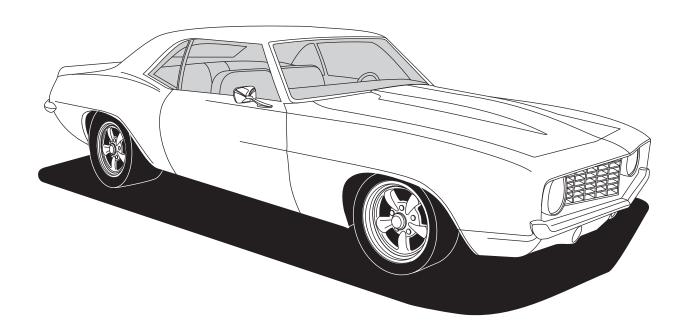


## 1969 Chevrolet Camaro

Condenser Kit with Drier (021169)



**18865 Goll St. San Antonio, TX 78266** 

Phone: 210-654-7171 Fax: 210-654-3113 www.vintageair.com



## **Table of Contents**

Thank you for purchasing this condenser kit from Vintage Air. When installing these components as part of a complete SureFit™ system, Vintage Air recommends working from front to back on the vehicle, installing the condenser kit, hose kit, and compressor first, followed by the wiring, evaporator, and finally the control panel.

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## **Additional Info: Please Read Before Beginning**

In their original configuration, on 1969 Chevrolet Camaros, the compressor mounts on the driver side. However, due to the variety of drive systems available, in some configurations, the compressor may be mounted on the passenger side.

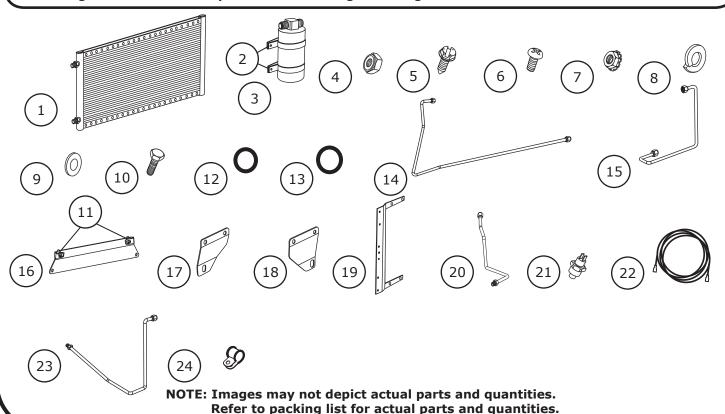
This condenser kit is designed for a driver-side-mounted compressor. For vehicles equipped with a passenger-side-mounted compressor, this kit may be used, but it will be necessary to purchase an alternate #8 Condenser/Core Hardline (Part Number 35367-VCG) and a modified hose kit.



# Packing List: Condenser Kit (021169)

No.	Qty.	Part No.	Description
1.	1	03766-VUC	Condenser, 14" x 22" Parallel Flow
2.	2	07113-VUB	Drier Clamp
3.	1	07321-VUC	Drier
4.	1	18148-VUB	Nut, 5/16"
5.	3	18247-VUB	Screw, #10 x 1/2", Sheet Metal
6.	10	18249-VUB	Screw, 10-24 x 3/8", Pan Head
7.	10	18260-VUB	Nut, 10-24, with Star Washer
8.	1	18610-VUB	Lock Washer, 5/16"
9.	2	18611-VUB	Washer, 5/16" Flat
10.	1	18310-VUB	Bolt, 5/16-18 x 1 ½"
11.	2	18977-VUB	U-nut, 5/16"
12.	3	33857-VUF	O-ring, #6
13.	3	33858-VUF	O-ring, #8
14.	1	09169-FFD	Hardline, #8 Condenser/Core
15.	1	35368-VCG	Hardline, #6 Condenser/Drier
16.	1	64268-VCB	Bracket, Condenser, Top
17.	1	64368-VCB	Bracket, Condenser, Bottom Right
18.	1	64468-VCB	Bracket, Condenser, Bottom Left
19.	1	65998-VUB	Bracket, Drier
20.	1	09170-FCD	Hardline, #8 Condenser/Fenderwell
21.	1	11079-VUS	Binary Switch, Male
22.	1	23127-VUW	Compressor Lead
23.	1	35067-VCG	Hardline, #6 Drier/Fenderwell
24.	3	31603-VUD	Adel Clamp, #4

<sup>\*\*</sup> 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.





## **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. (1 lb., 12 oz.) 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 remained 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.

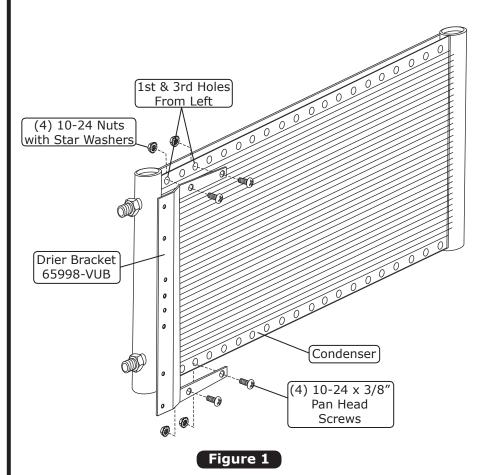
### Heater Hose (Not Included With This Kit):

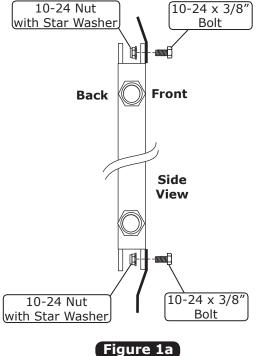
Heater hose may be purchased from Vintage Air (Part# 31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



### **Drier Bracket Installation**

1. On a workbench, install the drier mounting bracket onto the condenser using (4) 10-24 x 3/8" pan head screws and (4) 10-24 nuts with star washers (See Figures 1 & 1a, below). NOTE: The bracket mounts through the 1st and 3rd holes from the left side of the condenser.

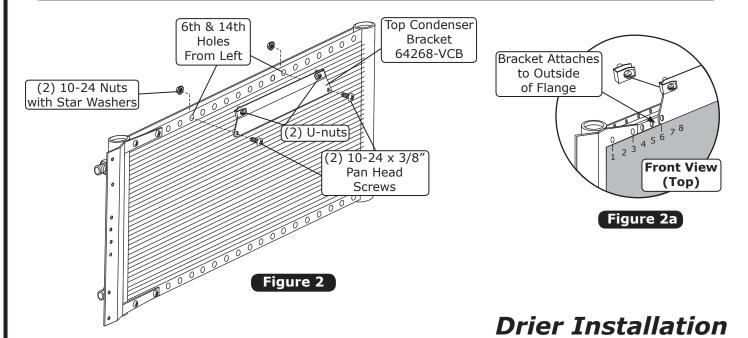






## Top Bracket Installation

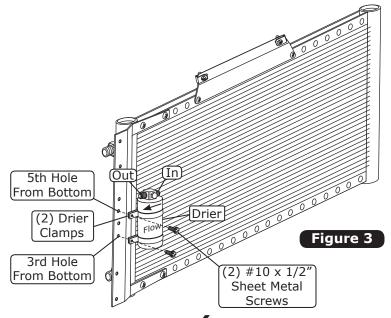
- 1. Install (2) U-nuts onto the top condenser mounting bracket as shown in Figure 2, below.
- 2. Install the top mounting bracket onto the condenser using (2) 10-24 x 3/8" pan head screws and (2) 10-24 nuts with star washers (See Figures 2 & 2a, below). **NOTE: The bracket mounts to the outside of the flange through the 6th and 14th holes from the left side of the condenser.**



NOTE: Do not remove the caps from the drier. The drier contains a desiccant that will quickly absorb moisture from the air, causing it to lose effectiveness. For this reason, Vintage Air recommends that the drier remains capped until the installer is ready to evacuate the system.

#### Perform the Following:

- 1. Install the drier clamps onto the drier.
- 2. Secure the drier to the drier bracket using (2) #10 x 1/2" sheet metal screws through the 3rd and 5th holes from the bottom of the bracket as shown in Figure 3, below. NOTE: Refrigerant flow through the drier is IN from condenser, OUT to evaporator.

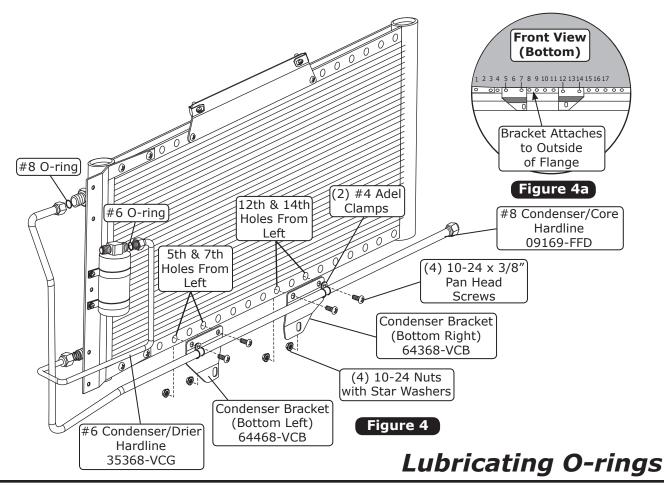


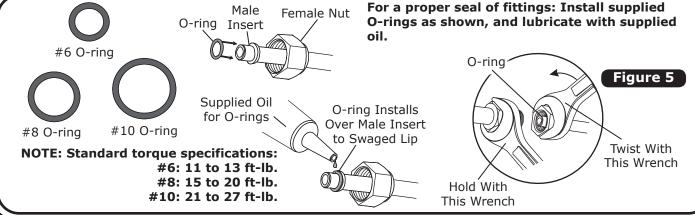


## Hardline and Bottom Bracket Installation

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- **1.** Lubricate (2) #6 O-rings, and install the #6 condenser/drier hardline as shown in Figures 4 & 5, below. Tighten fittings as shown in Figure 5, below.
- 2. Lubricate a #8 O-ring, and install the #8 condenser/core hardline as shown in Figures 4 & 5, below. Tighten fittings as shown in Figure 5, below. **NOTE: Omit this step for passenger-side-mounted compressors.**
- 3. Using (2) #4 Adel clamps, (4) 10-24 x 3/8" pan head screws and (4) 10-24 nuts with star washers, install the (2) bottom condenser mounting brackets onto the condenser as shown in Figures 4 & 4a, below. NOTE: The brackets mount to the outside of the flange. The left bracket mounts through the 5th and 7th holes from the left side of the condenser. The right bracket mounts through the 12th and 14th holes from the left side of the condenser. Adel clamps will not be used with passenger-side-mounted compressors.

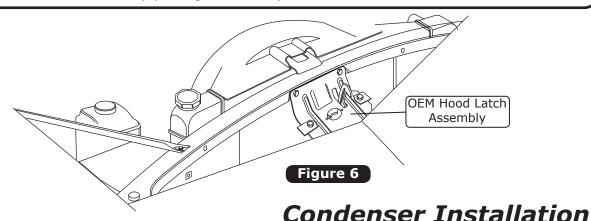




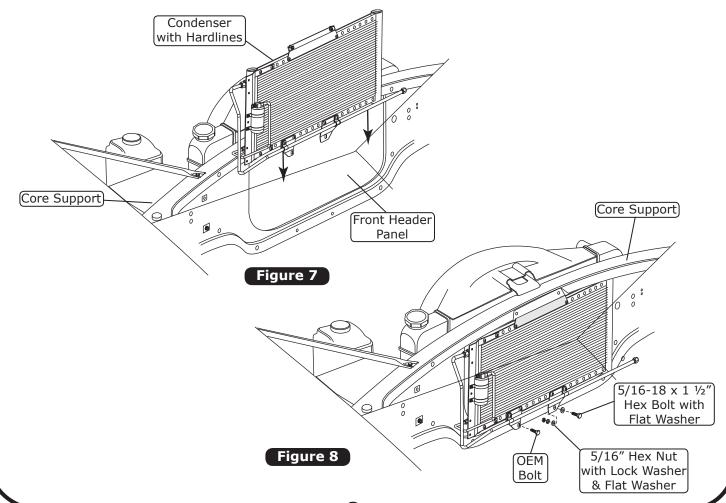


## Hood Latch Assembly

1. Remove the OEM hood latch assembly (See Figure 6, below).



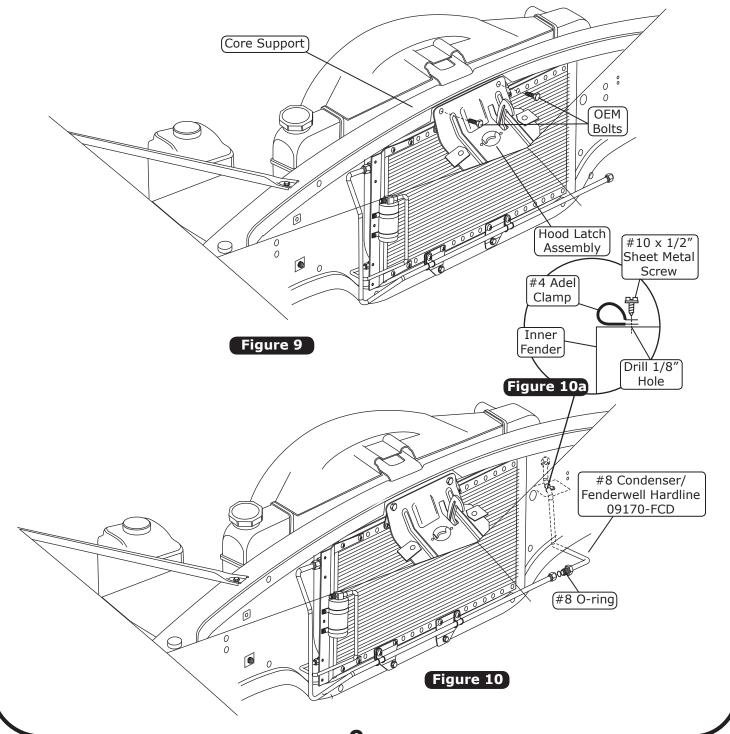
- Lower the condenser/hardline assembly between the front side of the core support and the front header panel (See Figures 7 & 8, below). NOTE: The top mounting bracket attaches to the back side of the core support.
- **2.** Secure the bottom driver side of the condenser to the core support using a  $5/16-18 \times 1 \frac{1}{2}$ " hex bolt, a flat washer, a lock washer, and a 5/16" hex nut as shown in Figure 8, below.
- **3.** Secure the bottom passenger side of the condenser to the core support using an OEM bolt (See Figure 8, below).





## Condenser Installation (Cont.)

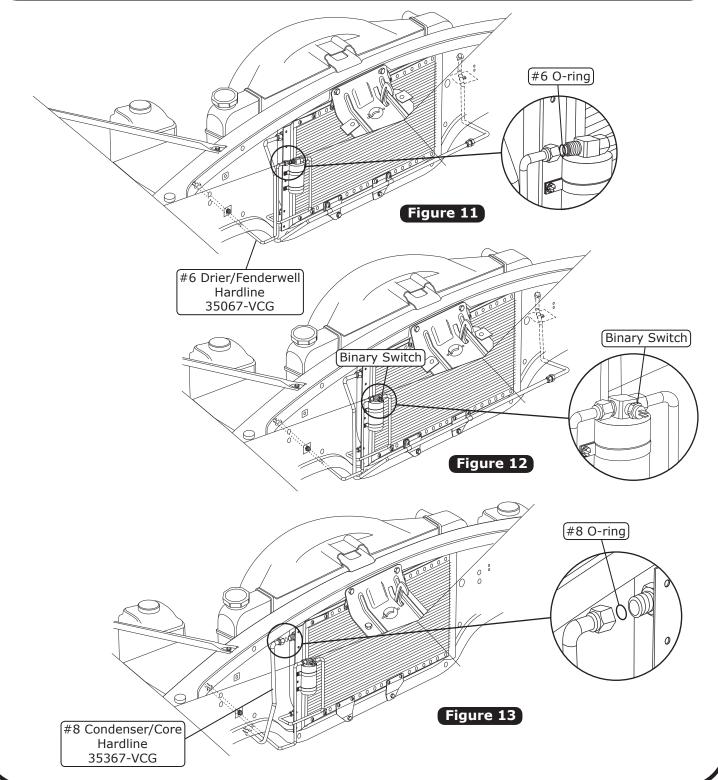
- 1. Reinstall the hood latch assembly using the OEM bolts. Install the OEM bolts through the hood latch assembly, through the core support, and into the U-nuts on the top condenser bracket (See Figure 9, below).
- 2. Lubricate a #8 O-ring, and install the #8 condenser/fenderwell hardline as shown in Figure 5, Page 7, and Figure 10, below. Tighten fittings as shown in Figure 5, Page 7. NOTE: Omit this step for passenger-side-mounted compressors.
- 3. Install a #4 Adel clamp onto the #8 condenser/fenderwell hardline. Using the Adel clamp as a guide, drill a 1/8" hole into the inner fenderwell. Secure using a #10 x 1/2" sheet metal screw (See Figure 10a, below). NOTE: Omit this step for passenger-side-mounted compressors.





## Condenser Installation (Final)

- 1. Lubricate a #6 O-ring, and install the #6 drier/fenderwell hardline as shown in Figure 5, Page 7, and Figure 11, below. Tighten fittings as shown in Figure 5, Page 7.
- 2. Install the binary switch onto the drier as shown in Figure 12, below.
- **3.** For vehicles with passenger-side-mounted compressors, lubricate a #8 O-ring, and install the #8 condenser/core hardline (35367-VCG) as shown in Figure 13, below.

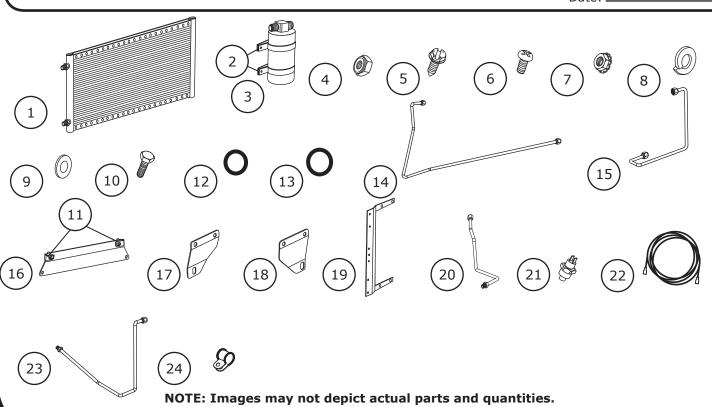




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9.	2	18611-VUB	Washer, 5/16" Flat	
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21.	1	11079-VUS	Binary Switch, Male	
22.	1	23127-VUW	Compressor Lead	
23.	1	35067-VCG	Hardline, #6 Drier/Fenderwell	
24.	3	31603-VUD	Adel Clamp, #4	

Checked By: \_\_\_\_\_\_\_
Packed By: \_\_\_\_\_\_
Date: \_\_\_\_\_



Refer to packing list for actual parts and quantities.