFIC SIZE AND THICKNESS O-RING FOR EACH CONNECTION. THE SMALL WHITE TUBE IS A SPECIFIC OIL FOR O-RINGS AND THREADS. O-RINGS SHOULD NOT BE REUSED ONCE A FITTING IS TIGHTENED. SEE FIGURE 16. DO NOT OVER TIGHTEN. ALWAYS USE TWO (2) WRENCHES, ONE ON EACH SIDE OF A CONNECTION.

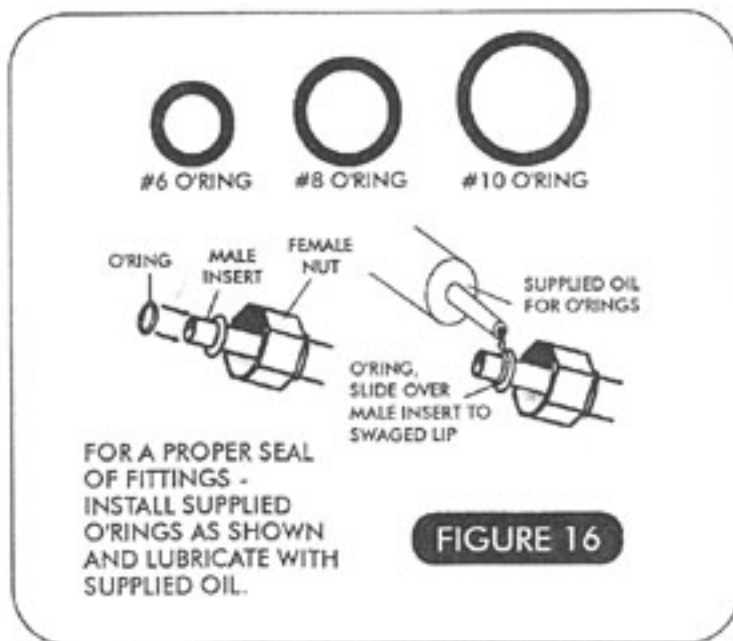
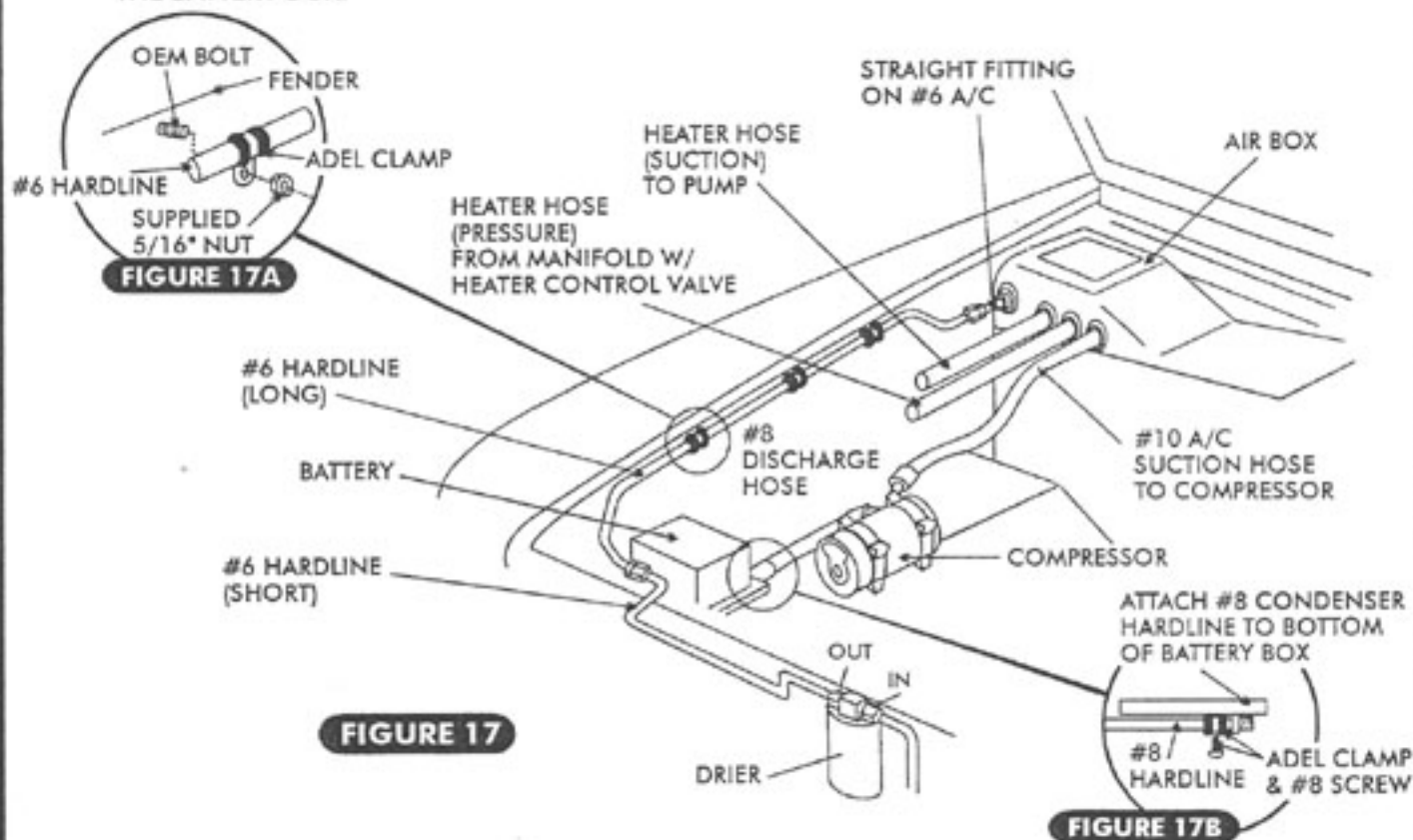


FIGURE 16

- LOCATE THE (LARGE) #10 HOSE THAT WAS PREVIOUSLY ROUTED FROM THE PASSENGER COMPARTMENT AND UP THROUGH THE HOLE IN THE AIR BOX. LUBRICATE THE O'RING AND FITTING ATTACH THE 90 DEGREE FITTING TO THE SUCTION SIDE OF THE COMPRESSOR. LEAVE FINGER TIGHT. SEE FIGURES 17 & 18 (PG.8 & 9).
- LOCATE THE (MIDDLE SIZE) #8 A/C HOSE. THE 45 DEGREE FITTING WITH THE CHARGING ADAPTER ATTACHES TO THE DISCHARGE PORT OF THE COMPRESSOR. LUBRICATE BOTH O'RINGS AND FITTINGS AND ATTACH AS SHOWN IN FIGURES 17 & 18. LEAVE FINGER TIGHT.
- SEPERATE THE TWO FITTINGS ON THE COMPRESSOR SO THAT THEY WILL NOT INTERFERE WITH EACH OTHER DURING CHARGING (APPROX. 2"). TIGHTEN SNUGLY - DO NOT OVERTIGHTEN.
- LOCATE THE #8 ALUMINUM HARDLINE. LUBRICATE THE O'RING AND FITTING AND ATTACH TO THE TOP OF THE CONDENSER. CLAMP THE HARDLINE TO THE BOTTOM OF THE BATTERY BOX WITH AN ADEL CLAMP AND A #8 SCREW (SEE FIGURE 17B). TRIM THREADS IF NECESSARY.
- CONNECT THE REMAINING END OF THE #8 A/C HOSE TO THE ALUMINUM HARDLINE AT THE BATTERY BOX.



- THERE ARE TWO #6 ALUMINUM HARDLINES THAT TOGETHER RUN FROM THE "OUT" SIDE OF DRIER TO THE #6 A/C HOSE FITTING AT THE AIR BOX.
- THE LONG #6 HARDLINE RUNS FROM THE #6 FITTING AT THE AIR BOX TO THE FRONT OF THE BATTERY.
- THE SHORT LINE RUNS FROM THE LONG LINE THROUGH THE RADIATOR CORE SUPPORT AND CONNECTS TO THE DRIER. LUBRICATE ALL O'RINGS AND FITTINGS AND ATTACH AS SHOWN IN FIGURES 17 & 18.
- SECURE THE LONG HARDLINE TO THE LOWER LIP OF THE RIGHT FENDER USING THE SUPPLIED ADEL CLAMPS, SEE FIGURE 17 & 17A.

HEATER HOSE INSTALLATION (CONTINUED)

- ATTACH PREVIOUSLY INSTALLED HEATER HOSE TO ENGINE WATER PUMP AND INTAKE MANIFOLD. INSTALL HEATER CONTROL VALVE IN PRESSURE LINE FROM THE INTAKE MANIFOLD. SEE FIGURE 18.
- NOTE: ARROW ON HEATER CONTROL VALVE SHOWS WATER FLOW DIRECTION.

VACUUM LINES AND WIRING

- ROUTE VACUUM LINE, HOT WIRE FROM CIRCUIT BREAKER AND COMPRESSOR LEAD THROUGH EXISTING HOLE IN FIREWALL 10" BELOW THE #10 SUCTION LINE. SEE FIGURE 8 (PG. 4).

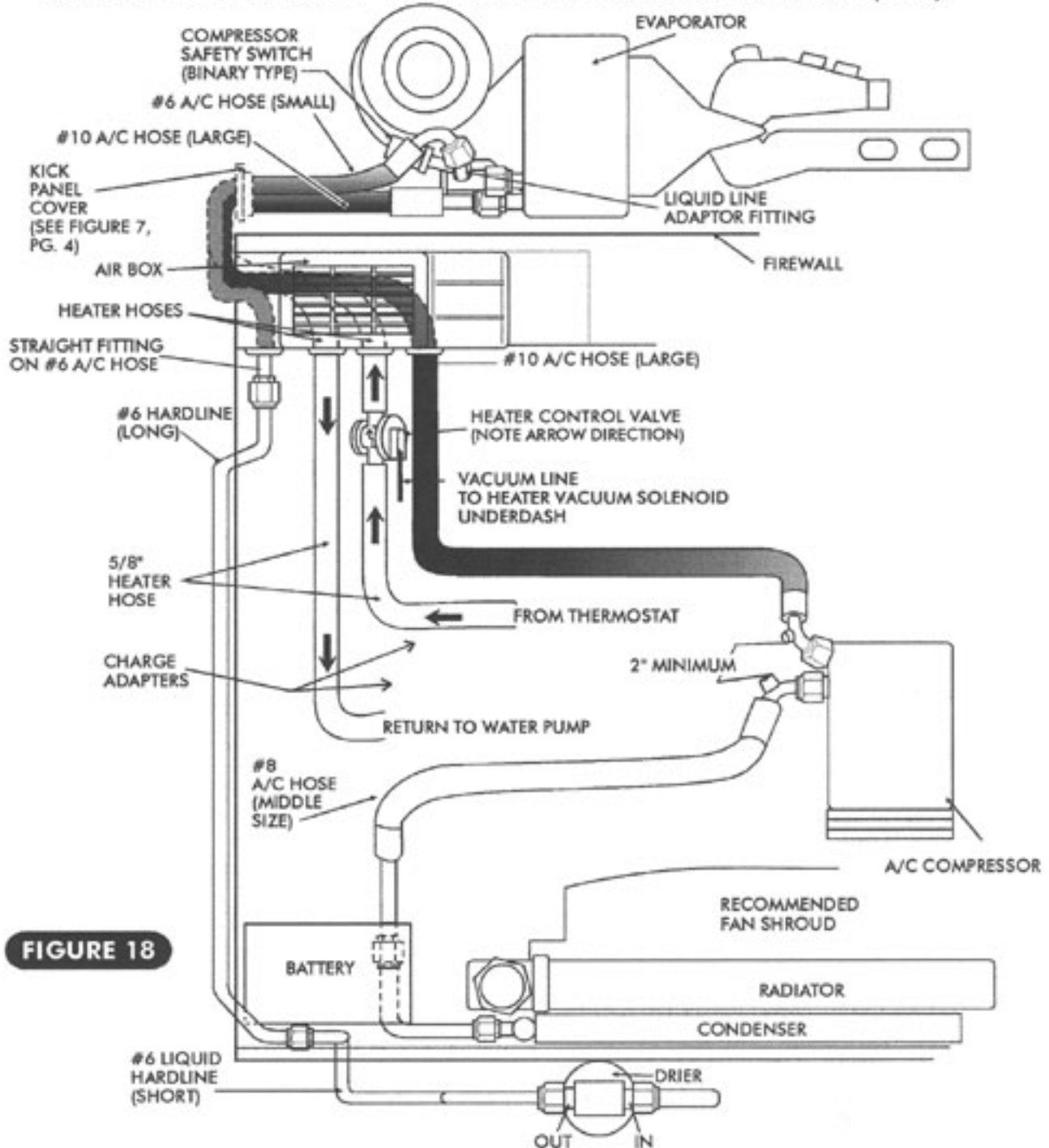
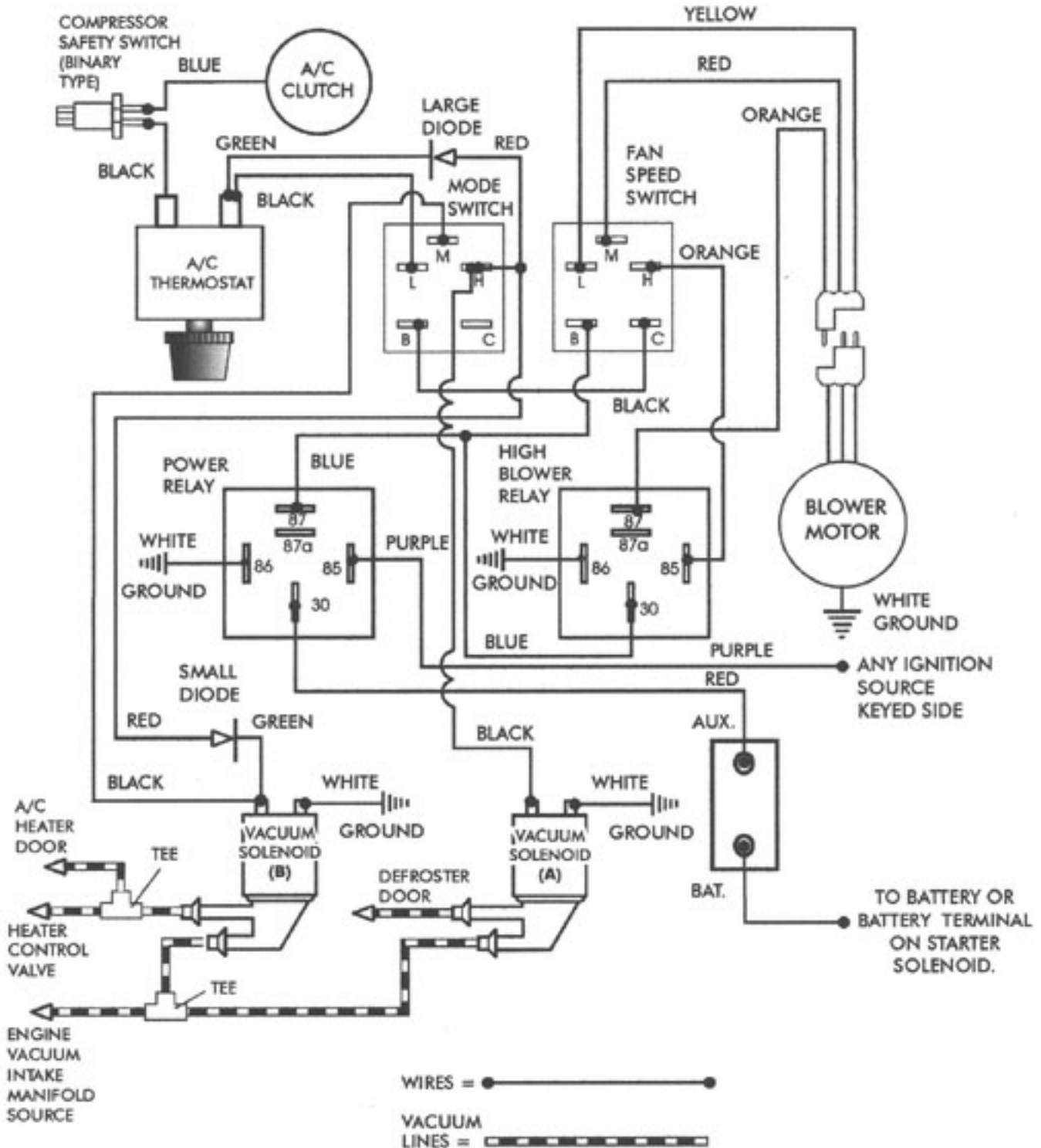
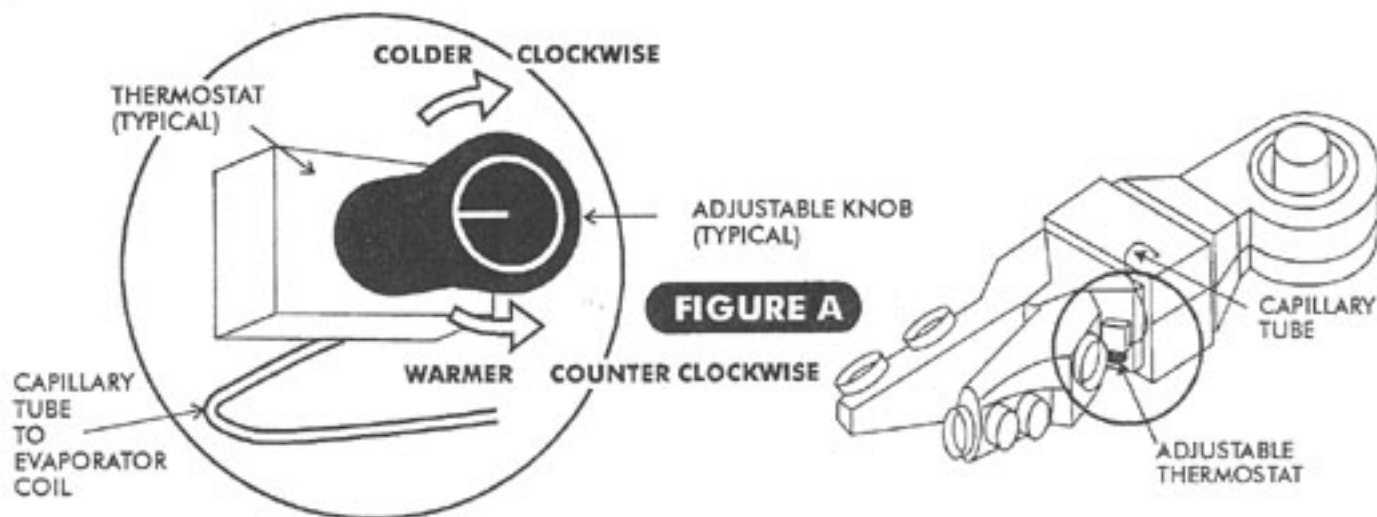


FIGURE 18

WIRING DIAGRAM




FIGURE A

AIR CONDITIONING ADJUSTMENTS:

- THE AIR CONDITIONER THERMOSTAT CONTROLS COIL TEMPERATURE, IT IS SHIPPED ADJUSTED FULLY COLD (CLOCKWISE), IN THE MAJORITY OF CASES THE A/C WILL OPERATE CORRECTLY AS SHIPPED.
- TURNING THE KNOB ON THE THERMOSTAT TO THE RIGHT (CLOCKWISE) MAKES THE SYSTEM OPERATE COLDER. IF THE THERMOSTAT IS SET TOO COLD THE EVAPORATOR WILL "ICE UP" - THE EVAPORATOR COIL IS RESTRICTED WITH ICE AND COLD AIR FLOW WILL BE REDUCED.
- TURNING THE KNOB TO THE LEFT (COUNTER CLOCKWISE) MAKES THE SYSTEM OPERATE WARMER. THE COMPRESSOR CLUTCH WILL CYCLE OFF FREQUENTLY AND THE A/C SYSTEM WILL NOT GET AS COOL AS IT COULD.

ADJUSTING A/C THERMOSTAT

1.) **SYMPTOM:** THE A/C WORKS WELL AT FIRST THEN QUILTS COOLING. THE AIR FLOW FROM THE VENTS IS LOW AND THE COMPRESSOR CYCLES INFREQUENTLY.

SOLUTION: THE THERMOSTAT IS SET TOO COLD AND THE EVAPORATOR IS "ICING UP" AND RESTRICTING AIR FLOW. ALLOW THE ICE TO MELT AND SET THE THERMOSTAT WARMER (COUNTER CLOCKWISE) 10% OF A TURN EACH ADJUSTMENT UNTIL THE SYMPTOMS DIMINISH.

2.) **SYMPTOM:** A/C NEVER GETS COLD AND THE COMPRESSOR CLUTCH CYCLES FREQUENTLY.

SOLUTION: THE THERMOSTAT IS SET TOO WARM. SET THE THERMOSTAT COLDER (CLOCKWISE) 10% OF A TURN EACH ADJUSTMENT UNTIL THE COMPRESSOR CLUTCH CYCLES INFREQUENTLY. AVOID SETTING THE THERMOSTAT TOO COLD.

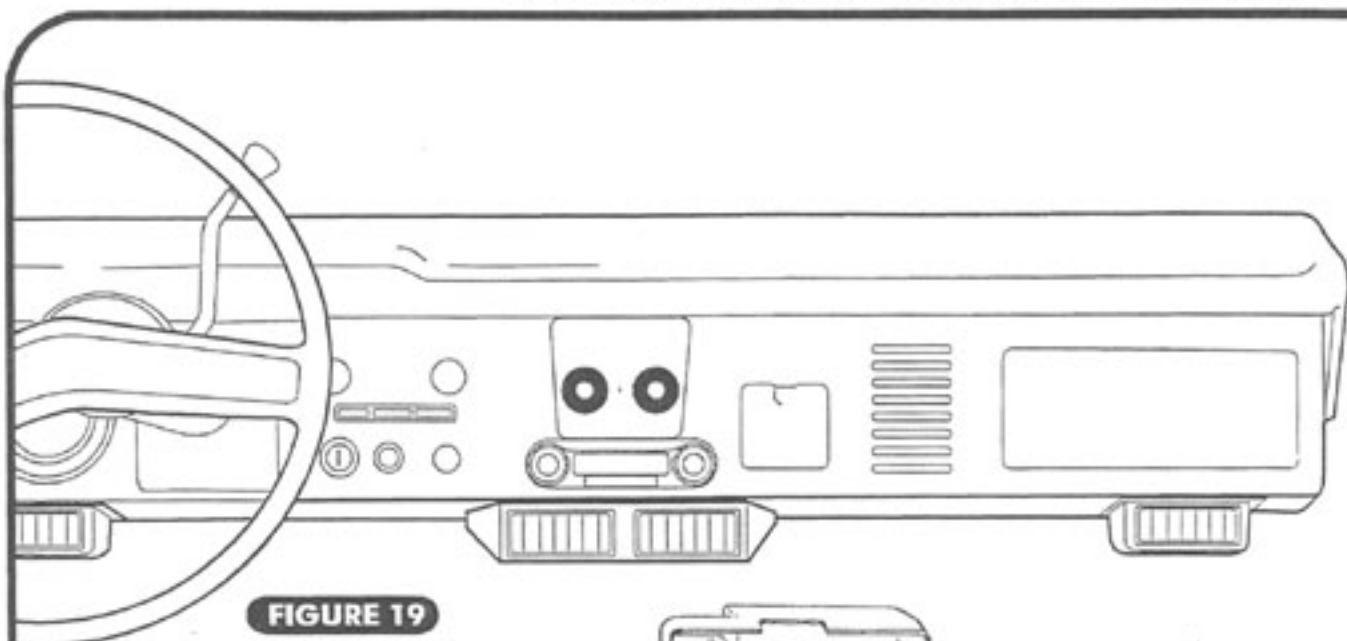
3.) **SYMPTOM:** THE A/C NEVER GETS COLD, SOMETIMES EVEN BLOWS HOT, AND THE A/C COMPRESSOR CLUTCH INFREQUENTLY CYCLES OFF.

SOLUTION: THE HEATER MAY BE ON AT ALL TIMES. CAREFULLY FEEL AROUND THE HEATER HOSES AT THE FIREWALL. IF THE HOSES ARE HOT THEN:

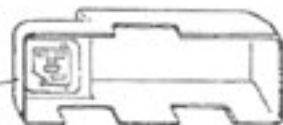
A) - THE HEATER CONTROL VALVE MAY BE INSTALLED BACKWARDS. CHECK THE FLOW DIRECTION ARROW ON THE VALVE AGAINST THE ILLUSTRATION IN YOUR INSTALLATION INSTRUCTIONS.

B) - IF CABLE OPERATED: THE VALVE MAY BE MISADJUSTED.

C) - IF VACUUM OPERATED: IT MAY BE GETTING VACUUM AT ALL TIMES (CHECK ELECTRIC SOLENOID).


FIGURE 19

NEW GLOVE BOX
 PLACE TEMPLATE AT
 REAR OF
 SHALLOW SECTION - SEE FIGURE 6,
 PG. 3 FOR TEMPLATE.



GLOVE BOX DOOR

GLOVE BOX INSTALL

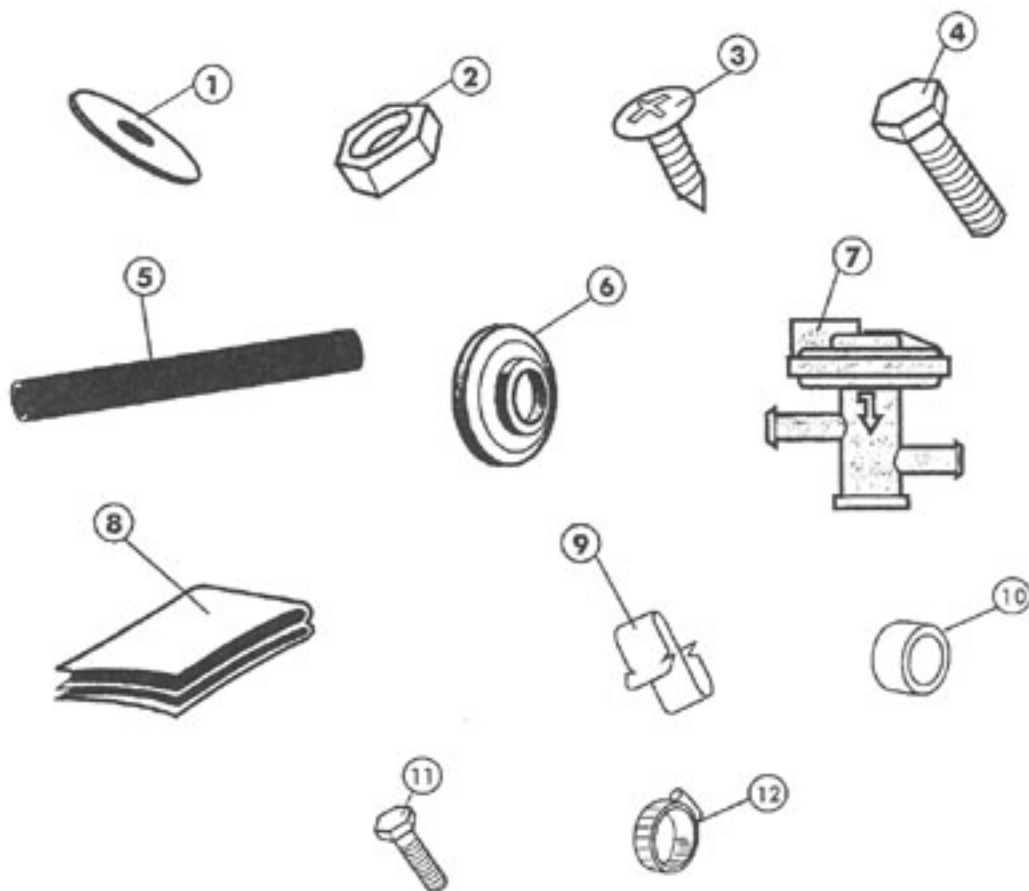
- 1972-77 BRONCO ONLY. USING THE TEMPLATE PROVIDED ON PG. 3 (FIGURE 6), TRIM THE DRIVER SIDE OF THE NEW GLOVE BOX INSERT FOR THE OEM FUSE PANEL. SEE FIGURE 19.
- INSTALL GLOVE BOX INTO OPENING (CAREFULLY SQUEEZE GLOVE BOX TO FIT INTO OPENING IN DASH - INSERT AND LET SPRING BACK INTO SHAPE) AND REATTACH WITH OEM SCREWS.
- INSTALL GLOVE BOX DOOR USING ORIGINAL HARDWARE.

FINAL STEPS

- REINSTALL ALL PREVIOUSLY REMOVED ITEMS (BATTERY, RADIATOR, FAN BLADE, FAN SHROUD AND RADIO, ETC.).
- SEAL ANY HOLES IN FIREWALL AND KICK PANEL.
- VINTAGE AIR RECOMMENDS THAT ALL A/C SYSTEMS BE SERVICED BY A CERTIFIED AUTOMOTIVE AIR CONDITIONING TECHNICIAN ONLY. SEE INSIDE COVER FOR SERVICE INFO.
- FILL RADIATOR WITH 50/50 ANTIFREEZE.

63576-LFE BRONCO DRAIN KIT PARTS LIST

No.	QTY.	PART NUMBER	DESCRIPTION
1.	2	18125-VUB	1/4" x 3/4" FLAT WASHER
2.	1	18152-VUB	1/4" COARSE NUT W/ STAR WASHER
3.	15	18235-VUB	#8 x 1/2" PAN HEAD SCREW
4.	1	18289-VUB	1/4" x 1 1/2" COARSE BOLT
5.	25	31050-YUD	1/2" DRAIN HOSE
6.	4	33137-VUI	LARGE GROMMET
7.	1	46103-VUH	HEATER CONTROL VALVE
8.	20	49003-VUP	PRESS TAPE
9.	4	65980-VUE	"S" CLIPS
10.	1	18040-VUB	3/4" NYLON SPACER
11.	1	18287-VUB	1/4" x 1/2" COARSE BOLT
12.	6	31606-VUA	#12 HOSE CLAMP

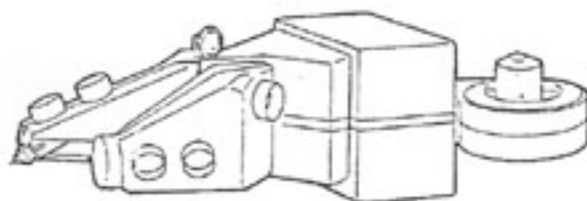


**75076-LFZ-A 1966-77 BRONCO V/8
EVAPORATOR KIT**

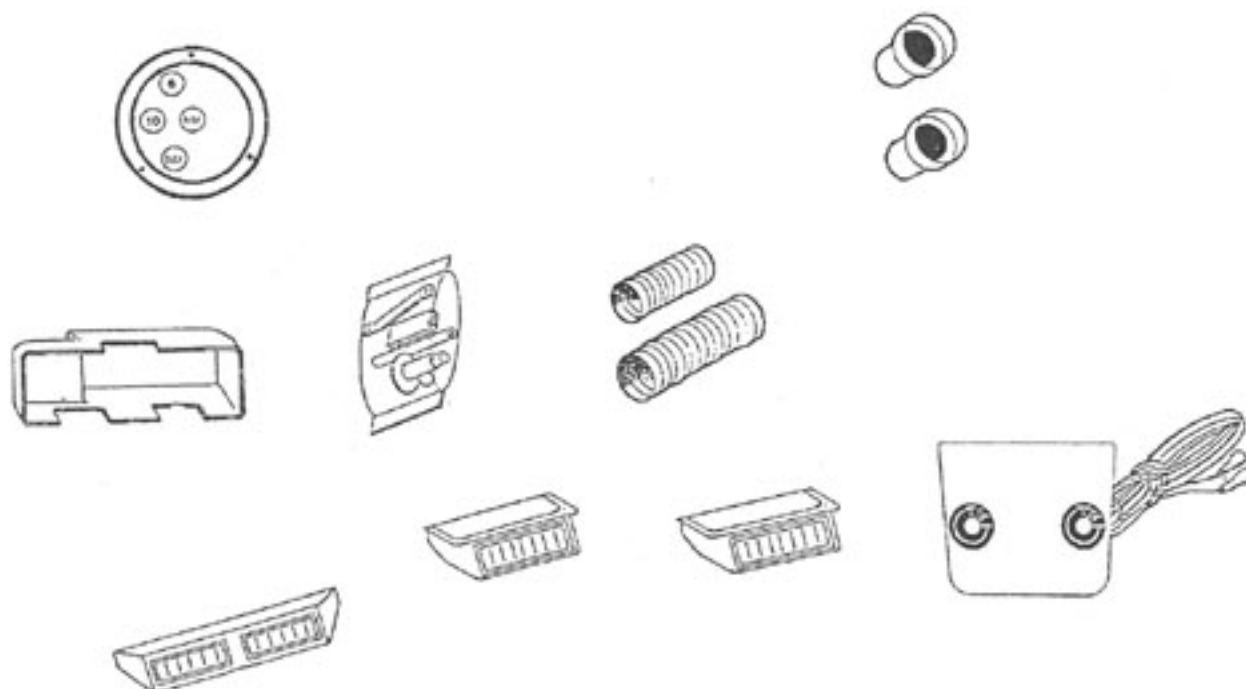
No.	QTY.	PART No.	DESCRIPTION
1.	1	55376-LFE-A	EVAPORATOR SUB CASE
2.	1	79077-LFN	ACCESSORY KIT

CHECKED BY: _____
 PACKED BY: _____
 DATE: _____

①



②



**79077-LFN
ACCESSORY KIT LIST**