1968-76 CORVETTE
GEN IV w/o FACTORY AIR
561174-PCZ
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** 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.**

### EVAPORATOR KIT PACKING LIST

<table>
<thead>
<tr>
<th>No.</th>
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<th>PART No.</th>
<th>DESCRIPTION</th>
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<td>1</td>
<td>761174-VCE</td>
<td>1968-76 CORVETTE w/o AC EVAP. SUBCASE</td>
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<tr>
<td>2.</td>
<td>1</td>
<td>781174-PCN</td>
<td>1968-76 CORVETTE w/o AC ACC. KIT</td>
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1. **1968-76 CORVETTE w/o AC EVAP. SUB CASE**
   - 761174-VCE

2. **ACCESSORY KIT**
   - 781174-PCN
1968-76 CORVETTE
GEN IV

IMPORTANT NOTICE—PLEASE READ

FOR MAXIMUM SYSTEM PERFORMANCE
VINTAGE AIR RECOMMENDS THE FOLLOWING:

* 18” HEAVY DUTY FAN
* FAN SHROUD
* 16” SPAL AUXILIARY CONDENSER FAN PACKAGE (PART # 302686-CCA)

THIS KIT DOES NOT CONTAIN HEATER HOSE. YOU MUST PURCHASE 8 FEET OF 5/8” DIA. HEATER HOSE FROM VINTAGE AIR (31800-VUD) OR FROM YOUR LOCAL PARTS RETAILER

SAFETY SWITCHES:

YOUR VINTAGE AIR SYSTEM IS EQUIPPED WITH A BINARY PRESSURE SAFETY SWITCH. A BINARY SWITCH (11078-VUS) DISENGAGES THE COMPRESSOR CLUTCH IN CASE OF EXTREME LOW PRESSURE CONDITION (REFRIGERANT LOSS) OR EXCESSIVELY HIGH HEAD PRESSURE (406 PSI), TO PREVENT COMPRESSOR DAMAGE OR HOSE RUPTURE. A TRINARY SWITCH (11076-VUS) COMBINES HI/LO PRESSURE PROTECTION WITH AN ELECTRIC FAN OPERATION SIGNAL AT 254 PSI, AND MAY BE SUBSTITUTED FOR USE WITH ELECTRIC CONDENSER FANS. COMPRESSOR SAFETY SWITCHES ARE EXTREMELY IMPORTANT SINCE AN A/C SYSTEM RELIES ON REFRIGERANT TO CARRY LUBRICATION THROUGH THE SYSTEM.

SERVICE INFO:

EVACUATE THE SYSTEM FOR 35-45 MINUTES WITH SYSTEM COMPONENTS (DRIER, COMPRESSOR, EVAPORATOR AND 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 SPECIFICATIONS.

THE PROPER AMOUNT OF REFRIGERANT IS CRITICAL TO PROPER SYSTEM OPERATION. VINTAGE AIR RECOMMENDS OUR SYSTEMS BE CHARGED BY WEIGHT WITH A QUALITY CHARGING STATION OR SCALE.

REFRIGERANT CAPACITIES

134a SYSTEM
CHARGE WITH 1.8 lb. (1 lb. 12 oz) OF REFRIGERANT

R-12 SYSTEM
CHARGE WITH 2.0 lb. OF REFRIGERANT

LUBRICANT CAPACITIES

NEW COMPRESSOR - NO ADDITIONAL OIL NEEDED
USED COMPRESSOR - CONSULT VINTAGE AIR
THE HEATER CONTROL VALVE IS A NORMALLY OPEN VALVE. IT MUST BE CONNECTED TO THE ECU TO BLOCK WATER FLOW IN AC MODE.

CARE MUST BE TAKEN WHEN INSTALLING THE COMPRESSOR LEAD, NOT TO SHORT IT TO GROUND. THE COMPRESSOR LEAD MUST NOT BE CONNECTED TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE. SHORTING TO GROUND OR CONNECTING TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE WILL CAUSE SEVERE DAMAGE TO THE ECU.

IT IS ALSO IMPORTANT THAT THE BATTERY LEAD IS IN GOOD SHAPE AND THAT THE GROUND LEADS ARE NOT COMPROMISED. THERE SHOULD BE A HEAVY GROUND FROM THE BATTERY TO THE ENGINE BLOCK, AND ADDITIONAL GROUNDS TO THE BODY AND TO THE CHASSIS.

IF THESE PRECAUTIONS ARE NOT OBSERVED, IT IS POSSIBLE FOR VOLTAGE SPIKES TO BE PRESENT ON THE BATTERY LEADS. THESE SPIKES COME FROM IGNITION SYSTEMS, CHARGING SYSTEMS, AND FROM TURNING SOME OF THE VEHICLE'S OTHER SYSTEMS ON AND OFF. MODERN COMPUTER OPERATED EQUIPMENT CAN BE SENSITIVE TO VOLTAGE SPIKES ON THEIR POWER LEADS, WHICH CAN CAUSE UNEXPECTED RESETS, STRANGE BEHAVIOR, AND MAY ALSO CAUSE PERMANENT DAMAGE.

VINTAGE AIR STRIVES TO HARDEN THEIR PRODUCTS AGAINST THESE TYPES OF ELECTRICAL NOISE, BUT THERE IS A POINT WHERE A VEHICLE'S ELECTRICAL SYSTEM CAN BE DEGRADED SO MUCH THAT NOTHING CAN HELP.

RADIO INTERFERENCE CAPACITORS SHOULD BE AVAILABLE AT MOST AUTO & TRUCK PARTS SUPPLIERS. THEY TYPICALLY ARE CYLINDRICAL IN SHAPE, A LITTLE OVER AN INCH LONG, A LITTLE OVER A HALF INCH IN DIAMETER, THEY HAVE A SINGLE LEAD COMING FROM ONE END OF THE CYLINDER WITH A TERMINAL ON THE END OF THE WIRE, AND THEY WILL HAVE A MOUNTING CLIP WHICH IS SCREWED INTO A GOOD GROUND ON THE VEHICLE. THE SPECIFIC VALUE OF THE CAPACITANCE IS NOT TOO SIGNIFICANT, IN COMPARISON TO IGNITION CAPACITORS THAT ARE MATCHED WITH THE COIL TO REDUCE PITTING OF THE POINTS.

- CARE MUST BE TAKEN WHEN INSTALLING THE COMPRESSOR LEAD, NOT TO SHORT IT TO GROUND. THE COMPRESSOR LEAD MUST NOT BE CONNECTED TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE. SHORTING TO GROUND OR CONNECTING TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE WILL CAUSE SEVERE DAMAGE TO THE ECU.
- WHEN INSTALLING GROUND LEADS ON GEN IV SYSTEMS, THE BLOWER CONTROL GROUND AND ECU GROUND MUST BE CONNECTED DIRECTLY TO THE NEGATIVE BATTERY POST.
- THE HEATER CONTROL VALVE IS A NORMALLY OPEN VALVE. IT MUST BE CONNECTED TO THE ECU TO BLOCK WATER FLOW IN AC MODE.
INSTALLATION INSTRUCTIONS FOR 
1968-1976 CORVETTE

BEFORE STARTING THE AIR CONDITIONER INSTALLATION, CHECK FOR PROPER OPERATION OF ALL COMPONENTS (RADIO, LIGHTS, WIPERS, ETC.). STUDY THE INSTRUCTIONS, ILLUSTRATIONS AND DIAGRAMS. FOR EASE OF INSTALLATION CHECK OFF (x) EACH PROCEDURE PRIOR TO MOVING ON TO THE NEXT STEP.

ENGINE COMPARTMENT

☐ DISCONNECT BATTERY
☐ REMOVE HOOD TO EASE INSTALLATION
☐ DRAIN RADIATOR
☐ REMOVE OEM BLOWER ASSEMBLY AND COVER
☐ REMOVE OEM HEATER CORE AND COVER

FIGURE 1
PASSENGER COMPARTMENT

- REMOVE PASSENGER SIDE DASH
- DISCONNECT CENTER DASH AND PULL FORWARD TO REMOVE OEM CENTER DASH BEZEL
- REMOVE OEM RADIO
- REMOVE CONTROL PANEL (RETAIN), REFER TO CONTROL PANEL CONVERSION KIT TO ASSEMBLE CONTROL PANEL
- DROP STEERING COLUMN
- DISCONNECT DRIVER SIDE DASH AND PULL FORWARD

- REMOVE THE DEFROST DUCT (RETAIN), FLOOR HEATER DUCT AS SHOWN IN FIGURE 3 BELOW.
- REMOVE THE HEATER AS SHOWN.
ASTRO AIR VENTILATION DUCTS REMOVAL

- REMOVE DRIVER SIDE & PASSENGER SIDE ASTRO AIR VENTILATION DUCTS AND DISCARD. SEE FIGURE 4 BELOW.
- REMOVE PASSENGER SIDE DASH SUPPORT BRACE (DISCARD) AND CUT OFF MOUNTING TAB ON THE KICK PANEL AS SHOWN IN FIGURE 4.
- REMOVE THE DRIVER SIDE & PASSENGER SIDE ASTRO AIR VENTILATION DUCT MOUNTING BRACKETS AS SHOWN IN FIGURE 4.
- INSTALL INSIDE FRESH AIR CAPS ON DRIVER & PASSENGER SIDE AS SHOW IN FIGURE 4a BELOW

FRESH AIR COVER INSTALLATION

- APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FRESH AIR CAP AS SHOWN IN FIGURE 4b BELOW.
- ATTACH FRESH AIR CAP TO FIREWALL USING A 1/4-20 x 1" BOLT AND WASHER, SEE FIGURE 4b.
CONSENSER ASSEMBLY & INSTALLATION

☐ Refer to separate instructions included with the condenser kit to install the condenser. Refer to Figure 5 below for condenser location.

![Figure 5]

COMPRESSOR & BRACKETS

☐ Refer to separate instructions included with the bracket kit to install the compressor bracket. Refer to Figure 6 below for compressor mounting position.

PULLEYS

☐ In most instances existing belt lengths will remain the same. See Figure 6 below.

**PULLEYS (VINTAGE AIR) SHORT PUMP SMALL BLOCK CHEVY (STEEL PULLEY)**

- 22503-VCA - Water Pump Pulley (Double Groove)
- 22506-VCA - Crankshaft Pulley (Double Groove) (With Power Steering A 3 Groove Crank Pulley is Required)
- 22507-VCA - Crankshaft Pulley (Triple Groove)

*NOTE: BELT ROUTING MAY VARY WITH DIFFERENT BRACKET SETS. ALWAYS REFER TO INSTRUCTIONS INCLUDED WITH BRACKETS.*

![Figure 6]
O.E.M. DEFROST DUCT MODIFICATION

☐ MEASURE 6” FROM THE TOP OF THE DEFROST DUCT AND MARK AS SHOWN IN FIGURE 7 BELOW. CUT OFF THE BOTTOM PORTION OF THE DEFROST DUCT AS SHOWN.

☐ LOCATE THE DEFROST DUCT TEMPLATE ON PAGE 27, PLACE THE TEMPLATE OVER THE DEFROST DUCT AS SHOWN IN FIGURE 7a BELOW.

☐ USING A PENCIL OR SCRIBE MARK ALONG THE EDGE OF THE TEMPLATE AS SHOWN.


☐ INSTALL THE DEFROST DUCT HOSE ADAPTER AS SHOWN IN FIGURE 8 BELOW.
DEFROST DUCT & PS AND DS SIDE A/C DUCT HOSE ADAPTER INSTALLATION

- Using the O.E.M. Defrost Duct mounting screws install the Defrost Duct with Hose Adapter as shown in Figure 9 below.
- Remove Vent Knobs and retain.

Remove the passenger and driver side vent adapters (discard) as shown in Figure 10 below.

**Note:** Retain mounting hardware.

- Install the inner and outer A/C duct hose adapters as shown in Figure 10 below. Use O.E.M. screws to secure adapters to dash.
- Install the vent knob as shown using a 10-24 x 1 1/4" PH pan head screw and 3/16" flat washer.

**Note:** The passenger side installation is shown below in Figure 10, repeat the same steps for the driver side installation.
CENTER LOUVER ADAPTER INSTALLATION

- REMOVE THE O.E.M. CENTER DASH BEZEL & O.E.M. WIPER SWITCH AS SHOWN IN FIGURE 11 BELOW.

- INSTALL THE WIPER SWITCH BRACKET & GROUND WIRE USING (2) 10-32 x ½ PH PAN HEAD SCREWS & (2) NUTS w/ STAR WASHER AS SHOWN IN FIGURE 11a BELOW.

- INSTALL THE O.E.M WIPER SWITCH ON THE CENTER LOUVER BEZEL USING (2) 6-32 x 3/8 PH FLAT HEAD SCREWS w/ NYLOCK NUTS AS SHOW IN FIGURE 11a BELOW.

- INSTALL RECTANGLE LOUVER TO CENTER LOUVER BEZEL AS SHOW IN FIGURE 11b.

**EVAPORATOR INSTALLATION**

- On a work bench, install evaporator rear bracket, and install evaporator hardlines with properly lubricated O-rings. (See Figure 17, Page 18, and Figures 22, Page 22.)
- Install front mounting bracket on evaporator using (2) 1/4-20 x 1/2” hex bolts and tighten as shown in Figure 12, Page 14.
- Place 4mil polyethylene sheet over the stepper motors. See Figure 13, Page 14.
- Lift evaporator unit up under the dashboard see Figure 13, Page 14. Secure loosely to the firewall from the engine compartment side using a 1/4-20 x 1” bolt and washer, see Figure 13, Page 14.
- Using a #14 x 3/4” sheetmetal screw secure the front evaporator mounting bracket to the inner cowl by aligning the right hole in front evaporator mounting bracket with the OEM hole in inner cowl. See Figure 13, Page 14.
- To secure the left side of the front mounting bracket, with evaporator mounting bracket in place drill a 3/16” hole in inner cowl using the left mounting bracket hole as a guide. Secure the bracket to the inner cowl using a #14 x 3/4” sheetmetal screw see Figure 13, Page 14.
- Verify that evaporator unit is level and square to the dash, then tighten all mounting bolts. *(Note: Tighten the bolt on firewall first, then the front mounting bracket screws.)*
ONCE BRACKET IS IN PLACE, DRILL 3/16" MOUNTING HOLE

* NOTE: INSTALL THIS BOLT FIRST
DRAIN HOSE INSTALLATION

☐ IN-LINE WITH THE DRAIN, LIGHTLY MAKE A MARK ON THE FIREWALL. MEASURE ONE INCH DOWN AND DRILL A 5/8" HOLE THROUGH THE FIREWALL. SEE FIGURE 14 BELOW.

☐ INSTALL DRAIN HOSE TO BOTTOM OF EVAPORATOR UNIT AND ROUTE THROUGH FIREWALL. SEE FIGURE FIGURE 14, BELOW.
FIREWALL COVER

- Locate the dimple in the back side of the firewall cover. Use a ½” drill bit and drill ½” hole in firewall cover as shown in Figure 15 below.

- Apply a 1/4” bead of silicone around the back side of the firewall cover as shown in Figure 15 below.

- Pass lines through firewall cover, and secure with (2) 7/16 panel retainers. See Figure 15 below.

- Once the firewall cover is in place locate the hole on the left side of the firewall cover and drill a 3/8” hole through the firewall and install a 7/16 panel retainer to secure the left side of the firewall cover to firewall. See Figure 15 below.

- Apply a 1/4” bead of silicone around the back side of the firewall cover cap as shown in Figure 15 below. Using (2) #8 x ½” PH pan head screws install firewall cover cap as shown in Figure 15 below.

FIGURE 15
A/C HOSE INSTALLATION

STANDARD HOSE KIT

☐ LOCATE THE #8 COMPRESSOR A/C HOSE. LUBRICATE (2) #8 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE 90° FITTING TO THE #8 DISCHARGE PORT ON THE COMPRESSOR AND ROUTE THE STRAIGHT FITTING TO THE #8 CONDENSER HARDLINE COMING THROUGH THE CORE SUPPORT SEE FIGURE 18, PAGE 18. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18.

☐ LOCATE THE #10 COMPRESSOR A/C HOSE. LUBRICATE (2) #10 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE 135° FITTING TO THE #10 SUCTION PORT ON THE COMPRESSOR AND ROUTE THE STRAIGHT FITTING TO THE #10 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL SEE FIGURE 18, PAGE 18. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18. (NOTE: WRAP THE #10 FITTING CONNECTIONS AT FIREWALL WITH PRESS TAPE. SEE FIGURE 18, PAGE 18.

☐ LOCATE THE #6 EVAP/COR HARDLINE AND LUBRICATE (2) #6 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE HARDLINE TO THE #6 HARDLINE COMING THROUGH THE CORE SUPPORT FROM DRIER. ATTACH THE OTHER END OF THE HARDLINE WITH LUBRICATED ORING TO THE #6 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL. SEE FIGURE 18, PAGE 18. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18. USE A #2 ADEL CLAMP TO SECURE THE #6 EVAP/CORE HARDLINE TO THE INNER FENDERWELL AS SHOWN IN FIGURES 18 & 19 PAGES 18 & 19. SECURE THE ADEL CLAMP TO THE INNER FENDER USING A 10-32 x ½” MACHINE SCREW AND NUT.

MODIFIED A/C HOSE KIT

☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH MODIFIED HOSE KIT.

BIG BLOCK MODIFIED HOSE KIT

☐ LOCATE THE #8 COMPRESSOR A/C HOSE. LUBRICATE (2) #8 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE 90° FITTING TO THE #8 DISCHARGE PORT ON THE COMPRESSOR AND ROUTE THE STRAIGHT FITTING TO THE #8 CONDENSER HARDLINE COMING THROUGH THE CORE SUPPORT SEE FIGURE 19, PAGE 19. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18.

☐ LOCATE THE #10 COMPRESSOR A/C HOSE. LUBRICATE (2) #10 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE 90° FITTING TO THE #10 SUCTION PORT ON THE COMPRESSOR AND ROUTE THE STRAIGHT FITTING TO THE #10 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL SEE FIGURE 19, PAGE 19. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18. (NOTE: WRAP THE #10 FITTING CONNECTIONS AT FIREWALL WITH PRESS TAPE. SEE FIGURE 18, PAGE 18.

☐ LOCATE THE #6 EVAP/COR HARDLINE AND LUBRICATE (2) #6 O-RINGS (SEE FIGURE 16, PAGE 18) AND CONNECT THE HARDLINE TO THE #6 HARDLINE COMING THROUGH THE CORE SUPPORT FROM DRIER. ATTACH THE OTHER END OF THE HARDLINE WITH LUBRICATED ORING TO THE #6 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL. SEE FIGURE 18, PAGE 18. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 17, PAGE 18. USE A #2 ADEL CLAMP TO SECURE THE #6 EVAP/CORE HARDLINE TO THE INNER FENDERWELL AS SHOWN IN FIGURES 18 & 19 PAGES 18 & 19. SECURE THE ADEL CLAMP TO THE INNER FENDER USING A 10-32 x ½” MACHINE SCREW AND NUT.

HEATER HOSE & HEATER CONTROL VALVE INSTALLATION

☐ ROUTE A PIECE OF HEATER HOSE FROM THE WATER PUMP TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURES 20, PAGE 20. SECURE USING HOSE CLAMPS.

☐ ROUTE A PIECE OF HEATER HOSE FROM THE INTAKE TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURES 20, PAGE 20. NOTE: INSTALL HEATER CONTROL VALVE IN-LINE WITH INTAKE MANIFOLD (PRESSURE SIDE) HEATER HOSE, SECURE USING HOSE CLAMPS AS SHOWN IN FIGURE 20 ON PAGE 20. NOTE PROPER FLOW DIRECTION.
SMALL BLOCK HOSE ROUTING

FIGURE 16

- #6 O-RING
- #8 O-RING
- #10 O-RING

FOR A PROPER SEAL OF FITTINGS: INSTALL SUPPLIED O-RINGS AS SHOWN AND LUBRICATE WITH SUPPLIED OIL.

FIGURE 17

#6 LIQUID LINE FROM EXPANSION VALVE TO DRIER
(091070-CFL)

#8 A/C DISCHARGE HOSE
(COMP-COND HARDLINE)

T W I S T  W I T H  T H I S  W R E N C H

H O L D  W I T H  T H I S  W R E N C H

L U B R I C A T E  O - R I N G
(SEE FIGURE 16)

FIGURE 18

#2 ADEL CLAMP
10-32 x ½" SCREW
w/ NUT

#10 A/C SUCTION HOSE
(COMP-EVAP)

#6 O-RING

#8 O-RING

#10 O-RING

EU MODULE

PRESS TAPE

EVAPORATOR SUB CASE

FIREWALL COVER

HEATER CONTROL VALVE

PRESS TAPE

#6 LIQUID LINE FROM EXPANSION VALVE TO DRIER
(091070-CFL)

#8 A/C DISCHARGE HOSE
(COMP-COND HARDLINE)

OUT IN

BINARY SWITCH

TWIST WITH THIS WRENCH

HOLD WITH THIS WRENCH

LUBRICATE O-RING
(SEE FIGURE 16)
HEATER CONTROL VALVE INSTALLATION

FINAL STEPS - DUCT HOSE ROUTING & CONTROL PANEL HARNESS

- Install duct hoses as shown in Figure 21, Page 21.
- Reinstall the center dash assembly.
- Plug the control panel harness into the ECU module on sub case as shown. See Figure 21, Page 21.
- Route the control panel harness under the center dash assembly and connect the control harness to the control pots as shown in Figure 21, Page 21.
- Plug the wiring harness into the ECU module on sub case as shown. (Wire according to wiring diagram on Page 23.)
- Reinstall control panel.
- Reinstall all previously removed items (battery box & battery).
- Fill radiator with at least a 50/50 mixture of approved antifreeze and distilled water. It is the owner's responsibility to keep the freeze protection at the proper level for the climate in which the vehicle is operated. Failure to follow antifreeze recommendations will cause heater core to corrode prematurely and possibly burst in AC mode and/or freezing weather, voiding your warranty.
- Double check all fittings, brackets and belts for tightness.
- Vintage Air recommends that all AC systems be serviced by a certified automotive air conditioning technician.
- Evacuate the system for a minimum of 45 minutes prior to charging and leak check prior to servicing.
- Charge the system to the capacities stated on the information page (Page 4) of this instruction manual.
SECURE BLOWER SPEED SWITCH WIRE TO BRACKET USING TYE WRAP AS SHOWN

NOTE: THIS PLUG WILL NOT BE USED ON THIS APPLICATION

NOTE: PLUG-IN CONNECTOR BEFORE INSTALLING PC BOARD ON SWITCH

PLUG-IN AS SHOWN

WHT/RED

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WHT/RED

NOTE: THIS PLUG WILL NOT BE USED ON THIS APPLICATION

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RE
NOTE: AFTER INSTALLING #10 SUCTION LINE, WRAP ALL EXPOSED METAL (FITTINGS & TUBE) WITH SUPPLIED PRESS TAPE.

PRESS TAPE

#10 SUCTION LINE (09151-PCS)

#10 O-RING (33859-YUF)

ECU MODULE

PRES.

#10 LIQUID LINE (09150-PCL)

HEATER LINE (EVAP TO WATER PUMP) 09152-PCH

HEATER LINE (EVAP TO INTAKE) 09152-PCH

#6 LIQUID LINE (09150-PCL)

#6 O-RING (33857-YUF)

1/4-20 x 1/2" BOLT (LOCATED ON SUB CASE)

LUBRICATE O-RING (SEE FIGURES 10 & 11, PAGE 12)

TWIST WITH THIS WRENCH

FIGURE 23

HOLD WITH THIS WRENCH

FIGURE 8

801174-PCZ REV A 8/3/05, GEN IV 68-76 CORVETTE w/o AC INSTRUCTIONS PG 22 OF 29
NOTE: WHEN EVER BATTERY POWER IS RE CONNECTED TO THE ECU, THE COMPUTER GOES THROUGH AN INITIALIZATION SEQUENCE. THIS INITIALIZATION MAY TAKE UP TO 30 SECONDS. DURING INITIALIZATION THE DOORS INSIDE THE UNIT WILL BE OPERATING. A LOW BATTERY MAY ALSO TRIGGER A RE-INITIALIZATION. WHEN THE ENGINE IS BEING CRANKED A WEAK BATTERY MAY DROP BELOW 7 VOLTS, TRIGGERING RE-INITIALIZATION.

MODE DIAL, AC & ECONO RANGES

BOTH RANGES OF THE MODE DIAL OPERATE IDENTICALLY, WITH THE SINGULAR EXPECTATION THAT THE EXTRA COOLING AVAILABLE FROM THE AC COMPRESSOR IS NOT AVAILABLE WHILE THE MODE DIAL IS IN THE ECONO RANGE. WHEN THE MODE DIAL MOVES FROM ONE MODE RANGE TO THE OTHER, THE BLOWER SPEED CHANGES FOR AN INSTANT AND RETURNS TO NORMAL. THIS BEHAVIOR IS USED TO INDICATE THAT THE OPERATOR HAS MOVED INTO THE ALTERNATE MODE RANGE.
THERMOSTAT ADJUSTMENT

AIR CONDITIONING ADJUSTMENTS:

When the mode dial is in the AC range, the compressor will automatically cycle on and off so as to make the air temperature correspond with the position of the thermostat dial. At the upper-most end of the thermostat dial, the cooling effort can be so intense that under high humidity conditions, ice may form on the evaporator coil. This condition known as icing up or ice up, can be recognized when the system seems to be operating properly, but the flow of cold air is greatly diminished. To counter this effect, simply back the thermostat dial away from its existing position slightly, thereby permitting the ice from the high humidity to melt and not re-occur.
### Troubleshooting Information

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blower stays on high, no mode functions</td>
<td>Be sure control head connector is properly installed</td>
</tr>
<tr>
<td>Partial function of control head. (Some functions work)</td>
<td>Check for damage to control harness</td>
</tr>
<tr>
<td>Compressor does not turn on. (All other functions work)</td>
<td>Check for proper charge</td>
</tr>
<tr>
<td>No function at all</td>
<td>Be sure A/C dial is in A/C range</td>
</tr>
<tr>
<td></td>
<td>Check main power lead after circuit breaker</td>
</tr>
<tr>
<td></td>
<td>Check for power with ignition on at purple wire</td>
</tr>
<tr>
<td></td>
<td>Check all grounds</td>
</tr>
</tbody>
</table>
DEFROST DUCT TEMPLATE

☐ CUT OUT TEMPLATE AND TAPE TOGETHER AS SHOWN BELOW.

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE

ALIGN TEMPLATE WITH BOTTOM OF THE DEFROST DUCT

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE

TAPE

OVER LAP SHADED PORTIONS AND TAPE TOGETHER

CUT ALONG DOTTED LINE

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE

ALIGN TEMPLATE WITH BOTTOM OF THE DEFROST DUCT

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE

CUT ALONG DOTTED LINE

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE

MARK OR Scribe ALONG THIS EDGE OF TEMPLATE
FIREWALL MODIFICATION TEMPLATE

DO NOT CUT
ALIGN WITH EDGE
OF FIREWALL OPENING

REMOVE
SHADE PORTION

CUT ALONG DOTTED LINE

69 CORVETTE
w/o FACTORY AIR
FIREWALL
TEMPLATE
**EVAPORATOR KIT PACKING LIST**

<table>
<thead>
<tr>
<th>No.</th>
<th>QTY.</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
<td>761174-VCE</td>
<td>1968-76 CORVETTE w/o AC EVAP. SUBCASE</td>
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<tr>
<td>2.</td>
<td>1</td>
<td>781174-PCN</td>
<td>1968-76 CORVETTE w/o AC ACC. KIT</td>
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</table>

**ACCESSORY KIT**

**781174-PCN**
## ACCESSORY KIT PACKING LIST

<table>
<thead>
<tr>
<th>No.</th>
<th>QTY.</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2</td>
<td>06200-VUE</td>
<td>2&quot; DUCT HOSE</td>
</tr>
<tr>
<td>2.</td>
<td>10</td>
<td>06250-VUE</td>
<td>2 ½&quot; DUCT HOSE</td>
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<tr>
<td>3.</td>
<td>2</td>
<td>625070-CCE</td>
<td>1968-76 CORVETTE O.E.M. DS/PS INNER HA</td>
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<tr>
<td>4.</td>
<td>1</td>
<td>625067-CCA</td>
<td>1968-76 CORVETTE CENTER LOUVER BEZEL w/o AC ASM</td>
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<tr>
<td>5.</td>
<td>6</td>
<td>65980-VUE</td>
<td>&quot;S&quot; CLIP</td>
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<tr>
<td>6.</td>
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<td>625073-CCE</td>
<td>1968-76 CORVETTE DEF DUCT HA</td>
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<td>7.</td>
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<td>627069-CCE</td>
<td>1968-76 CORVETTE FIREWALL COVER</td>
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<td>8.</td>
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<td>627070-CCE</td>
<td>1968-76 CORVETTE FIREWALL COVER CAP</td>
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<tr>
<td>9.</td>
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<td>33137-VUI</td>
<td>LARGE GROMMET</td>
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<td>10.</td>
<td>1</td>
<td>33135-VUI</td>
<td>1 1/4&quot; x 1&quot; w/ 3/8&quot; HOLE GROMMET</td>
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<tr>
<td>11.</td>
<td>2</td>
<td>625071-CCE</td>
<td>1968-76 CORVETTE INSIDE FRESH AIR CAP</td>
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<td>12.</td>
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<td>634173-PCA</td>
<td>1968-76 CORVETTE IK KIT</td>
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<tr>
<td>13.</td>
<td>1</td>
<td>09155-PCA</td>
<td>HARDLINE KIT</td>
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<td>14.</td>
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<td>644173-PCA</td>
<td>1968-76 CORVETTE EVAP BRKT KIT</td>
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<tr>
<td>15.</td>
<td>1</td>
<td>640164-PCA</td>
<td>FRESH AIR CAP ASM</td>
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<tr>
<td>16.</td>
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<td>473174-PCA</td>
<td>1968-76 CORVETTE CNTRL PNL CONVERSION KIT</td>
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<tr>
<td>17.</td>
<td>1</td>
<td>231055-PCA</td>
<td>GEN IV WIRING KIT</td>
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<tr>
<td>18.</td>
<td>10</td>
<td>204001-TVR</td>
<td>VELCRO STRIP</td>
</tr>
<tr>
<td>19.</td>
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<td>625079-CCE</td>
<td>1968-76 CORVETTE O.E.M. PS OUTER HA</td>
</tr>
<tr>
<td>20.</td>
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<td>625080-CCE</td>
<td>1968-76 CORVETTE O.E.M DS OUTER HA</td>
</tr>
<tr>
<td>21.</td>
<td>1</td>
<td>200915-AUR</td>
<td>4mil 9 x 15 POLYETHYLENE SHEET</td>
</tr>
</tbody>
</table>

**GEN IV 1968-76 CORVETTE w/o AC**

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**ACCESSORY KIT 781174-PCN**

[Diagram of Corvette parts]