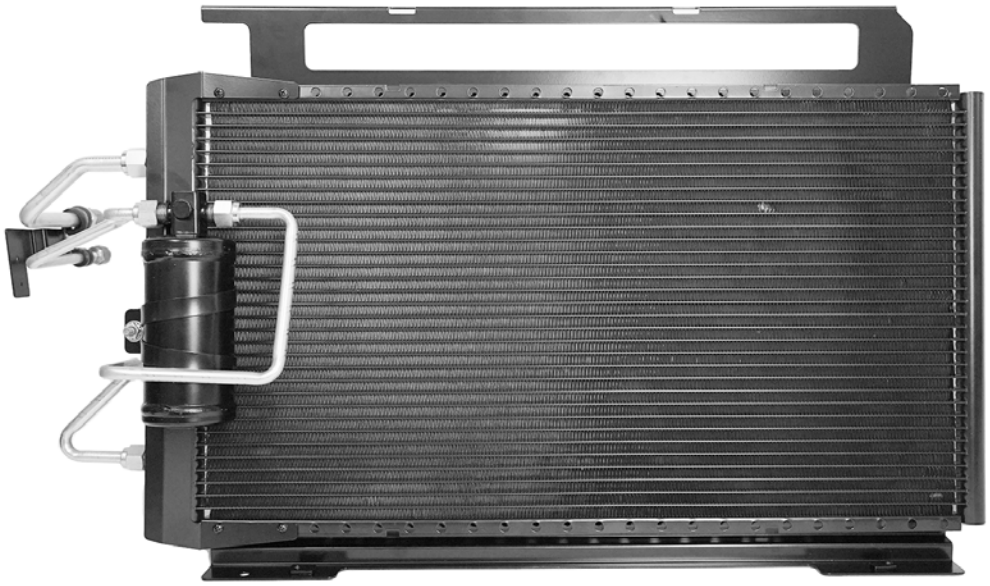
1982-92 Camaro/Firebird

Condenser Kit *with* Drier and Female Binary Switch (025707)



18865 Goll St. San Antonio, TX 78266
Phone: 800-862-6658
Sales: sales@vintageair.com
Tech Support: tech@vintageair.com
www.vintageair.com

www.vintageair.com

Table of Contents

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

A detailed tech video outlining the installation process is available on Vintage Air's YouTube channel at https://bit.ly/3o8Yp09.
Viewing the tech video along with the written instructions will provide the installer the most detailed installation procedure.

Additional Info: Please Read Before Beginning

- **This kit is intended to be used with a mechanical fan and is sent with a female binary switch. If using a hose kit other than Modified Hose Kit 524180, an inline fitting with a safety switch port will be required. The female safety switch sent with this kit will not install onto the drier. A male safety switch may not fit directly into the drier due to tight clearance and accessibility.**

34829-VUG
Beadlock Splicer with Safety Switch Port for #6 A/C Hose

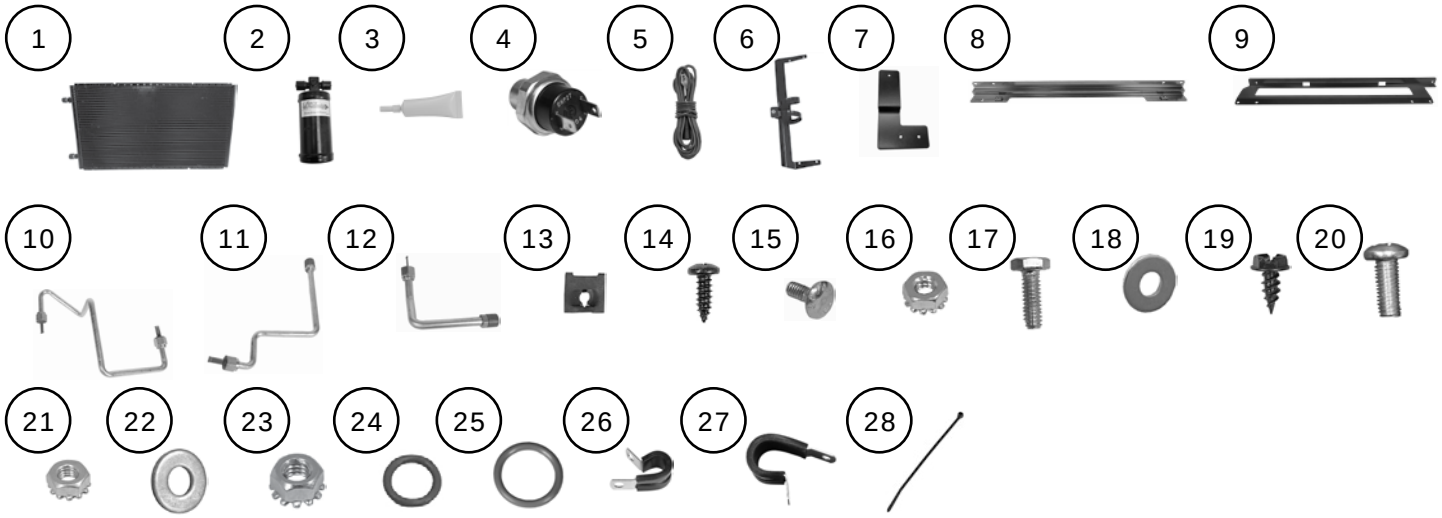
347561-VUR
EZ Clip Splicer with Safety Switch Port for #6 A/C Hose

www.vintageair.com

Packing List: Condenser Kit (025707)

No.	Qty.	Part No.	Description
1.	1	03771-VUC	Condenser, 14" x 25 ½", Parallel Flow
2.	1	07321-VUC	Drier
3.	1	41117-VUP	Refrigerant Oil
4.	1	11078-VUS	Binary Switch, Female
5.	1	23135-VUW	Compressor Lead
6.	1	659981	Bracket, Condenser/Drier, Passenger-Side
7.	1	649645	Bracket, Hardline Support
8.	1	649646	Bracket, Lower Condenser
9.	1	649643	Bracket, Upper Condenser
10.	1	091123	Hardline, #6 Condenser/Drier
11.	1	091124	Hardline, #6 Drier/Evaporator
12.	1	091125	Hardline, #8 Condenser/Compressor
13.	12	18979-VUB	J-Nut, #8
14.	12	18235-VUB	Screw, #8 x 1/2", Pan Head
15.	2	182545	Bolt, 10-24 x 1/2", Square-Neck Carriage
16.	2	18260-VUB	Nut with Star Washer, 10-24
17.	2	182871	Bolt, 1/4-20 x 3/4", Hex
18.	2	18125-VUB	Washer, 1/4" USS, Flat
19.	2	18247-VUB	Screw, #10 x 1/2", Sheet Metal
20.	1	18250-VUB	Screw, 10-32 x 1/2", Pan Head
21.	1	18251-VUB	Nut with Star Washer, 10-32
22.	1	186011	Washer, 9/32", Flat
23.	1	18152-VUB	Nut with Star Washer, 1/4-20, Hex
24.	4	33857-VUF	O-ring, #6
25.	2	33858-VUF	O-ring, #8
26.	1	31600-VUD	Adel Clamp, 3/8" I.D.
27.	1	31603-VUD	Adel Clamp, 1/2" I.D.
28.	4	21301-VUP	Tie Wrap, 4"

**** 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.

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:

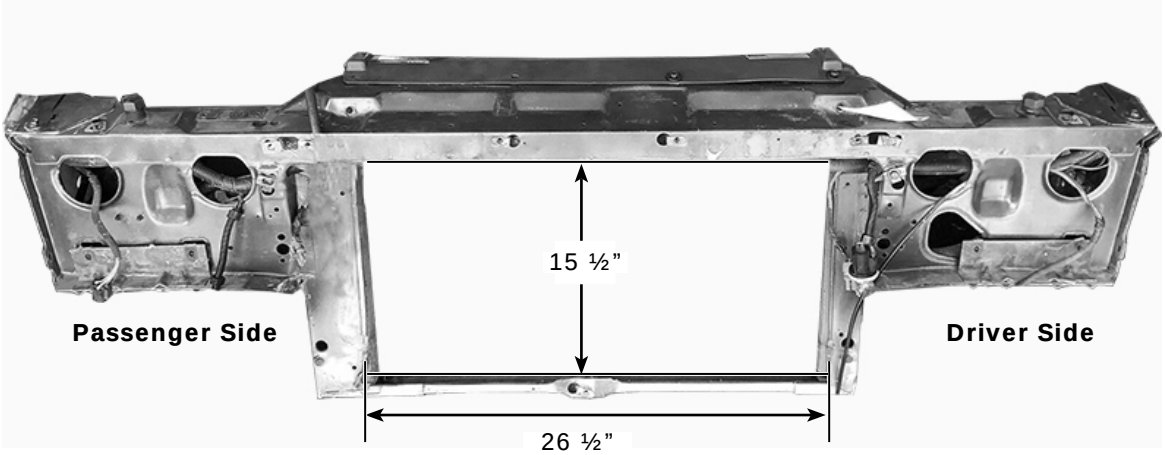
To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

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.

Core Support Measurements

This kit was developed based on the measurements below, which were taken from a 1992 Chevrolet Camaro with factory air.



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, & diagrams.

Perform the Following:

1. Disconnect and remove the battery.
2. Evacuate the A/C system, if necessary.
3. Drain the radiator.
4. Remove all coolant hoses connected to the radiator (if the vehicle is automatic, disconnect the transmission cooling lines).
5. Disconnect the A/C lines from the condenser (See Photo 1, below).
6. If vehicle is equipped with a tuned port injected motor, remove the upper air filter housing (See Photo 2, below).

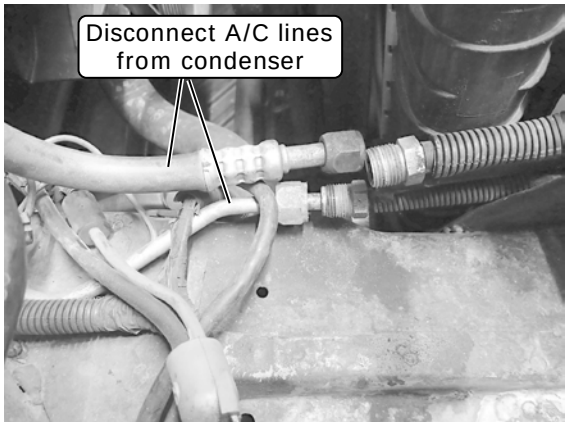


Photo 1

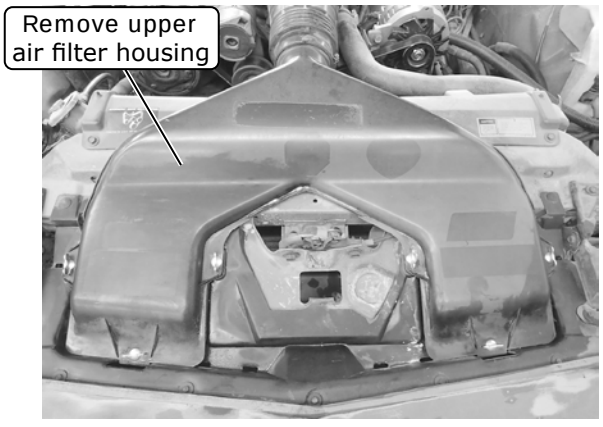


Photo 2

Engine Compartment Disassembly (Cont.)

7. Remove the cooling fan's (2) upper mounting bolts from the radiator hold-down bracket ((1) per fan) (See Photos 4 and 6, below).
8. Remove the remaining (4) radiator hold-down bracket mounting bolts, then remove the bracket (See Photo 5, below).
9. Disconnect the cooling fan plugs and remove the (4) lower mounting bolts ((2) per fan), then remove the cooling fans from the engine compartment (See Photo 6, below).
10. Remove the radiator from the engine compartment (See Photo 7, below).
11. Remove the A/C hardline mounting bracket (See Photo 8, below).
12. Pull the OEM condenser toward the engine, then remove it from the vehicle (See Photo 9, below). **NOTE: The condenser is wedged into place with rubber isolators, there is no hardware to remove.**

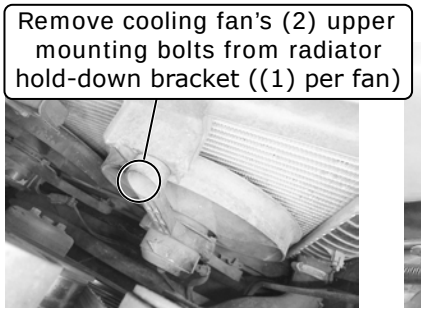


Photo 4

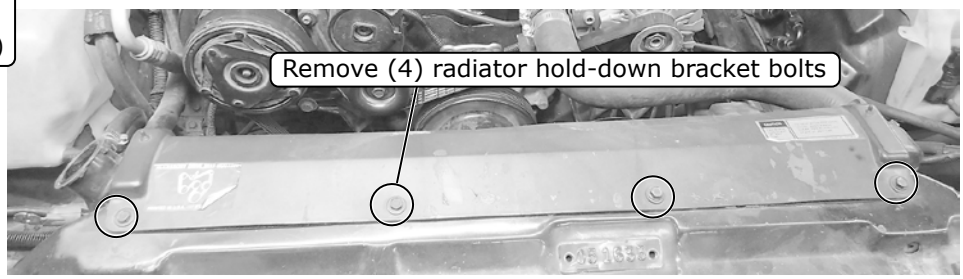


Photo 5

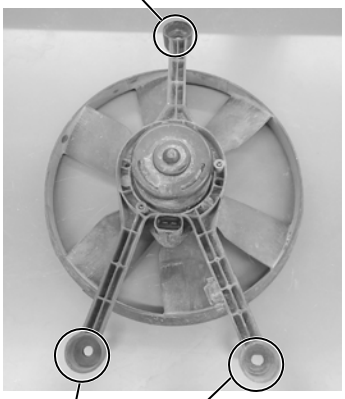


Photo 6

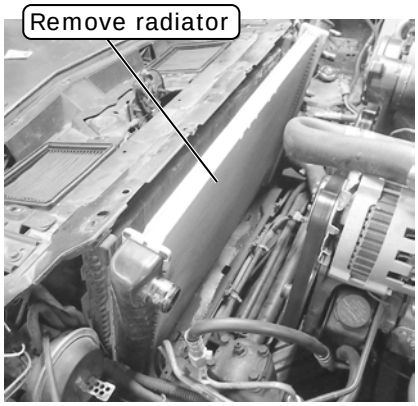


Photo 7

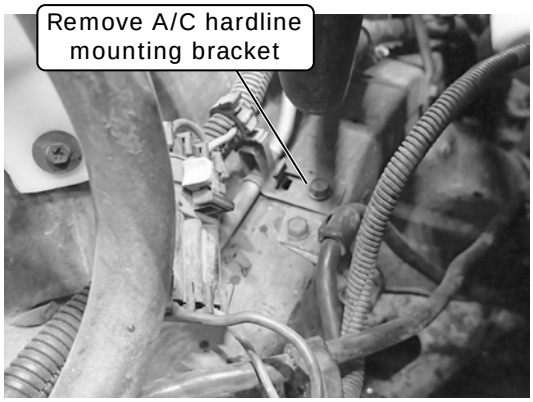


Photo 8

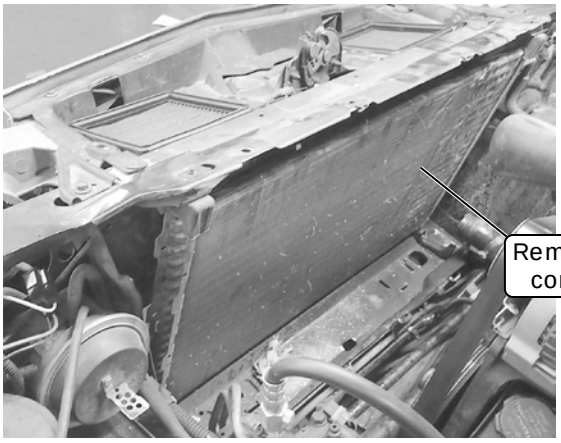


Photo 9

www.vintageair.com

Core Support Modification

1. Place the lower condenser bracket into the core support and use the OEM bolt to algin the bracket (See Photo 1, below).
2. Using the lower condenser bracket as a template, mark the (2) mounting hole locations. Remove the bracket, then drill (2) 5/16" holes into the core support (See Photos 1 and 2, below).

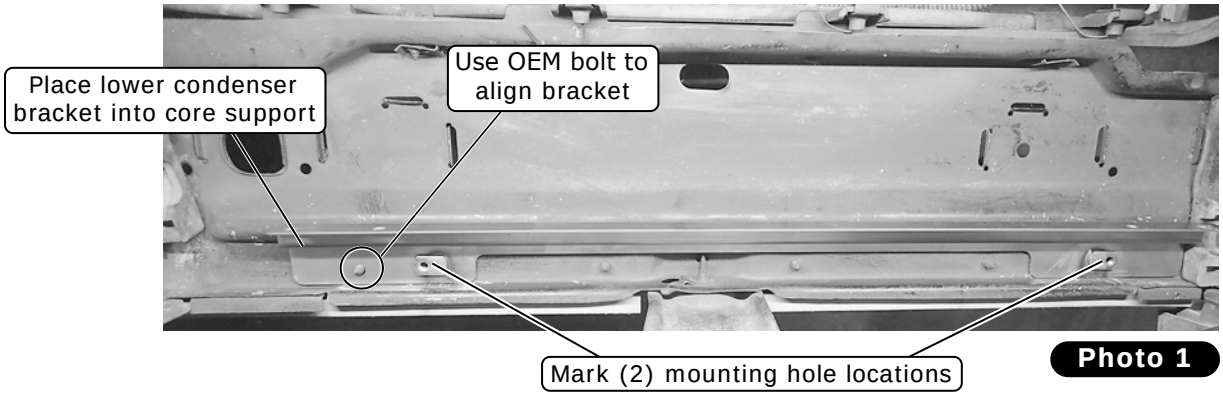


Photo 1

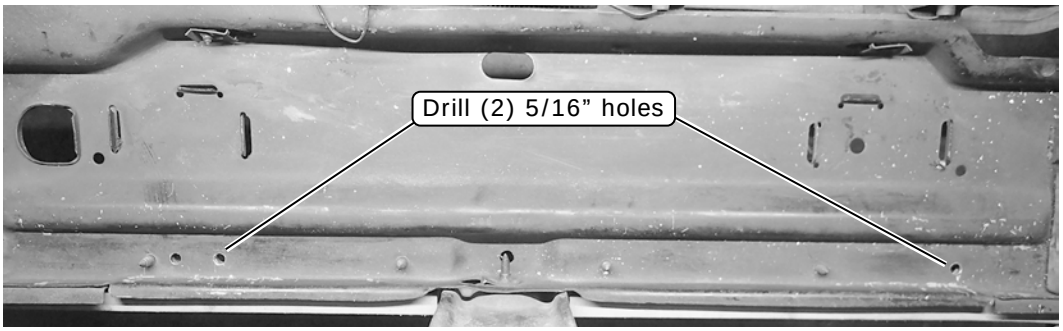
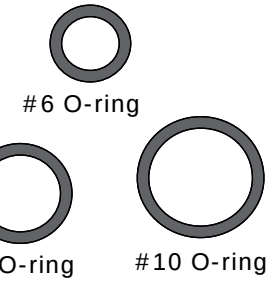
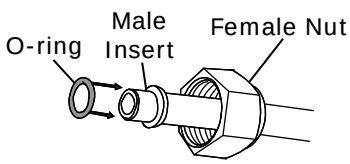


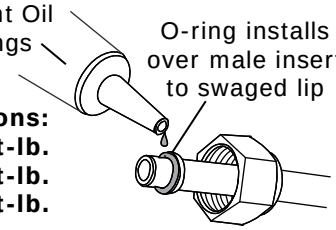
Photo 2

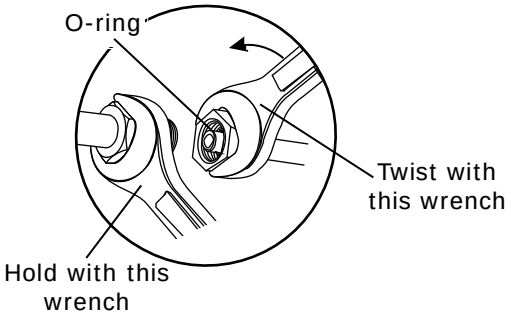
Lubricating O-rings





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





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

Mounting Bracket Installation

On a work bench, perform the following:

1. Install (8) J-nuts onto the condenser in the positions shown in Photo 1, below.
2. Flip the condenser over and install (4) J-nuts onto the 1st and 3rd holes of the upper and lower mounting rails (See Photo 2, below).
3. Install the upper condenser bracket onto the condenser and secure it using (4) #8 x 1/2" pan head screws (See Photo 3, below).
4. Install the lower condenser bracket onto the condenser and secure it using (4) #8 x 1/2" pan head screws (See Photo 4, below).

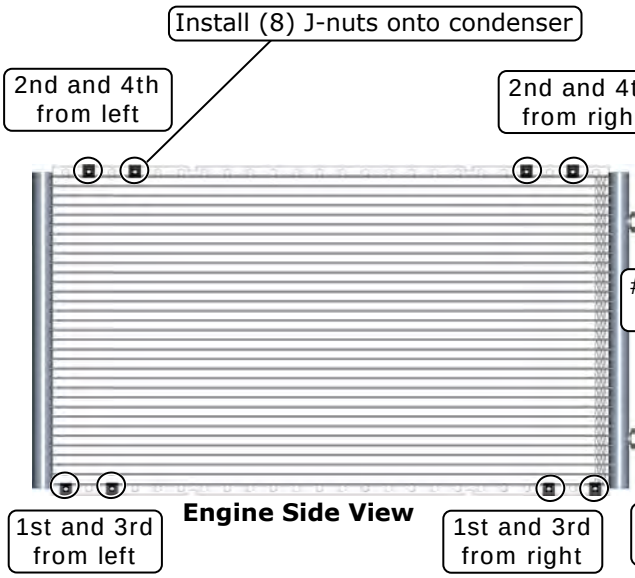


Photo 1

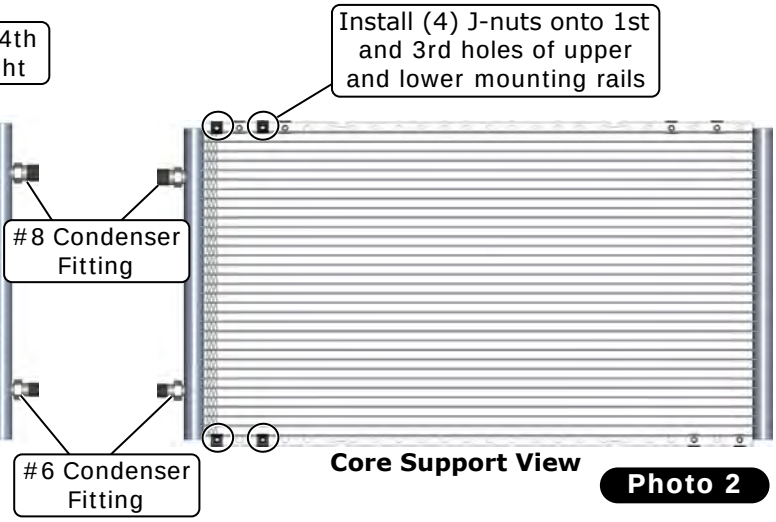


Photo 2

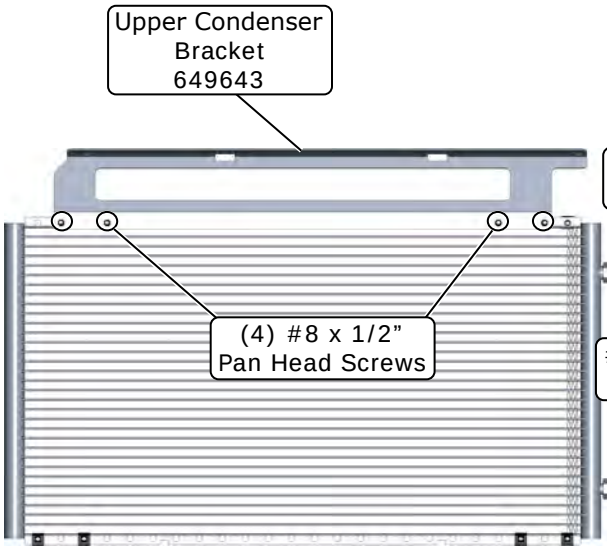


Photo 3

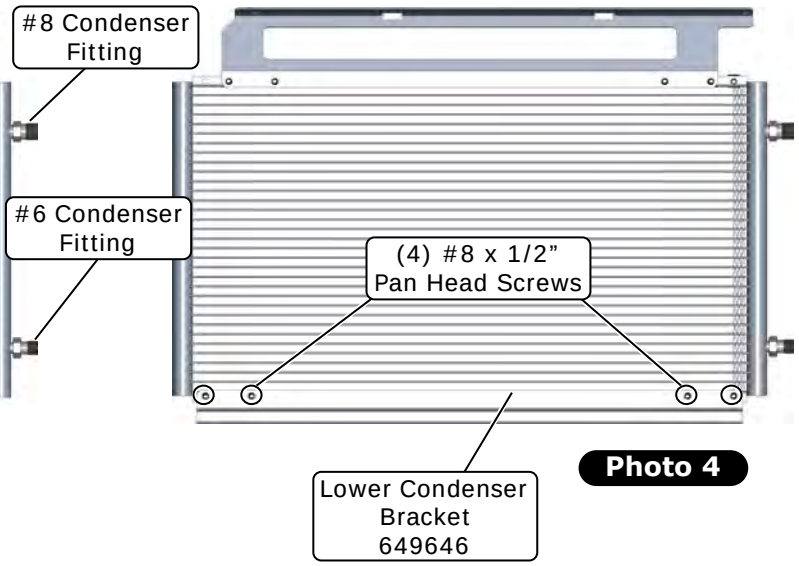


Photo 4

www.vintageair.com

Drier Bracket and Drier Installation

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.

1. Using (4) #8 x 1/2" pan head screws, secure the drier bracket to the condenser (See Photo 1, below).
2. Loosely install the drier into the drier bracket and secure it with a 1/4-20 nut with star washer and a 9/32" flat washer (See Photo 2, below). **NOTE: Do not fully tighten hardware at this time. Refrigerant flow through the drier is IN from condenser, OUT to evaporator (See Photo 2, below).**

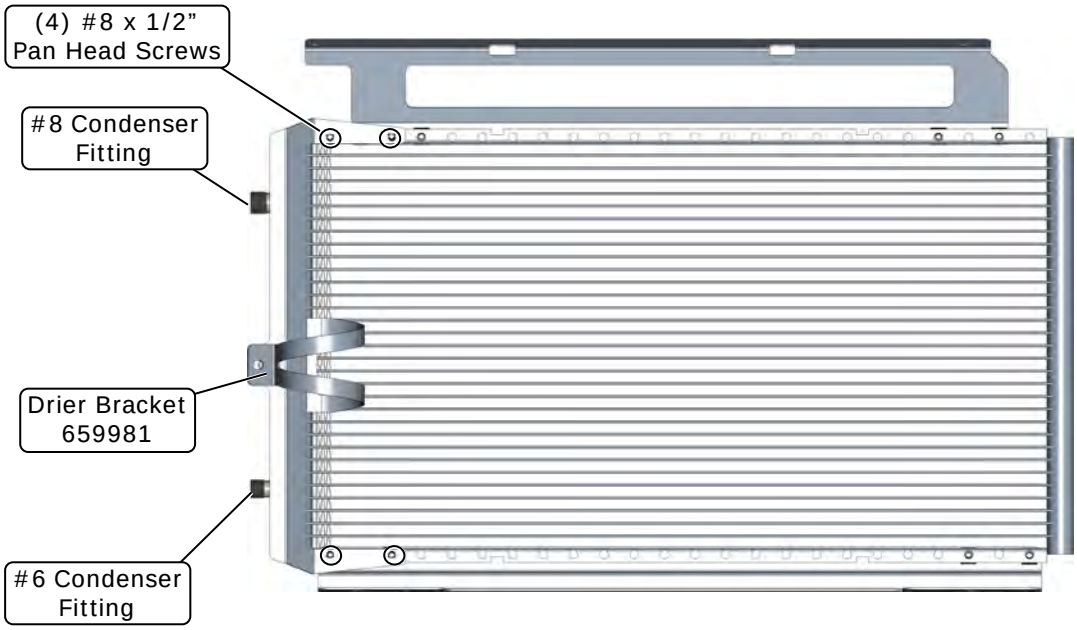


Photo 1

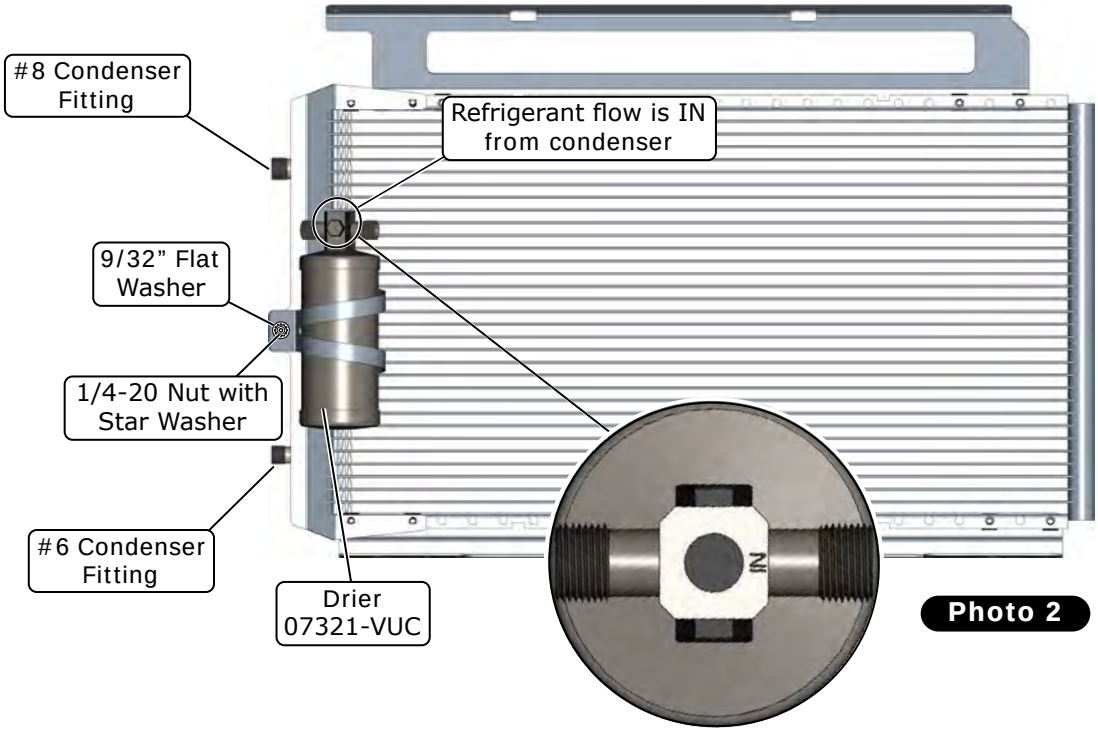


Photo 2

Hardline Installation

NOTE: The use of a backup wrench is important when installing the hardlines to avoid damage to the condenser (See Lubricating O-rings, Page 7).

1. With (2) properly lubricated #6 O-rings, install the #6 condenser/drier hardline onto the drier and the #6 condenser fitting (See Photo 1, below).
2. Tighten the drier bracket hardware at this time.
3. With a properly lubricated #6 O-ring, loosely install the #6 drier/evaporator hardline onto the drier (See Photo 2, below).
4. With a properly lubricated #8 O-ring, loosely install the #8 condenser/compressor hardline onto the condenser (See Photo 3, below).
5. Install the #3/8" I.D. and 1/2" I.D. Adel clamps onto the condenser hardlines (See Photo 4, below).

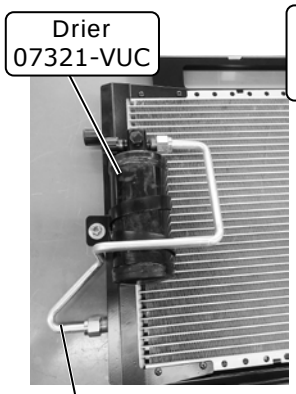


Photo 1

Photo 2

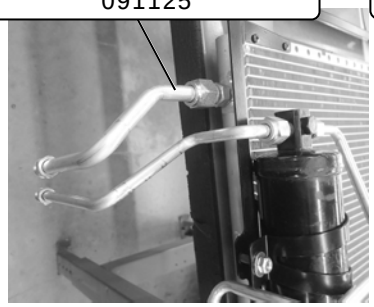


Photo 3

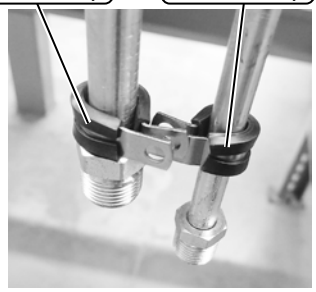


Photo 4

Condenser Installation

1. Locate the (2) OEM holes on the core support. Install the hardline support bracket and secure it using (2) #10 x 1/2" sheet metal screws (See Photos 1 and 2, below).

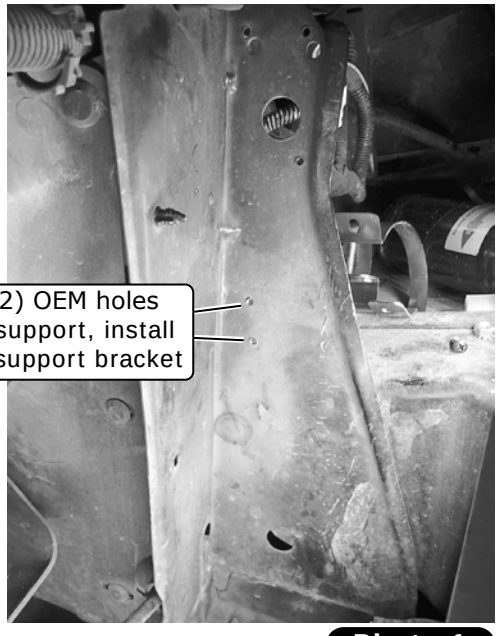


Photo 1

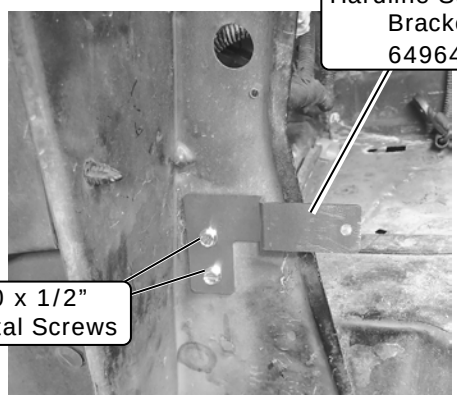


Photo 2

Condenser Installation (Cont.)

2. Insert the condenser assembly into the core support bottom first. Line up the Adel clamps with the mounting hole on the hardline support bracket. Once the condenser assembly is in the correct position, tighten the #6 and #8 hardlines.
3. Loosely secure the upper condenser bracket to the core support using the (2) 10-24 x 1/2" square-neck carriage bolts and (2) 10-24 nuts with star washers (See Photos 3 and 4, below).
4. Secure the lower condenser bracket to the lower core support using (2) 1/4-20 x 3/4" hex bolts and (2) 1/4" USS flat washers (See Photo 5, below).
5. Tighten the upper condenser mounting hardware at this time.
6. Secure the (2) hardline Adel clamps to the hardline support bracket using a 10-32 x 1/2" pan head screw and a 10-32 nut with star washer (See Photo 6, below).

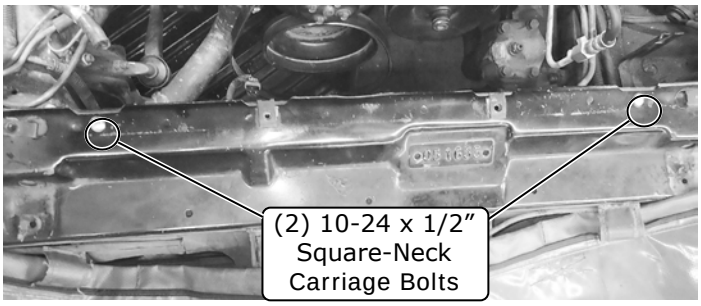


Photo 3

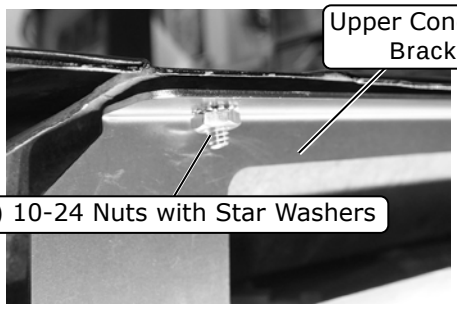


Photo 4

Photo 5

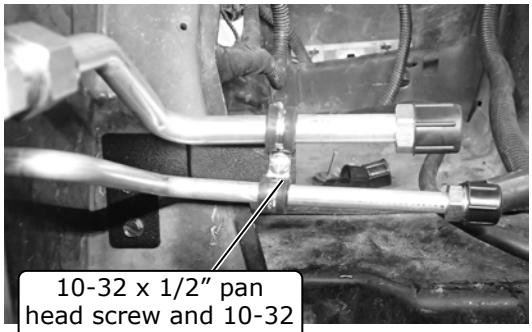


Photo 6

Binary Switch Installation

NOTE: The binary switch included with the hose kit will be installed on the #6 A/C hose inline adapter. Before continuing with the following steps, install the hose kit as shown in the evaporator instructions. Standard hose kit #524177 or Modified hose kit #524178.

1. Lubricate the threads on the inline adapter on the #6 A/C hose and install the binary switch (See Photos 1 and 2, below).
2. Crimp the supplied connector to the blue compressor lead from the main wiring harness and connect it to the binary switch (See Photo 3, below).
3. Connect the compressor bullet connector (See Photo 4, below) and route the compressor lead along the #10 A/C hose, then connect it to the binary switch (See Photo 5, below). Secure the compressor lead to the #10 A/C hose using the supplied tie wraps.

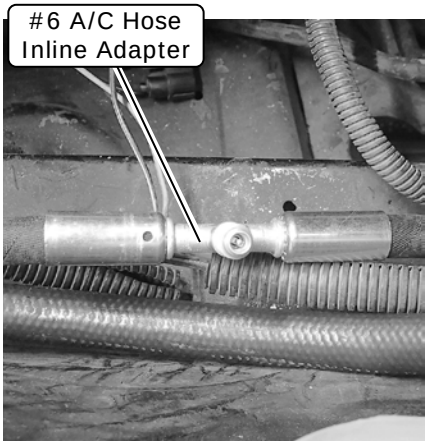


Photo 1

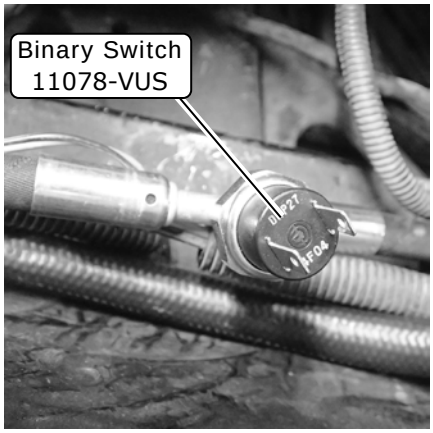


Photo 2

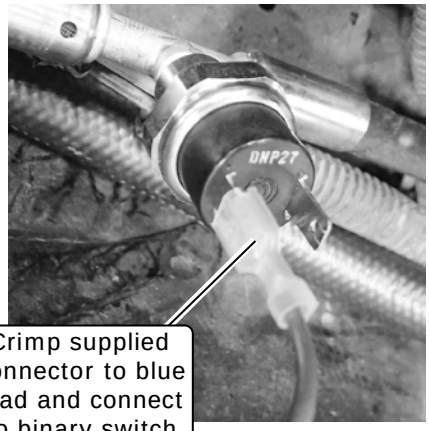


Photo 3

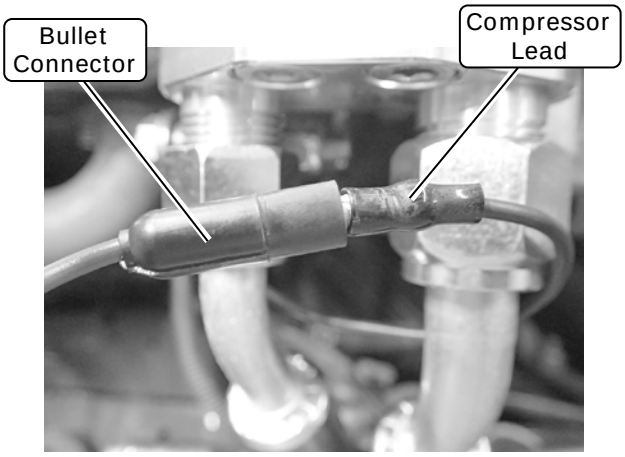


Photo 4

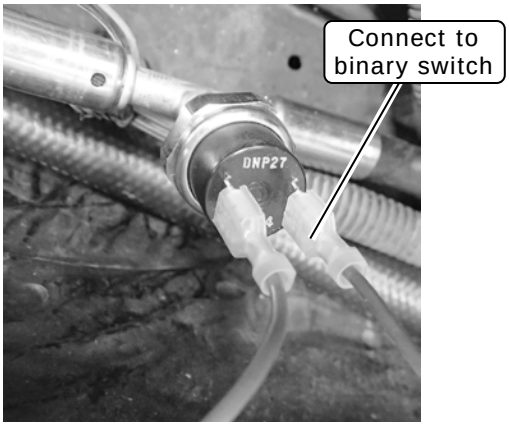
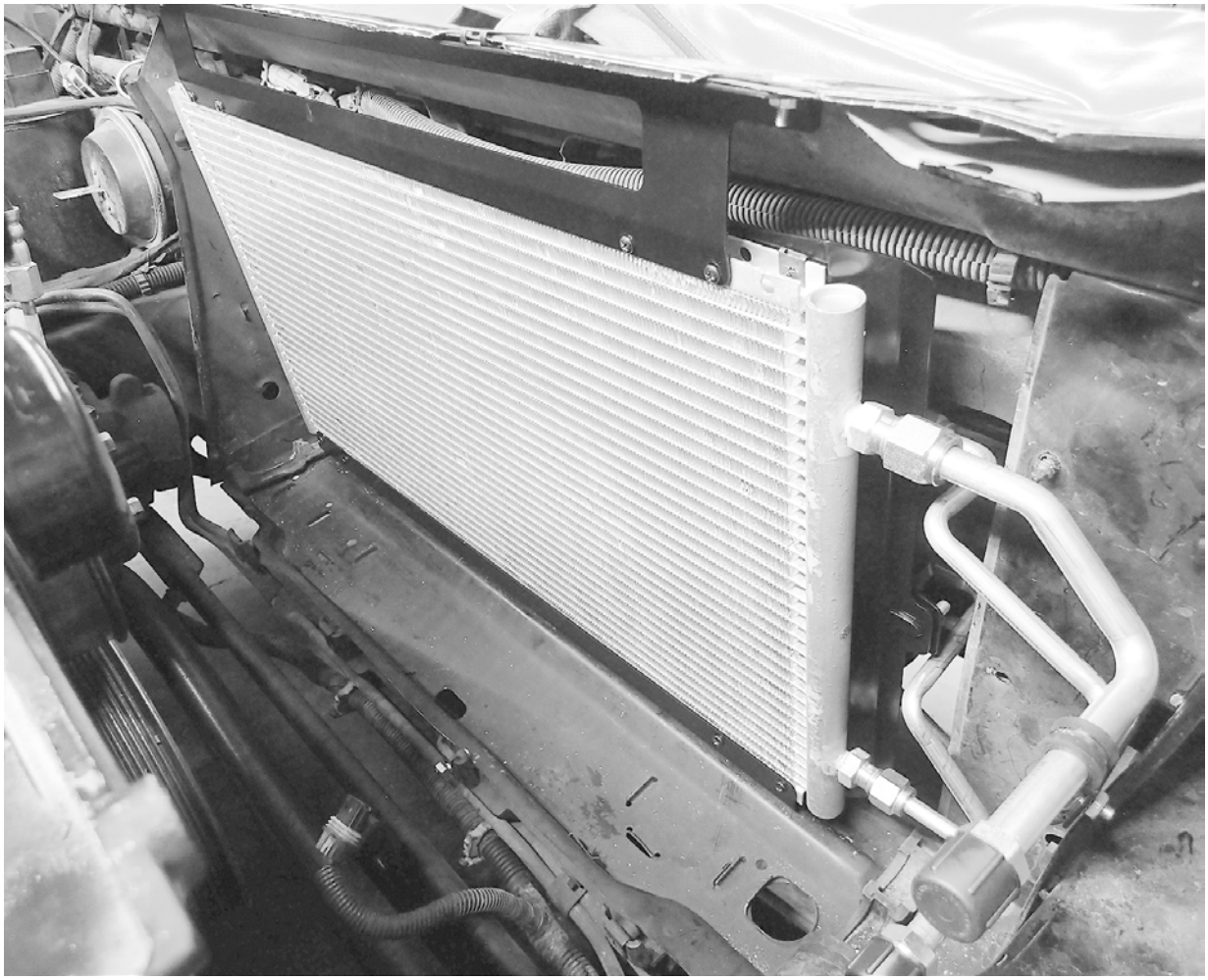


Photo 5

Final Steps

1. Reinstall and/or reconnect all remaining items removed or disconnected in the engine compartment disassembly instructions. This concludes the condenser kit portion of your installation. **NOTE: If proceeding to the evaporator installation portion of the install, do not reinstall and/or reconnect all items removed or disconnected.**



Final Installation

www.vintageair.com

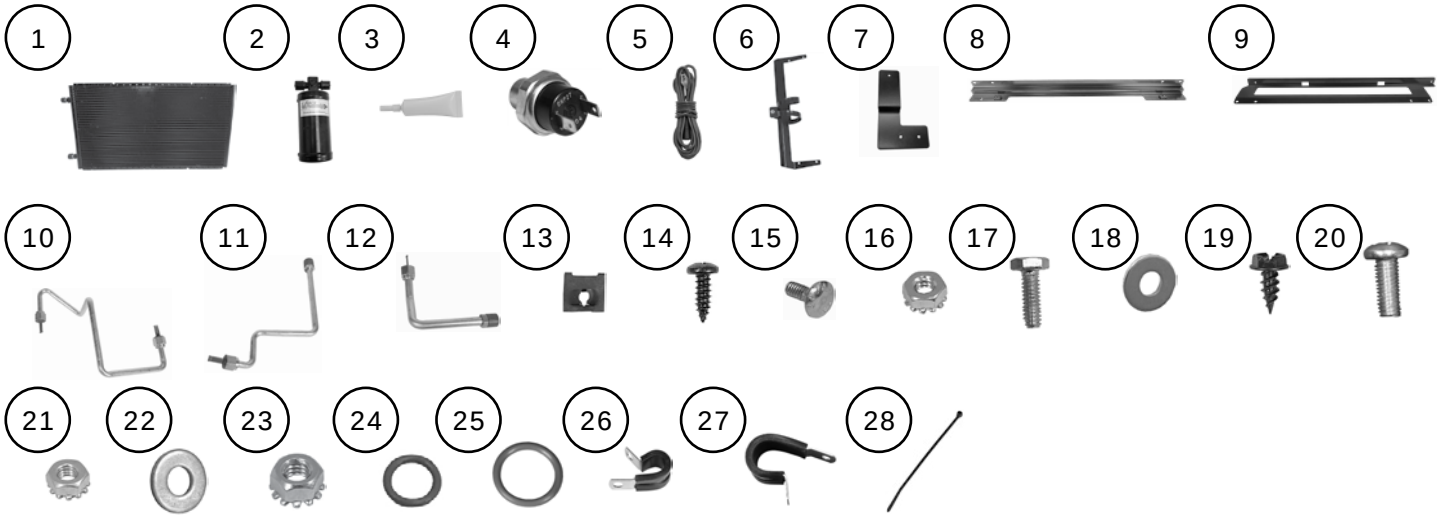
Packing List: Condenser Kit (025707)

No.	Qty.	Part No.	Description	
1.	1	03771-VUC	Condenser, 14” x 25 ½”, Parallel Flow	
2.	1	07321-VUC	Drier	
3.	1	41117-VUP	Refrigerant Oil	
4.	1	11078-VUS	Binary Switch, Female	
5.	1	23135-VUW	Compressor Lead	
6.	1	659981	Bracket, Condenser/Drier, Passenger-Side	
7.	1	649645	Bracket, Hardline Support	
8.	1	649646	Bracket, Lower Condenser	
9.	1	649643	Bracket, Upper Condenser	
10.	1	091123	Hardline, #6 Condenser/Drier	
11.	1	091124	Hardline, #6 Drier/Evaporator	
12.	1	091125	Hardline, #8 Condenser/Compressor	
13.	12	18979-VUB	J-Nut, #8	
14.	12	18235-VUB	Screw, #8 x 1/2”, Pan Head	
15.	2	182545	Bolt, 10-24 x 1/2”, Square-Neck Carriage	
16.	2	18260-VUB	Nut with Star Washer, 10-24	
17.	2	182871	Bolt, 1/4-20 x 3/4”, Hex	
18.	2	18125-VUB	Washer, 1/4” USS, Flat	
19.	2	18247-VUB	Screw, #10 x 1/2”, Sheet Metal	
20.	1	18250-VUB	Screw, 10-32 x 1/2”, Pan Head	
21.	1	18251-VUB	Nut with Star Washer, 10-32	
22.	1	186011	Washer, 9/32”, Flat	
23.	1	18152-VUB	Nut with Star Washer, 1/4-20, Hex	
24.	2	33857-VUF	O-ring, #6	
25.	2	33858-VUF	O-ring, #8	
26.	1	31600-VUD	Adel Clamp, 3/8” I.D.	
27.	1	31603-VUD	Adel Clamp, 1/2” I.D.	
28.	4	21301-VUP	Tie Wrap, 4”	

Checked By: _____

Packed By: _____

Date: _____



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