Installation Instructions for
1966-67 CHEVY NOVA
(55066-VCZ-A)
IMPORTANT NOTICE—PLEASE READ

FOR MAXIMUM SYSTEM PERFORMANCE
VINTAGE AIR RECOMMENDS THE FOLLOWING:

RADIATOR - 70069-VCR
SHROUD - 32069-VCF

SAFETY SWITCHES:

YOUR NEW VINTAGE AIR SYSTEM INCLUDES A BINARY COMPRESSOR SAFETY SWITCH. A BINARY SWITCH (PART # 24679-VUS) DISENGAGES THE COMPRESSOR CLUTCH IN CASE OF EXTREME LOW PRESSURE CONDITION (REFRIGERANT LOSS) OR EXCESSIVELY HIGH HEAD PRESSURE (380 lb.). TO PREVENT COMPRESSOR DAMAGE OR HOSE RUPTURE. A TRINARY SWITCH (PART # 24678) COMBINES HI/LO PRESSURE PROTECTION WITH AN ELECTRIC FAN OPERATION SIGNAL AT 220 lbs. COMPRESSOR SAFETY SWITCHES ARE EXTREMELY IMPORTANT SINCE AN A/C SYSTEM RELIES ON REFREIGERANT 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 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
166/67 NOVA

BEFORE STARTING THE INSTALLATION, CHECK THE FUNCTION OF THE VEHICLES (HORN LIGHTS, ETC.) FOR PROPER OPERATIONS. STUDY THE INSTRUCTIONS, ILLUSTRATIONS AND DIAGRAMS. DISCONNECT THE BATTERY.

PASSenger COMPARTMENT

REMOVE:

1. Glove box.
2. Glove box door.
5. fresh air duct (discard).

As Figure 1 shows.
**PASSENGER COMPARTMENT**

**CABLES INSTALLATION**

1. Remove and discard OEM cables on "TEMPERATURE" and "DEFROSTER" arms and install new cables provided as Figure 2 shows.

2. Remove and discard cable for "AIR FAN BLOWER".

3. Attach new cables provided at evaporator as Figure 2A and 2B shows.

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**Figure 2**

- **TEMPERATURE CABLE** (27-1/4")
- **DEFROSTER CABLE** (19-1/2")
- **HEAT/COOL DOOR CABLE**
- **MICROSWITCH BRACKET**
- **EVAPORATOR BRACKET**

**Figure 2A**

- **TEMPERATURE ARM**
- **DEFROSTER ARM**
- **INSTALL NEW CABLES PROVIDED**
- **BLOWER SWITCH**
- **CONTROL PANEL**

**Figure 2B**

- **HEAT/DEFROST DOOR CABLE**
- **EVAPORATOR**
PASSenger Compartment

Evaporator Installation

1. Install new fresh air cap provided with (4) OEM screws as Figure 3 shows.

2. Drill (3) holes in firewall indentions around blower motor hole to mount plastic header cover using 3/16" drill bit and #8 screws as Figure 3A shows.

3. To install new defroster ducts provided, clip to OEM defroster vents as Figure 3B shows.
4. Raise the evaporator unit up behind dash and align blower housing bracket hole with OEM hole on dash as Figure 4A shows.

5. Align unit left bracket hole to OEM hole on firewall, as Figure 4B shows.

6. Underhood, align jack nut in evaporator unit with OEM hole in firewall, install 1/4" x 1" bolt from engine side as Figure 4C shows.
VENTS INSTALLATION (FIGURE 5)

1. Install driver side louver with duct hose attached as side view shows in Figure 5A.
2. Install passenger side louver with duct hose attached on the bottom of evaporator blower as Figure 5B shows.
3. Install center louver with duct hose attached as side view shows in Figure 5C.
4. Route the (2") duct hose from evaporator to defroster ducts (Driver side 20", passenger side 18").
5. Install and route the (2-1/2") duct hoses from all louvers on dash and kick panels to evaporator as Figure 5 shows.
   - (2-1/2") Duct hose from center louver to evaporator 10"
   - (2-1/2") Duct hose from driver side louver to evaporator 36"
   - (2-1/2") Duct hose from passenger side louver to evaporator 39"
6. Attach wiring at unit as wiring diagram shows on page 12.
7. Re-install the OEM glove box.
8. Re-attach all items removed at this time.
ENGINE COMPARTMENT

1. Install compressor with mounting bracket, refer to separate instructions in bracket kit.

CONDENSER INSTALLATION (6 Cyl. CARS ONLY) PAGE 11.
CONDENSER INSTALLATION (V-8 CARS Only)

1. Remove (8) OEM radiator and radiator support mounting bolts. Lean radiator forward and remove radiator support as Figure 6 shows.

![Figure 6]

2. Drill (2) 1-1/4" diam. holes in side of radiator support as Figure 7 and 7A shows.

3. Install (2) rubber grommets in holes as Figure 7 shows.

![Figure 7A]

![Figure 7]
ENGINE COMPARTMENT

4. Install #6 and #8 A/C hoses through radiator support, attach #8 to condenser and #6 to the receiver drier, then tighten as Figure 8 shows.

5. Slide radiator support, condenser assembly with A/C hoses between radiator and bulkhead as Figure 9 shows.
6. Direct #6 and #8 A/C hoses between battery bottom support and fenderwall as Figure 9A shows.
7. Attach the radiator support assembly to bulkhead.
8. Align radiator and condenser brackets to OEM radiator bolts and thighten.
HOSE KIT INSTRUCTIONS

1. Install heater valve in heater hoses from intake manifold as close to firewall as possible as Figure 10A shows.
2. Install heater hoses as Figure 10A shows.

REFRIGERANT HOSES (FIGURE 10)

1. Lubricate and attach $10 suction hose to the compressor (1/2" I.D. hose 31-1/2" inches long, straight female 0'Ring fitting on firewall end and 90° female O-ring fitting on compressor end).
2. Lubricate and attach $8 discharge hose to the compressor (13/32" I.D. hose 33" inches long with 45° female O-ring fitting on compressor end).
3. Lubricate and attach $6 liquid hose from the receiver drier to the evaporator (5/16" I.D. hose 42-1/2" inches long with straight female O'Ring fitting on evaporator end).
4. Attach vacuum line to vacuum source on intake manifold as Figure 10A shows.
5. Your system is ready to evacuate and charge. This should be done only by a certified air conditioning technician.
66-67 NOVA w/DRIER 6 CYL. MOD.

#6 LIQUID LINE TO EVAPORATOR

#8 DISCHARGE LINE FROM COMPRESSOR

CORE SUPPORT

MOUNT BRACKETS TO REAR OF CONDENSER IN THE 1ST AND 3RD HOLES OF THE CONDENSER

$6 LIQUID LINE

$10 SUCTION HOSE

COMPRESSOR
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14. EVAPORATOR KIT PACKING LIST
# Accessory Kit Packing List

**1966 - 67 Chevy Nova**

<table>
<thead>
<tr>
<th>No.</th>
<th>QTY.</th>
<th>PART No.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>49863-VCI</td>
<td>Fresh Air Cover</td>
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<tr>
<td>2</td>
<td>1</td>
<td>62107-VCE</td>
<td>Firewall Cover</td>
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<td>3</td>
<td>2</td>
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<td>Grommet 1 1/4&quot; o.d. X 11/16&quot; i.d.</td>
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<td>1</td>
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<td>Large Grommet</td>
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<tr>
<td>5</td>
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<td>33139-VUI</td>
<td>Grommet 1 1/4&quot; o.d. X 3/8&quot; i.d.</td>
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<td>Louver Kit</td>
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<td>Defrost Kit</td>
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<tr>
<td>8</td>
<td>4</td>
<td>06200-VUE</td>
<td>2&quot; Duct Hose</td>
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<td>9</td>
<td>7</td>
<td>06250-VUE</td>
<td>2 1/2&quot; Duct Hose</td>
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<td>63290-VCE</td>
<td>Drain Kit</td>
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<td>1</td>
<td>46440-VCH</td>
<td>Cable Kit</td>
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**Checked by:**

**Packed by:**

**Date:**

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[Diagram of components labeled 1 to 11]
# 1966-67 CHEVY NOVA

## EVAPORATOR KIT PACKING LIST

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<td>1</td>
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<td>66-67 NOVA SUB-CASE</td>
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<tr>
<td>2</td>
<td>1</td>
<td>78171-PCN</td>
<td>ACCESSORY KIT</td>
</tr>
</tbody>
</table>

**EVAPORATOR KIT**

55066-VCZ-A

**CHECKED BY:**

**Packed By:**

**DATE:**

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[Diagram of 1966-67 CHEVY NOVA evaporator kit parts]

1. [Image 1]

2. [Image 2]

**ACCESSORY KIT**

78171-PCN