



# 1986-94 Chevrolet S-10 and GMC S-15 Pickup

Condenser Kit *with* Drier  
(021086)



18865 Goll St. San Antonio, TX 78266  
Phone: 800-862-6658  
Sales: [sales@vintageair.com](mailto:sales@vintageair.com)  
Tech Support: [tech@vintageair.com](mailto:tech@vintageair.com)  
[www.vintageair.com](http://www.vintageair.com)



[www.vintageair.com](http://www.vintageair.com)

# Table of Contents

Cover.....	1
Table of Content/Parts Disclaimer.....	2
Important Notice.....	3
Core Support Measurements.....	4
Engine Compartment Disassembly.....	5
Engine Compartment Disassembly (Cont.).....	6
Condenser Bracket Installation.....	7
Condenser Bracket Installation (Cont.).....	8
Condenser Bracket Installation (Final).....	9
Condenser Installation.....	10
Condenser Installation (Cont.).....	11
Lubricating O-rings and Fitting Torque Specs, Drier and Hardline Installation.....	12
Drier and Hardline Installation (Cont.), Final Steps.....	13
Packing List.....	14

## Parts Disclaimer: Please Read

**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. Packing list located on last page of instructions.**



www.vintageair.com

## 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):

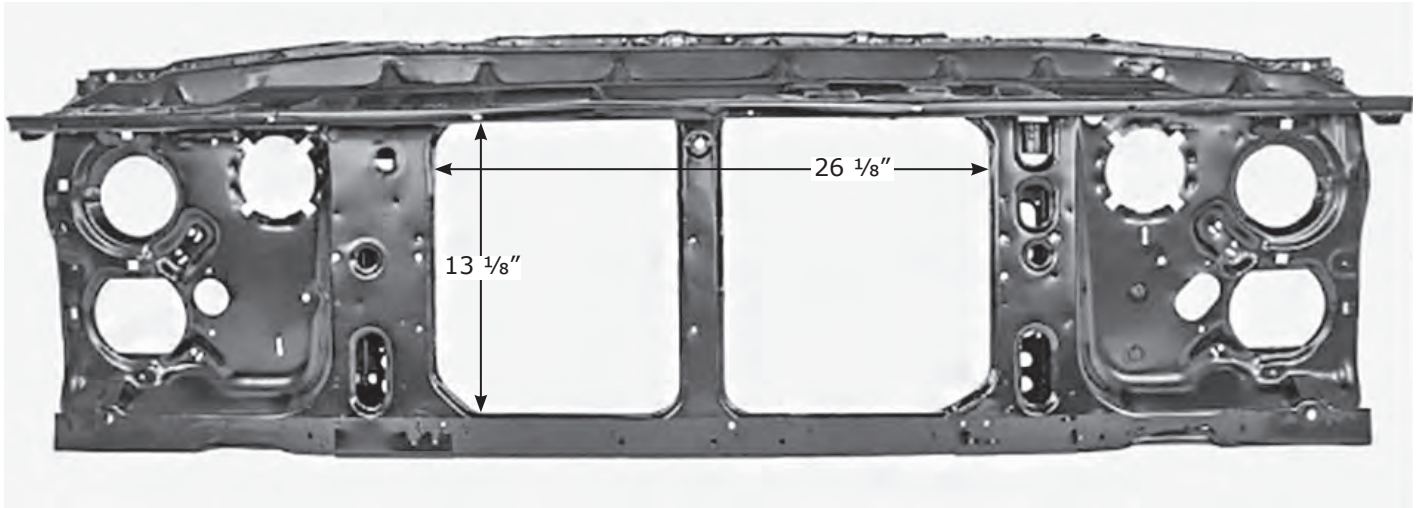
Heater hose may be purchased from Vintage Air (Part#31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



www.vintageair.com

## Core Support Measurements

This kit was developed based on the measurements below, which were taken from a 1987 Chevrolet Pickup with factory air.





www.vintageair.com

## Engine Compartment Disassembly

**NOTE:** Before starting the installation, check the function of the vehicle (horn, lights, etc.) for proper operation, and study the instructions, illustrations, photos & diagrams.

**Perform the following:**

1. Disconnect and remove the battery.
2. Evacuate the A/C system (If equipped).
3. Drain the radiator, then remove the upper and lower radiator hoses (See Photo 1, below).
4. Remove the heater core hoses (See Photo 2, below).
5. Remove the upper fan shroud (See Photo 3, below).
6. Remove the transmission cooling lines (If equipped).
7. Remove the radiator cooling fan (See Photo 4, below).

Drain radiator, then remove upper and lower radiator hoses

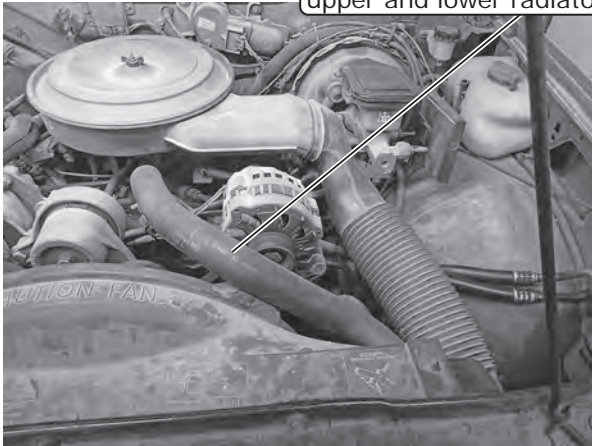


Photo 1

Remove heater core hoses

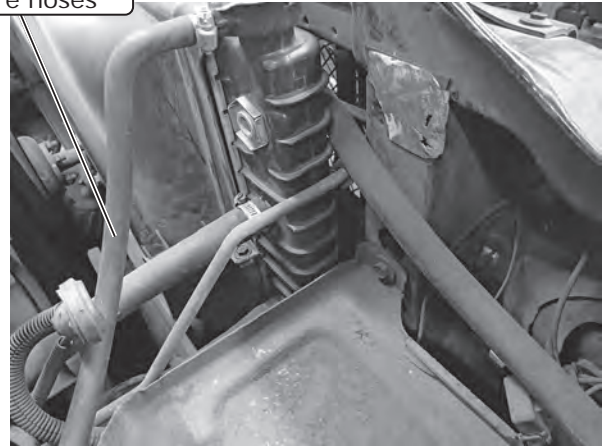


Photo 2

Remove upper fan shroud

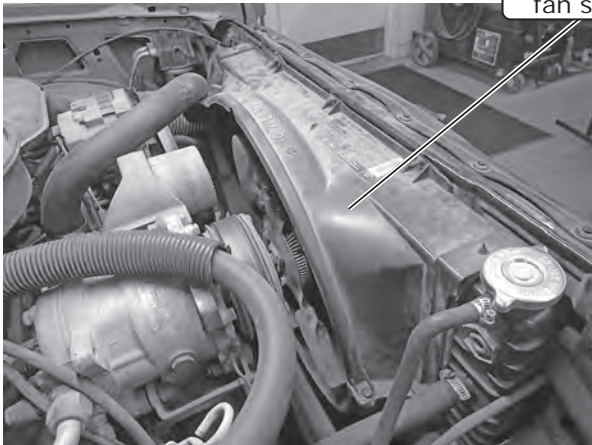


Photo 3

Remove radiator cooling fan

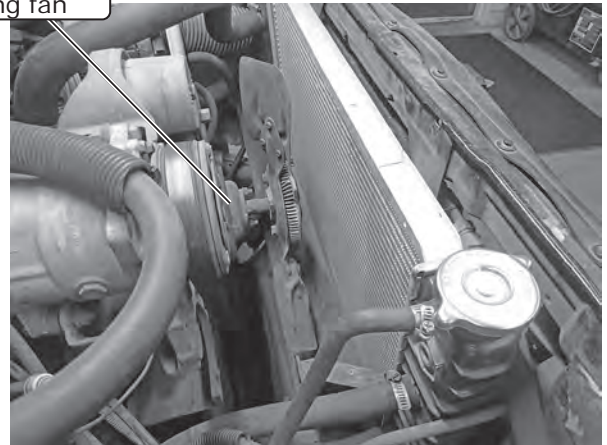


Photo 4



www.vintageair.com

## Engine Compartment Disassembly (Cont.)

8. Remove the radiator (See Photo 5, below).
9. Remove the battery tray (See Photo 6, below).
10. Disconnect the A/C hoses, then remove the OEM condenser (See Photo 7, below).
11. Remove the front grille (See Photos 8 and 9, below).



Photo 5

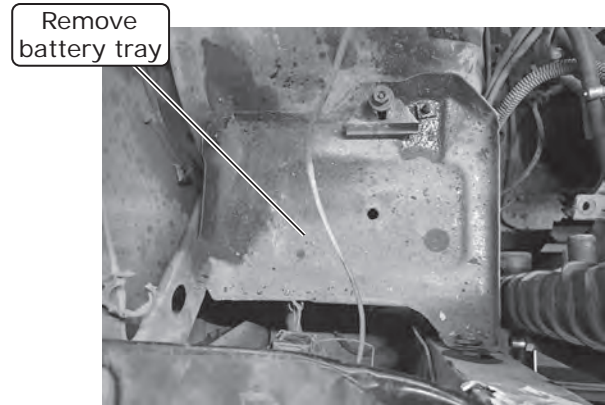


Photo 6

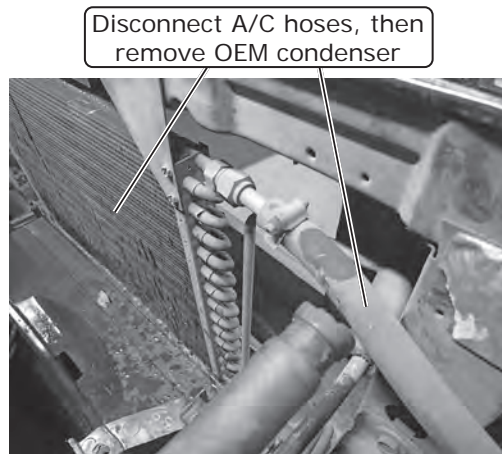


Photo 7



Photo 8



Photo 9



www.vintageair.com

## Condenser Bracket Installation

**NOTE: Snug all the condenser mounting bracket hardware when installing onto the condenser. Once the condenser assembly is in place, some adjustments may be needed to align the mounting positions.**

On a workbench perform the following:

1. Position the condenser as shown in the Photo 1, below.
2. Install (4) #8 J-nuts onto the 1st and 2nd bottom holes on each side of the condenser (See Photos 2 and 3, below).
3. Locate the bottom condenser mounting brackets and (4) #8 x 1/2" pan head screws (See Photos 4 and 5, below).

#8 Condenser Fitting

#6 Condenser Fitting



Photo 1

Install (4) #8 J-nuts onto 1st and 2nd bottom holes on each side of condenser

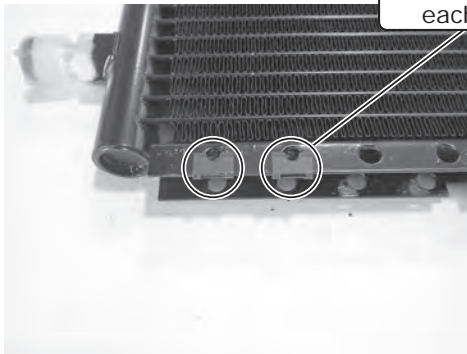


Photo 2

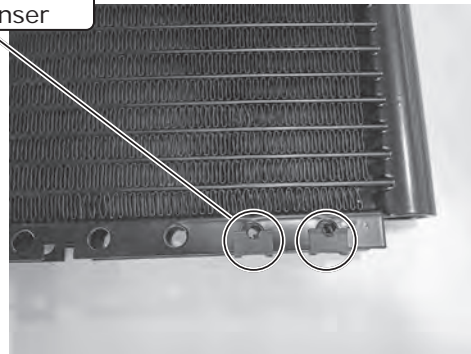
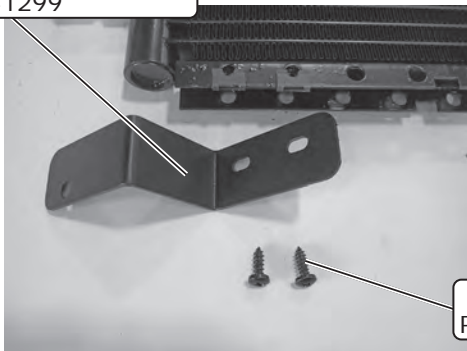


Photo 3

Passenger-Side Bottom Condenser Mounting Bracket 641299

Driver-Side Bottom Condenser Mounting Bracket 641298



(4) #8 x 1/2" Pan Head Screws

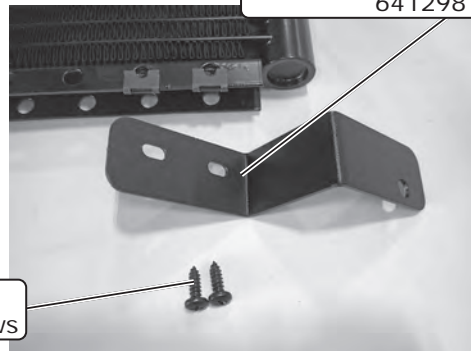


Photo 4

Photo 5



www.vintageair.com

## Condenser Bracket Installation (Cont.)

4. Secure the bottom condenser mounting brackets to the previously installed #8 J-nuts as shown in Photos 6 and 7, below.
5. Flip the condenser over, with the #8 and #6 fittings facing to the right and the #8 fitting on the top (See Photo 8, below).
6. Install (4) #8 J-nuts onto the 1st and 3rd holes on each side of the top of the condenser (See Photo 9 and 10, below).

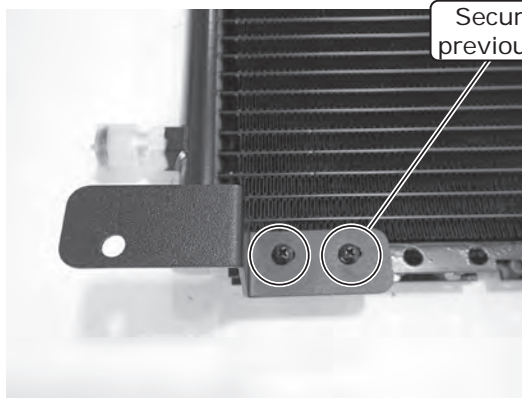


Photo 6



Photo 7



Photo 8

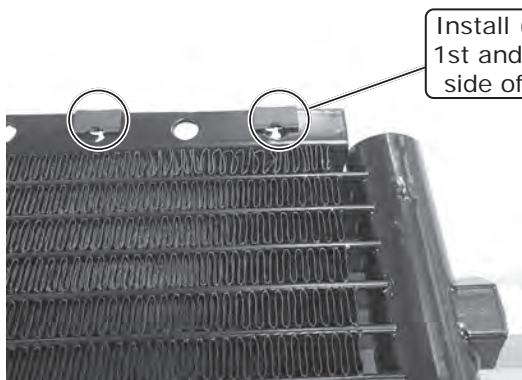


Photo 9

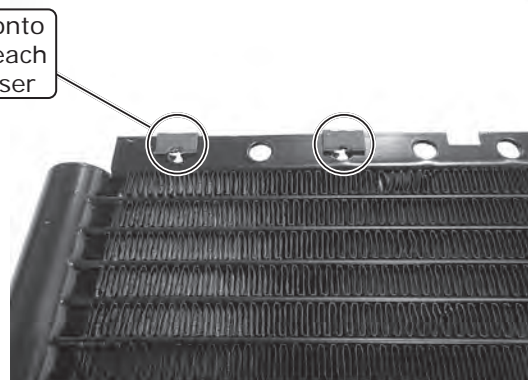


Photo 10



www.vintageair.com

## Condenser Bracket Installation (Final)

7. Locate the top condenser mounting brackets and (4) #8 x 1/2" pan head screws (See Photos 11 and 12, below).
8. Secure the top mounting brackets using (4) #8 x 1/2" pan head screws installed into the previously installed #8 J-nuts as shown in Photos, 13 and 14, below. **NOTE: The passenger-side bracket has a small hole for identification (See Photo 15, below).**

Passenger-Side  
Top Condenser  
Mounting Bracket  
641210

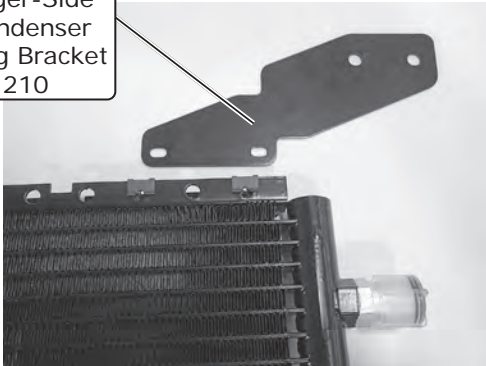


Photo 11

Driver-Side  
Top Condenser  
Mounting Bracket  
641211

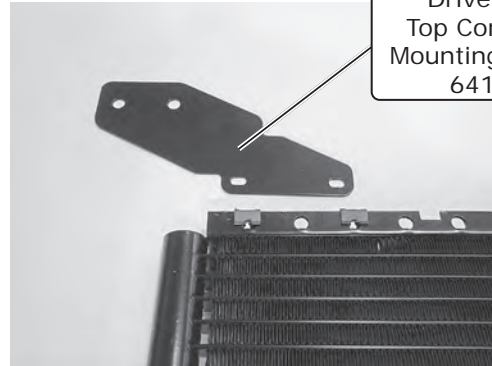


Photo 12

(4) #8 x 1/2"  
Pan Head Screws



Photo 13



Photo 14

Identification  
hole

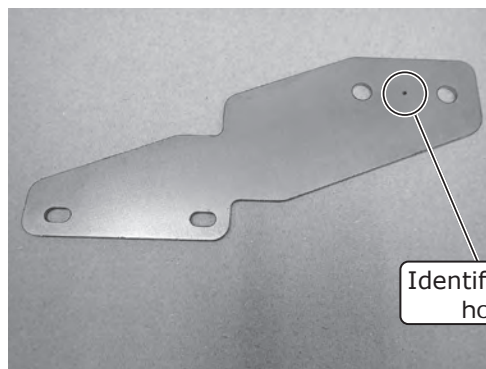


Photo 15



www.vintageair.com

## Condenser Installation

1. Lower the condenser assembly into the core support (See Photo 1, below).
2. Loosely secure the top condenser mounting brackets to the core support using (2) #14 x 3/4" washer head screws (one on each bracket) (See Photo 2, below).
3. Install (2) 1/4-20 x 1/2" flange head bolts into the bottom condenser mounting brackets and into the lower core support mounting holes as shown in Photos 3 and 4, below.

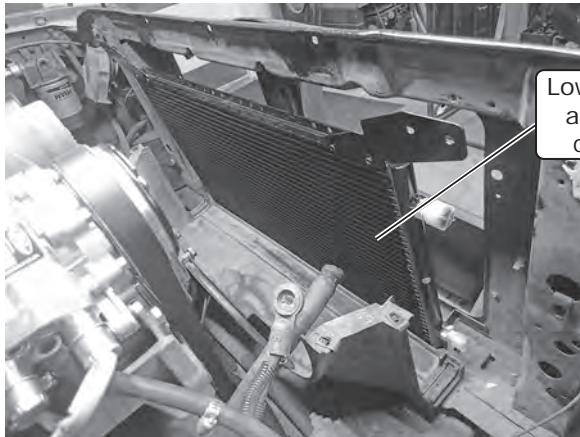


Photo 1



Photo 2

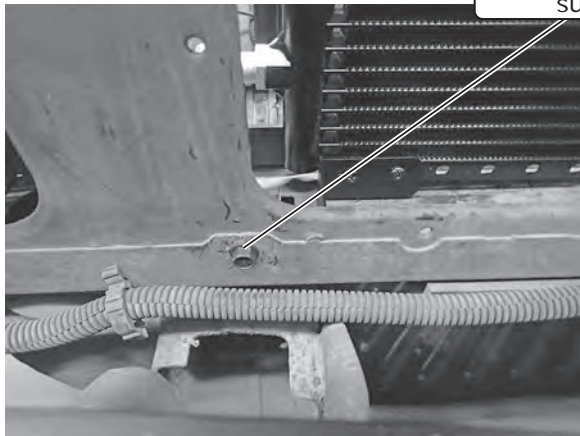


Photo 3

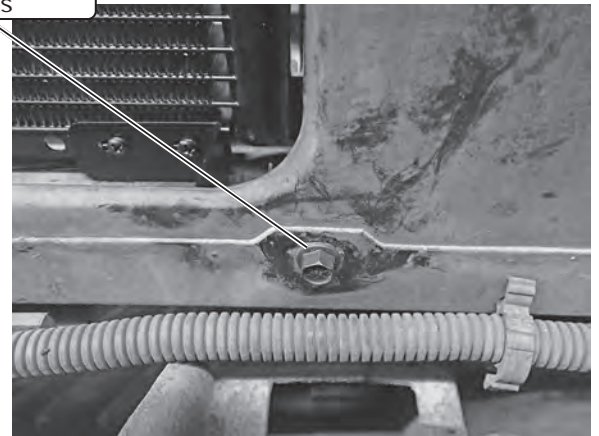


Photo 4



www.vintageair.com

## Condenser Installation (Cont.)

4. Secure the bottom condenser mounting brackets using (2) 1/4-20 nuts with star washers (See Photos 5 and 6, below).
5. Install (2) #14 x 3/4" washer head screws into the remaining mounting holes located on the top condenser mounting brackets (See Photos 7 and 8, below).
6. Tighten all mounting bracket hardware at this time.

Secure bottom condenser mounting brackets using (2) 1/4-20 nuts with star washers



Photo 5



Photo 6

Install (2) #14 x 3/4" washer head screws into remaining mounting holes on top condenser mounting brackets



Photo 7

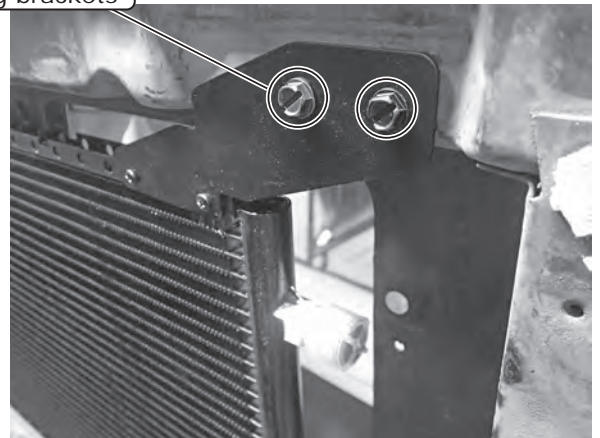
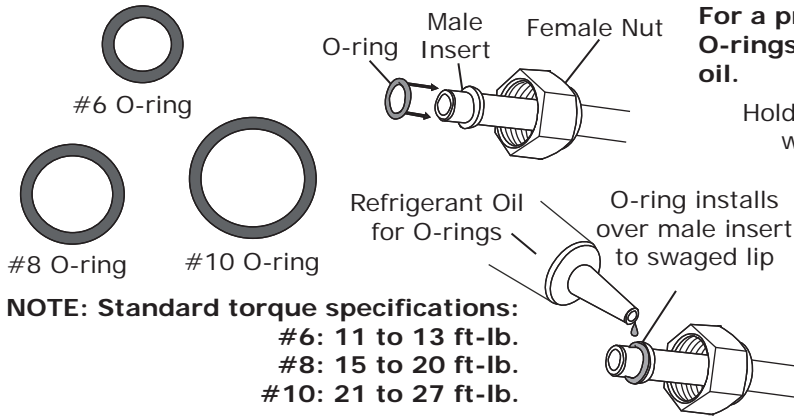


Photo 8



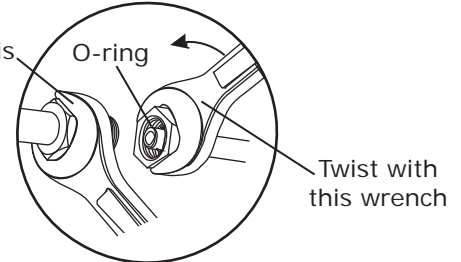
www.vintageair.com

## Lubricating O-rings & Fitting Torque Specs



For a proper seal of fittings: Install supplied O-rings as shown and lubricate with refrigerant oil.

Hold with this wrench



**NOTE: Standard torque specifications:**  
 #6: 11 to 13 ft-lb.  
 #8: 15 to 20 ft-lb.  
 #10: 21 to 27 ft-lb.

The use of a backup wrench is recommended to reduce the chance of damaging the fittings/hardline.

## Drier and Hardline Installation

**NOTE: Drier contains a desiccant that will quickly absorb moisture from the atmosphere and can lose effectiveness in less than 30 minutes. Remove caps and plugs only long enough to install safety switch and hardlines onto a sealed condenser assembly. Do not uncap again until ready to connect hoses and evacuate system before charging.**

Perform the following:

1. Install a 1/4-20 U-nut onto the lower opening on the core support as shown in Photos 1 and 2, below.
2. Remove the plug from the drier. Lubricate the binary switch O-ring (See Lubricating O-rings and Fitting Torque Specs, above), and install the binary switch onto the drier (See Photos 2 and 3, below). **NOTE: The binary switch and the drier come with an O-ring. Only use the binary switch O-ring.**

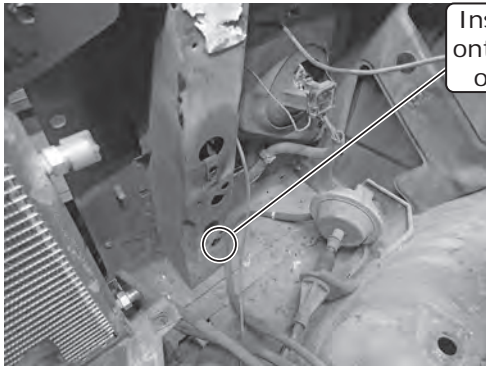


Photo 1



Photo 2

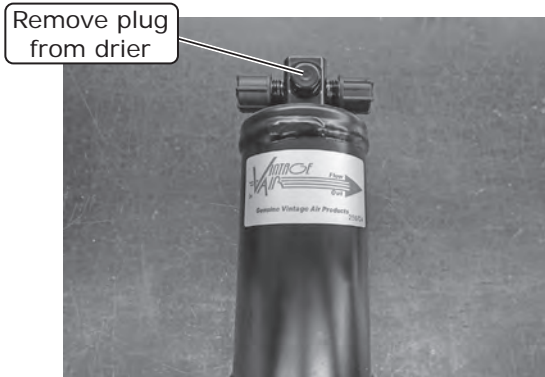


Photo 3

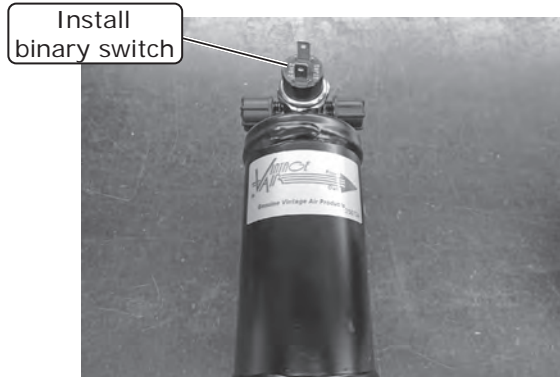


Photo 4



www.vintageair.com

## Drier and Hardline Installation (Cont.)

3. Install the drier clamp onto the drier as shown in Photo 5, below.
4. Install (2) #6 O-rings onto the #6 condenser/drier hardline (See Photo 6, below).
5. Lubricate the (2) #6 O-rings (See Lubricating O-rings and Fitting Torque Specs, Page 12), then loosely install the shorter length of the #6 condenser/drier hardline onto the #6 fitting of the condenser. Loosely install the drier onto the hardline. **NOTE: Refrigerant flow through drier is IN from condenser, OUT to evaporator (See Photo 8, below).** Secure the drier clamp to the previously installed 1/4-20 U-nut using a 1/4-20 x 3/4" serrated flange bolt (See Photo 7, below). Adjust the drier, then tighten the bracket hardware and #6 hardline fittings.

Install drier bracket onto drier clamp



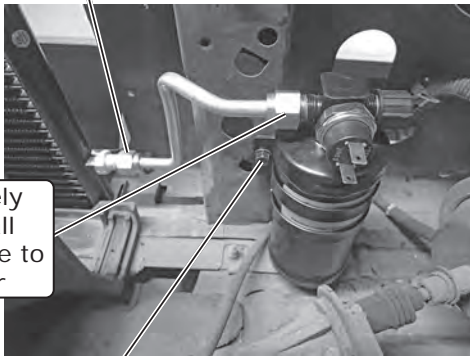
Photo 5

Install (2) #6 O-rings onto #6 condenser/drier hardline



Photo 6

Loosely install shorter length of #6 condenser/drier hardline onto #6 fitting of condenser



Loosely install hardline to drier

Secure drier clamp to previously install 1/4-20 U-nut using a 1/4-20 x 3/4" hex flange bolt

Photo 7

Flow direction

"IN" stamping

Evaporator

Condenser

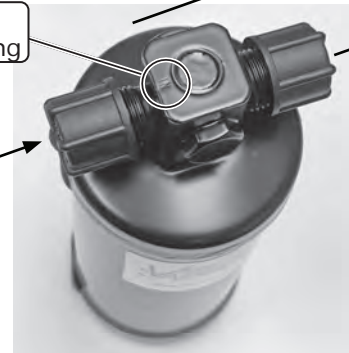


Photo 8

## Final Steps

1. Reinstall and/or reconnect all remaining items removed or disconnected in the Engine Compartment Disassembly instructions on Page 5 and 6. This concludes the condenser kit portion of your installation.



www.vintageair.com

## Packing List: Condenser Kit (021086)

	Qty		Part No	Description
	1	<input type="checkbox"/>	11079-VUS	Binary Switch, Male
	2	<input type="checkbox"/>	18152-VUB	Nut with Star Washer, 1/4-20
	8	<input type="checkbox"/>	18235-VUB	Screw, #8 x 1/2", Pan Head
	4	<input type="checkbox"/>	18266-VUB	Screw, #14 x 3/4", Washer Head
	1	<input type="checkbox"/>	182872	Bolt, 1/4-20 x 3/4", Serrated Flange, Black
	2	<input type="checkbox"/>	182873	Bolt, 1/4-20 x 1/2", Flange Head, Black
	1	<input type="checkbox"/>	18978-VUB	U-Nut, 1/4-20
	8	<input type="checkbox"/>	18979-VUB	J-Nut, #8
	1	<input type="checkbox"/>	23127-VUW	Compressor Lead, 72"

Packed By: \_\_\_\_\_

### O-rings/Refrigerant Oil

	Qty		Part No	Description
	4	<input type="checkbox"/>	33857-VUF	O-ring, #6
	3	<input type="checkbox"/>	33858-VUF	O-ring, #8
	1	<input type="checkbox"/>	41117-VUP	Refrigerant Oil

Packed By: \_\_\_\_\_

### Brackets

	Qty		Part No	Description
	1	<input type="checkbox"/>	641210	Bracket, Top Cond., Passenger-Side
	1	<input type="checkbox"/>	641211	Bracket, Top Cond., Driver-Side
	1	<input type="checkbox"/>	641298	Bracket, Bottom Cond., Driver-Side
	1	<input type="checkbox"/>	641299	Bracket, Bottom Cond., Pass-Side
	1	<input type="checkbox"/>	656030	Clamp, Drier

Packed By: \_\_\_\_\_

### Hardlines/Hoses

	Qty		Part No	Description
	1	<input type="checkbox"/>	091647	Hardline, #6 Condenser/Drier

Packed By: \_\_\_\_\_

### Condenser/Drier

	Qty		Part No	Description
	1	<input type="checkbox"/>	03771-VUC	Condenser, 14" x 25 1/2"
	1	<input type="checkbox"/>	07321-VUC	Drier

Packed By: \_\_\_\_\_

Inspected By: \_\_\_\_\_  
Date: \_\_\_\_\_