

Slimline

Cool Only (113011) (114011)



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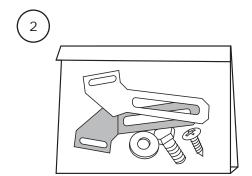


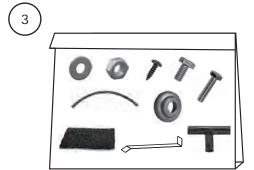
Packing List: Evaporator Kit (113011)(114011)

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No.	Qty.	Part No.	Description	
1.	1	553270	Evaporator Subcase Cool Only with Standard Louvers	
		554270	Evaporator Subcase Cool Only with Black Louvers	
2.	1	64143-VUE	Bracket Kit, Evaporator Front	
3.	1	633003	Installation Kit	

^{**} 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.







NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.



Important Notice—Please Read

For Maximum System Performance, Vintage Air Recommends the Following:

NOTE: Vintage Air systems are designed to operate with R134a refrigerant only. Use of any other refrigerant could damage your A/C system and/or vehicle, and possibly cause a fire, in addition to potentially voiding the warranties of the A/C system and its components.

Refrigerant Capacities:

Vintage Air System: 1.8 lbs. (28.8 oz.) or 816 grams of **R134a**, charged by weight with a quality charging station or scale. **NOTE:** Use of the proper type and amount of refrigerant is critical to system operation and performance.

Other Systems: Consult manufacturer's guidelines.

Lubricant Capacities:

New Vintage Air-Supplied Sanden Compressor: No additional oil needed (Compressor is shipped with proper oil charge).

All Other Compressors: Consult manufacturer (Some compressors are shipped dry and will need oil added).

Safety Switches

Your Vintage Air system is equipped with a binary pressure safety switch. A binary switch disengages the compressor clutch in cases of extreme low pressure conditions (refrigerant loss) or excessively high head pressure (406 PSI) to prevent compressor damage or hose rupture. A trinary switch combines Hi/Lo pressure protection with an electric fan operation signal at 254 PSI, and should be substituted for use with electric fans. Compressor safety switches are extremely important since an A/C system relies on refrigerant to circulate lubricant.

Service Info:

Protect Your Investment: Prior to assembly, it is critical that the compressor, evaporator, A/C hoses and fittings, hardlines, condenser and receiver/drier remain capped. Removing caps prior to assembly will allow moisture, insects and debris into the components, possibly leading to reduced performance and/or premature failure of your A/C system. This is especially important with the receiver/drier.

Additionally, when caps are removed for assembly, **BE CAREFUL!** Some components are shipped under pressure with dry nitrogen.

Evacuate the System for 35-45 Minutes: Ensure that system components (Drier, compressor, evaporator and condenser) are 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.

Bolts Passing Through Cowl and/or Firewall:

To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

Heater Hose (not included with this kit):

Heater hose may be purchased from Vintage Air (Part#31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



Planning Overview

Every vehicle is a little different, depending on the:

- 1. Type of vehicle/engine and location of engine.
- 2. Type of air conditioning equipment used.
- 3. Owner's preferences.

There are many factors that go into making each air conditioning installation different. Usually, all of the above decisions are made before any consideration is given to the air conditioning installation. The A/C system is then tailored to fit your particular application.

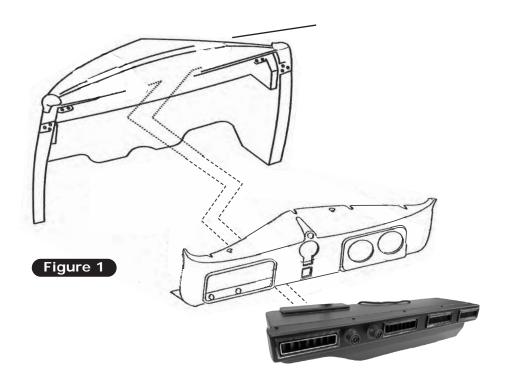
The mounting location of the evaporator unit is determined in part by the space available for the hose routing. The components used in the hose routing process (i.e. bulkhead plates, fitting and grommets, etc.) will also influence the location of the evaporator unit. When planning your hose routing, you must install the major component parts. Mount the compressor, condenser and drier. The evaporator must be temporarily held in position under the dash. Final mounting of the evaporator to the firewall should not be done until you have verified that all hoses attaching to the evaporator will exit the firewall and/or kick panel as planned. The hoses must be run exactly the way they will be when finished, before cutting them to length.

The Vintage Air Slimline unit was designed for street rods, custom cars and trucks. The evaporator unit is designed to mount behind the dash.

Read the installation instructions completely, and familiarize yourself with all the parts and illustrations.

The installation of this unit varies, according to the body manufacturer or modifications to the original body. The cowl vent may remain operational. Take your time, and double check before drilling or cutting.

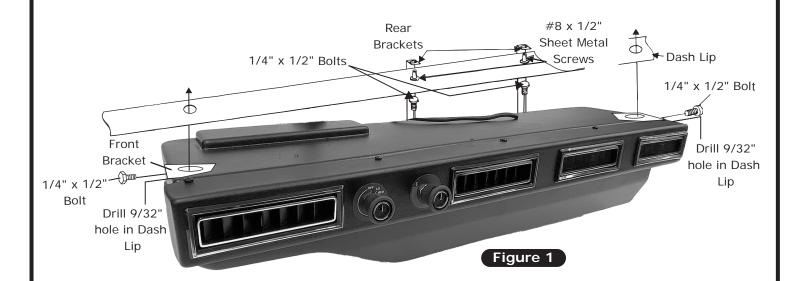
Before beginning, remove the cowl vent handle and glove box to ease installation. If the dash is easily removable, remove it now. Check for, and fill in any holes in the firewall and floor. Insulate and seal the firewall, floor, door panels and headliner to reduce the amount of heat entering the vehicle.

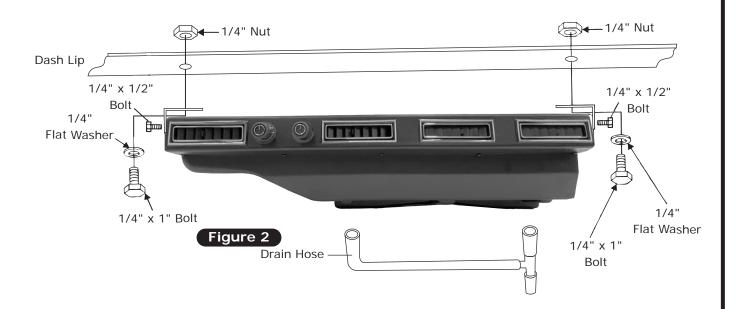




Evaporator Installation

- 1. Secure the evaporator brackets to the evaporator unit (See Figure 1, below). **NOTE: Evaporator brackets** can be installed facing in or out, depending on space and installer's preference.
- 2. Position the evaporator assembly under the dash. Mark and drill (2) 9/32" diameter holes under the lip of the dash.
- 3. Secure the front brackets to the dash using $1/4" \times 1"$ bolts, washers and nuts provided (See Figure 1, below).
- **4**. Secure the rear brackets to the cowl or firewall using (2) $\#8 \times 1/2$ " sheet metal screws.
- 5. Attach the drain hose (See Figure 2, below) and drill a 9/16" diameter hole in the firewall, 1" below the bottom of the evaporator assembly.





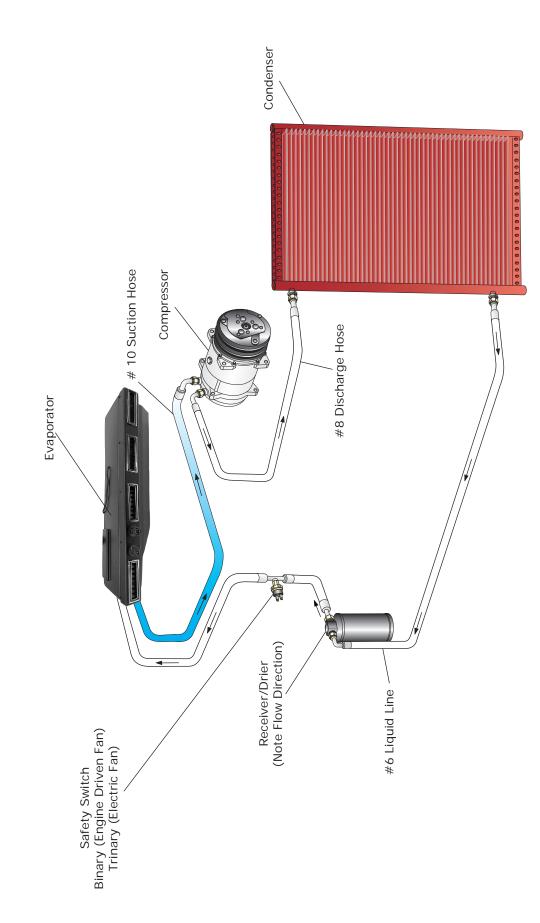


Evaporator Installation (Cont.)

- **6.** Push the 5/16" I.D. hose onto the straight #6 fitting (See Hose Routing Installation, Page 8). Install the fitting onto the expansion valve (finger tight). Push the 1/2" I.D. hose onto the straight #10 fitting, and install the fitting onto the #10 line on the evaporator unit (See Hose Routing Installation, Page 8).
- 7. At this time, try to determine where you want your lines to go through the firewall. Move the hoses to that point. Hold the fittings up to their respective hoses, and determine if the hoses will conform to the location for the bulkhead fittings or optional bulkhead plate. The 1/2" hose is hard to bend at a sharp angle, and the fittings take up a certain amount of space. NOTE: Before you drill holes in your firewall, make sure that you can make the hoses fit where you have planned. The engine compartment appearance is a consideration when choosing this location.
- **8.** When you have decided where you want to place your bulkhead fittings, mark these points with a grease pencil, and make a template from the inside location where the holes will be cut. Using the template, locate the same points on the outside of the firewall. Mark these points with a grease pencil.
- **9.** Determine the best location for the drier that will allow adequate room for the hose and fittings that connect the drier to the bulkhead fitting.
- 10. Mount the drier. NOTE: Keep the drier capped as much as possible. If you must screw the fitting to the drier, tape it closed. The drier is usually mounted where you have room for it. Just remember to mount it in the coolest spot possible and vertically so the sight glass is directly on top. Do not mount next to the exhaust manifold. It can also be mounted inside of the vehicle.
- **11.** At this point, cut holes for the bulkhead fittings, and install them. Using the hose routing illustration as a guide, route the remaining A/C lines, and cut them to length.
- **12.** At this time, you should have the refrigeration hoses cut to their proper length. **Pay close attention to the orientation of any hose with two angled fittings.** Any hose with two angle fittings must be marked from the hose to the fittings to assure they will remain in the position after crimping. The rubber hose is only capable of a minimal amount of twist to aid alignment.
- **13.** Remove hoses and crimp ends. If you do not have access to the proper equipment, Vintage Air recommends taking them to a qualified A/C service center for crimping (See crimping instructions supplied with the hose kit).
- 14. With the evaporator trial fit complete, remove the unit and lower into the vehicle.
- **15**. After crimping the hoses, locate the #6 A/C hose with the straight fitting. Lubricate a #6 O-ring and the threads on the fitting, then install it onto the expansion valve. Tighten carefully. Refer to Figures 1 and 1a, Page 9.
- **16.** Locate the #10 A/C hose with the straight fitting. Lubricate a #10 O-ring and the threads on the fitting, then install it onto the #10 line of the evaporator. Tighten carefully. Refer to Figures 1 and 1a, Page 9.
- 17. Wrap the #10 fitting with press tape, and cover all exposed metal surfaces. NOTE: Do not wrap the #6 A/C hose, fitting or the heater core tubes. See Figure 1, Page 9.

Typical Hose Routing Diagram



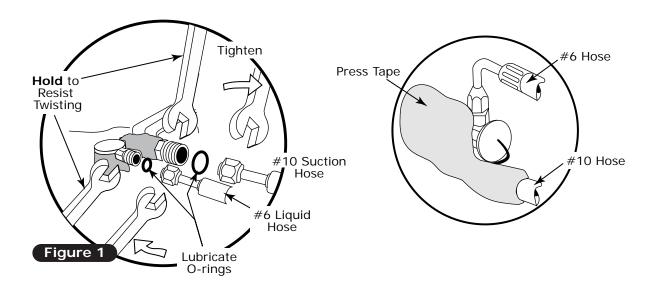


Direction of refrigerant flow indicated by arrows.

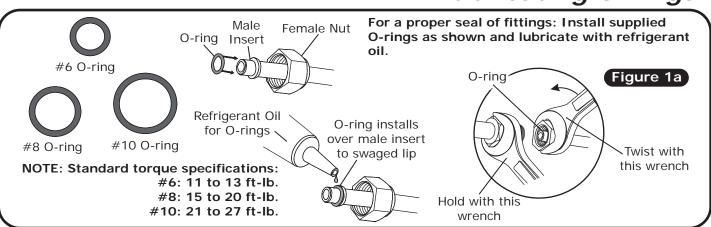


O-ring/Fitting Instructions

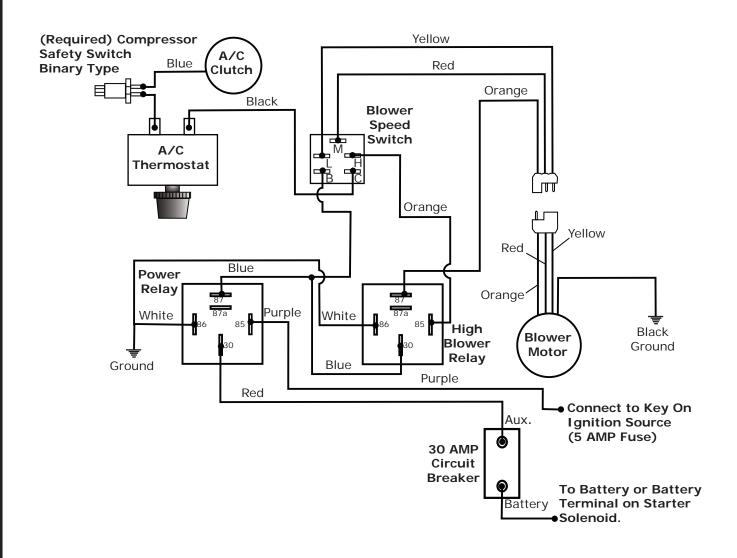
- 1. Route the heater hoses (Refer to Heater Hose Routing instructions, Page 10).
- 2. Make electrical connections, according to the diagram furnished on Page 11. NOTE: The red 12GA wire with the 30 Amp circuit breaker should be connected to a 12 volt power source of at least 12GA wire. Connect the molded plug with the red, yellow and orange wires to the corresponding plug from the blower motor. The single black wire from the blower motor must be grounded. The blue clutch wire runs from the thermostat to the compressor safety switch, then from the safety switch to the compressor. Be careful to ensure that this wire is not pinched or in a position to rub on a sharp edge as it goes through the firewall.



Lubricating O-rings









Thermostat Adjustment

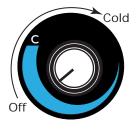


Operation of Controls

- 1. A/C thermostat knob controls the evaporator coil temperature. Counterclockwise is off. Full clockwise is maximum cold (28°).
- 2. For A/C operation, rotate the thermostat clockwise to its stop, then back off slightly (1/8 turn) to prevent coil freeze-up.



Blower Speed



A/C Thermostat

Adjusting A/C Thermostat

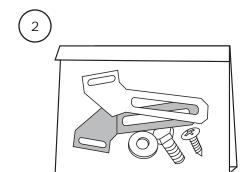
- 1. **Symptom**: The A/C works well at first then quits cooling. The airflow from the vents is low, and the compressor clutch cycles infrequently.
 - **Solution:** The thermostat is set too cold and the evaporator is "icing up" and restricting airflow. **Allow the ice to melt** and set the thermostat warmer (counterclockwise) 1/8 of a turn each adjustment until the symptoms diminish.
- 2. Symptom: The A/C never gets cold and the compressor clutch cycles frequently.
 - **Solution:** The thermostat is too warm. Set the thermostat colder (clockwise) 1/8 of a turn each adjustment until the desired air temperature is reached. **Avoid setting the thermostat too cold.**

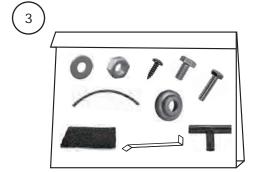


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			Checked By: Packed By: Date:	







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