



an ISO 9001:2015 Registered Company

1968-72 Pontiac GTO

Condenser Kit
(024480)



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A detailed tech video outlining the installation process is available on Vintage Air's YouTube channel at <https://bit.ly/2F3usHG>.

Viewing the tech video along with the written instructions will provide the installer the most detailed installation procedure.

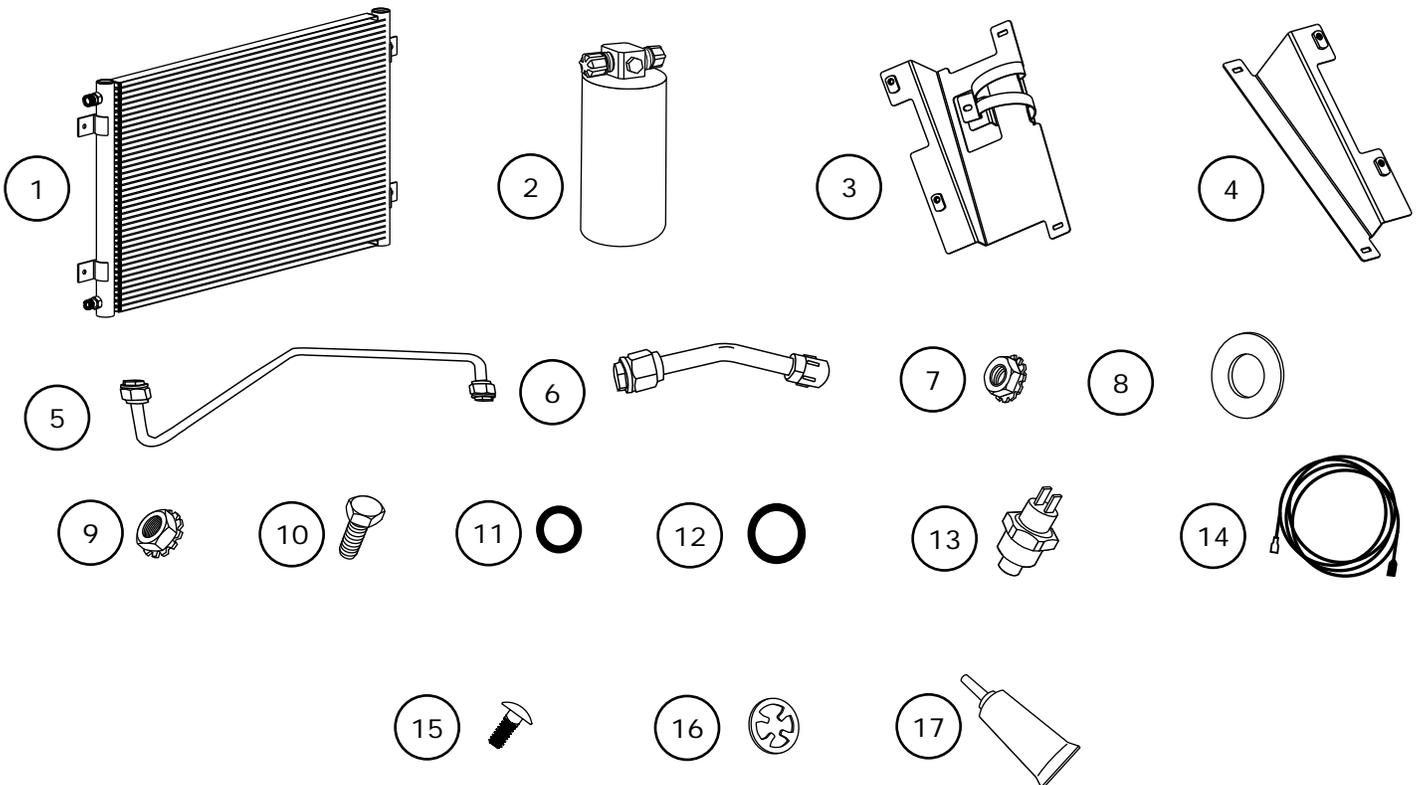


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Packing List: Condenser Kit (024480)

No.	Qty.	Part No.	Description
1.	1	037030-OVR	Condenser, 16" x 28", Parallel Flow
2.	1	07321-VUC	Drier
3.	1	643141	Bracket, Condenser/Drier
4.	1	643143	Bracket, Condenser
5.	1	091194	Hardline, #6 Condenser/Drier
6.	1	091193	Hardline, #8 Condenser/Compressor
7.	4	18260-VUB	Nut with Star Washer, 10-24
8.	1	186011	Washer, 9/32"
9.	1	18152-VUB	Nut with Star Washer, 1/4-20, Hex
10.	4	182870	Bolt, 1/4-20 x 1/2", Hex Flange
11.	2	33857-VUF	O-ring, #6
12.	1	33858-VUF	O-ring, #8
13.	1	11079-VUS	Binary Switch, Male
14.	1	23135-VUW	Compressor Lead
15.	4	182545	Bolt, 10-24 x 1/2", Square-neck Carriage
16.	4	65976-VUE	Push-on Ring, 3/16"
17.	1	41117-VUP	Refrigerant Oil

**** 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.



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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 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):

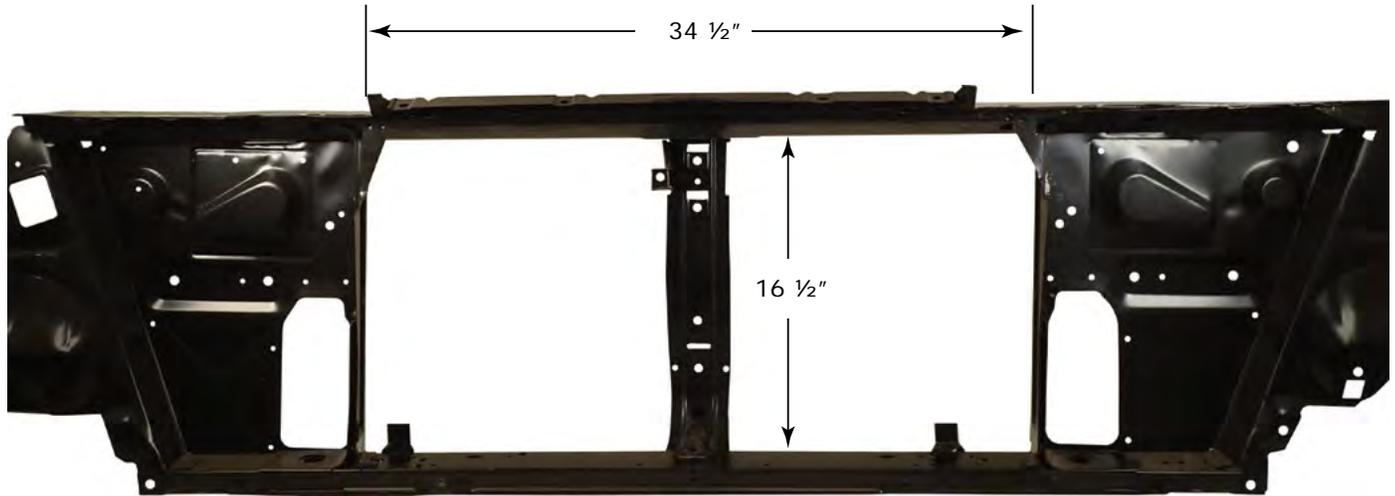
Heater hose may be purchased from Vintage Air (Part#31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



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Core Support Measurements

This kit was developed based on the measurements below, which were taken from a 1968, 1969 and 1972 GTO with factory air.





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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. Steps 7-10 only applies to factory A/C vehicles.

Perform the Following:

1. Disconnect the battery.
2. Drain the radiator.
3. Remove the OEM fan by removing (4) cooling fan bolts (retain) (See Photo 1, below).
4. Remove the fan shroud by removing (4) fan shroud top bolts and (2) bottom bolts (retain) (See Photos 2 & 3, below). **NOTE: Quantity of the bolts changes per model.**
5. Automatic transmission: Disconnect the transmission lines from the radiator (See Photo 4, below).
6. Remove the radiator (retain).
7. To remove the OEM condenser assembly, disconnect the drier hardlines and hoses (See Photo 4, below).
8. Remove the (2) drier bracket mounting bolts (See Photo 5, below).
9. Remove the driver side condenser bracket by removing (4) screws ((2) per side), then remove the (2) bracket to core support bolts (See Photos 6 & 7, below).
10. Remove the condenser assembly from the vehicle (discard).

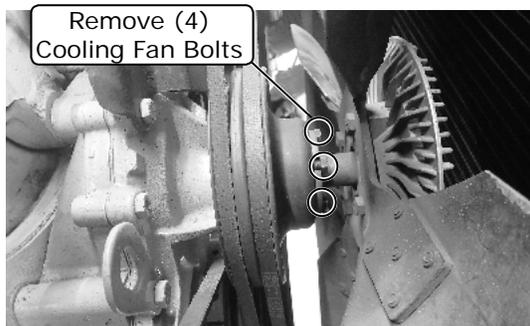


Photo 1

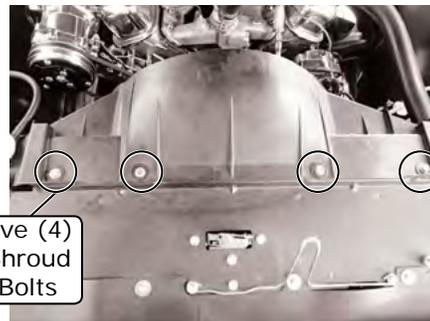


Photo 2

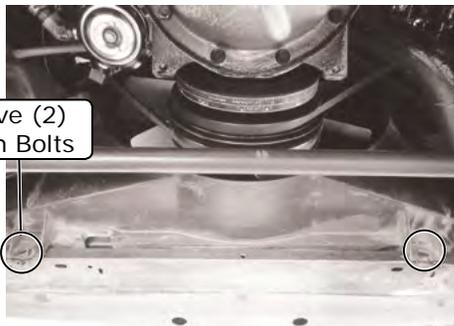


Photo 3

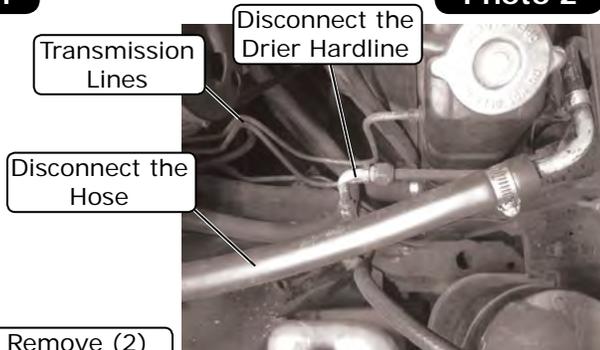


Photo 4

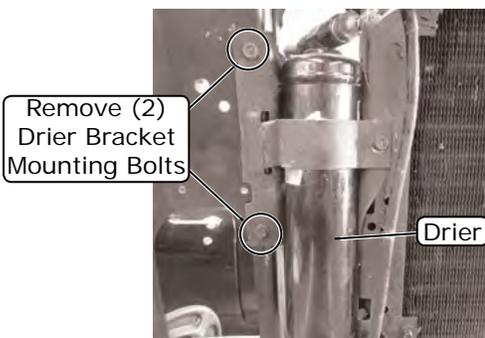


Photo 5

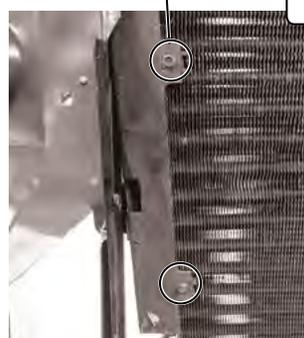


Photo 6

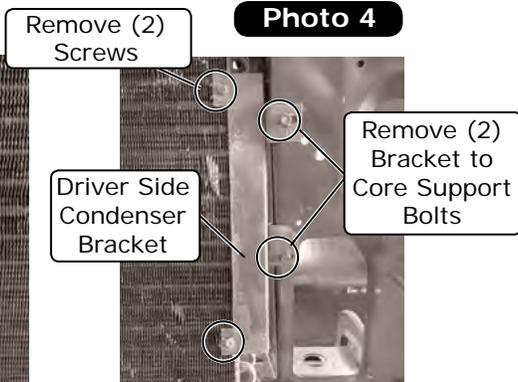


Photo 7



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Core Support Modification

1. Using a 5/16" drill bit, enlarge the condenser mounting holes shown in Photos 1 & 2, below.



Photo 1



Photo 2

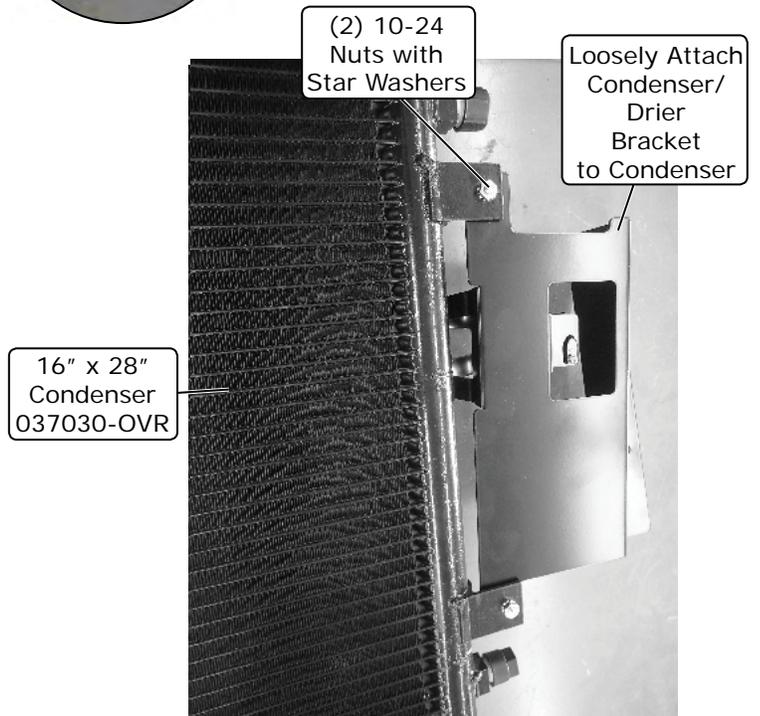
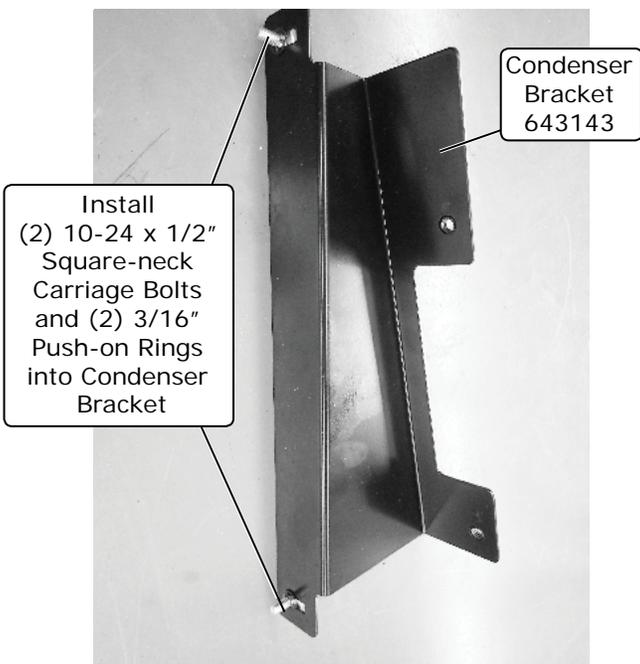
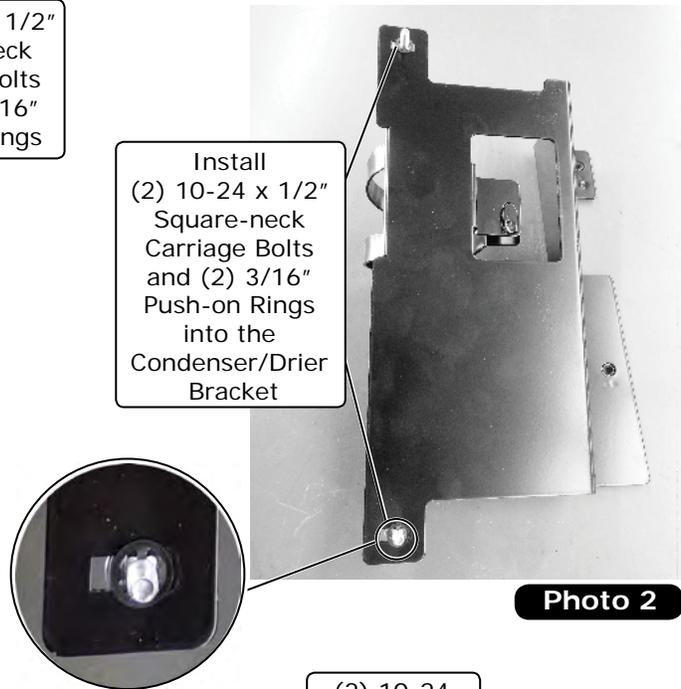
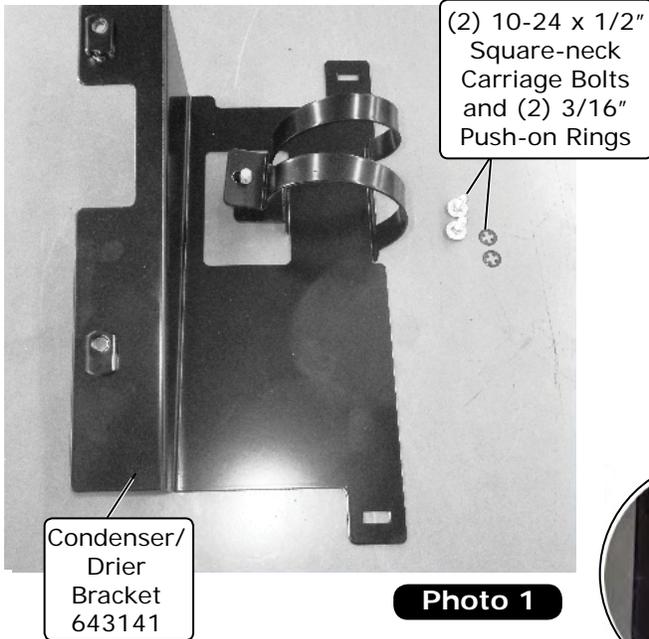


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Condenser Bracket Preparation and Installation

On a workbench perform the following:

1. Install (2) 10-24 x 1/2" square-neck carriage bolts into the condenser/drier bracket and secure them to the bracket using (2) 3/16" push-on rings (See Photos 1 & 2, below).
2. Install (2) 10-24 x 1/2" square-neck carriage bolts into the condenser bracket and secure them using (2) 3/16" push-on rings (See Photo 3, below).
3. Loosely attach the condenser/drier bracket to the condenser using (2) 10-24 nuts with star washers (See Photo 4, below).





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Drier & Hardline 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. Insert the drier into the condenser/drier bracket. Install a 9/32" washer and 1/4-20 nut with star washer. Do not fully tighten yet (See Photo 1, below). **NOTE: Refrigerant flow through drier is IN from condenser, OUT to evaporator.**
2. With (2) properly lubricated O-rings (See Lubricating O-rings, below), install the #6 condenser/drier hardline onto the drier and #6 condenser fitting. Tighten the condenser/drier bracket nut at this time (See Photo 2, below).

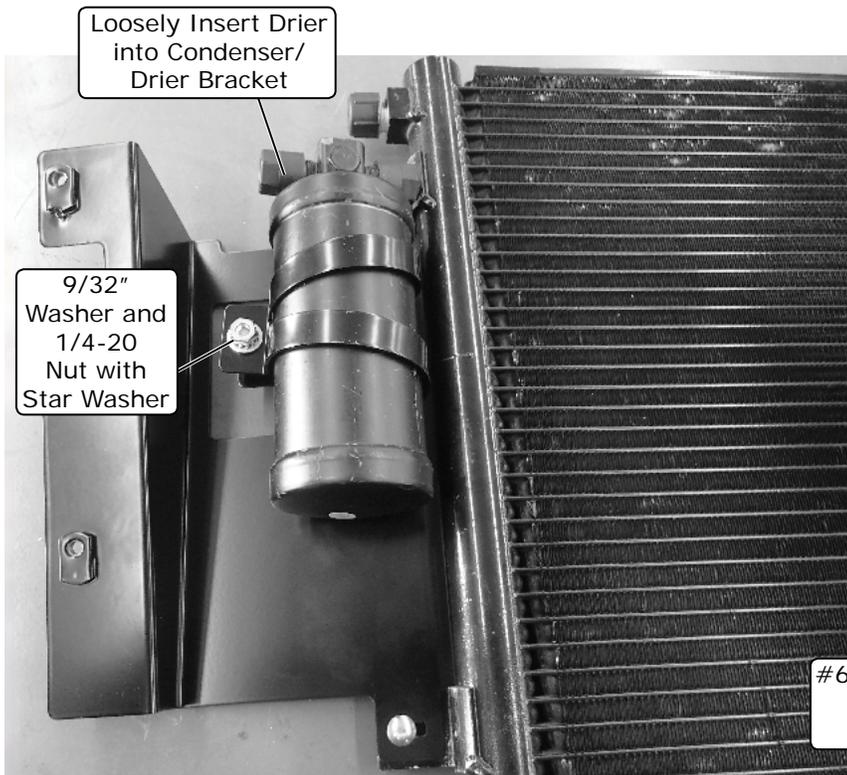


Photo 1

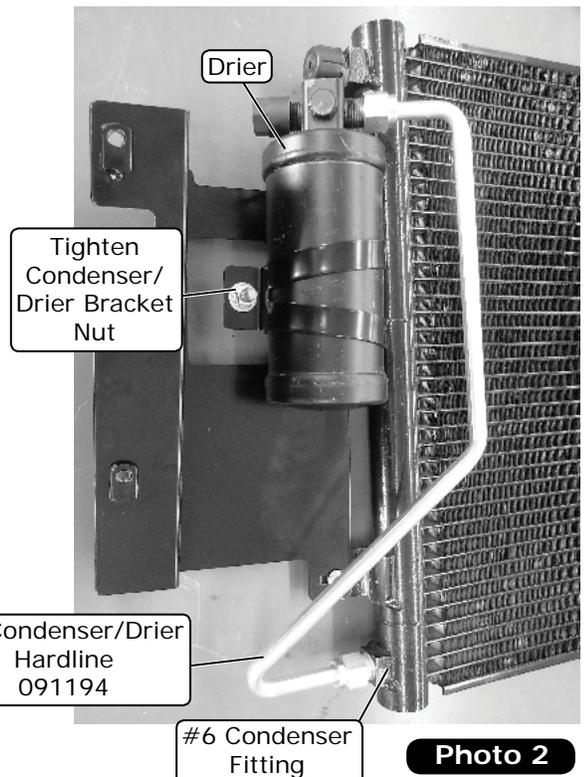
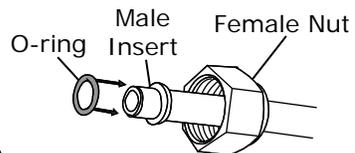
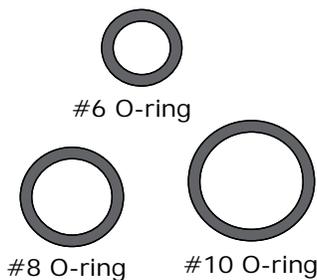
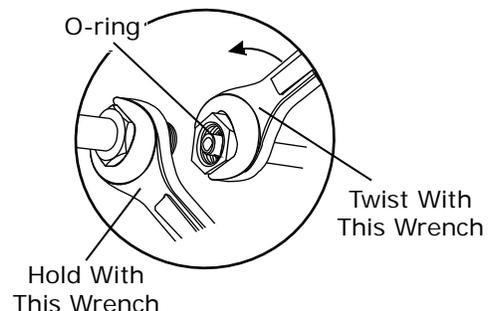
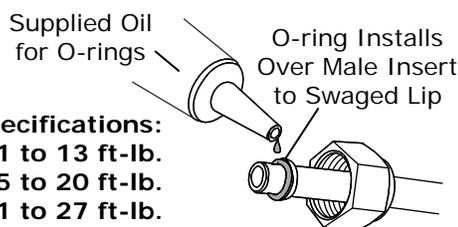


Photo 2

Lubricating O-rings



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



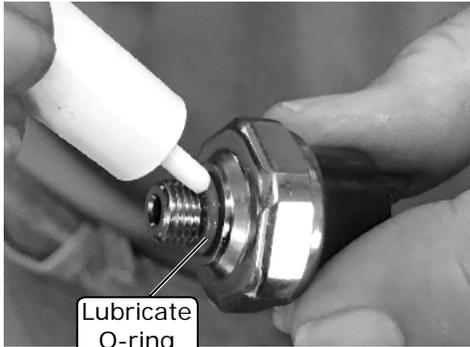
NOTE: Standard torque specifications:
 #6: 11 to 13 ft-lb.
 #8: 15 to 20 ft-lb.
 #10: 21 to 27 ft-lb.



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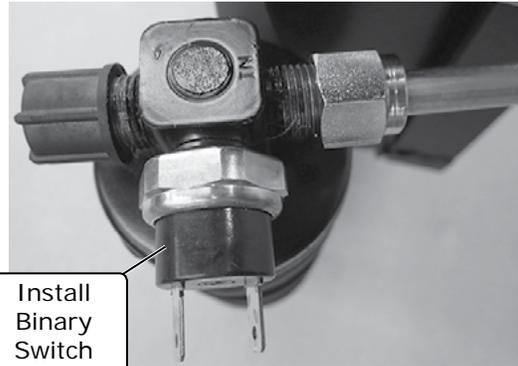
Binary Switch Installation

1. Lubricate the binary switch O-ring (See Lubricating O-ring, Page 9) and install it onto the drier (See Photos 1 & 2, below). **NOTE: The binary switch and the drier each come with an O-ring. Only use the binary switch O-ring.**



Lubricate O-ring

Photo 1



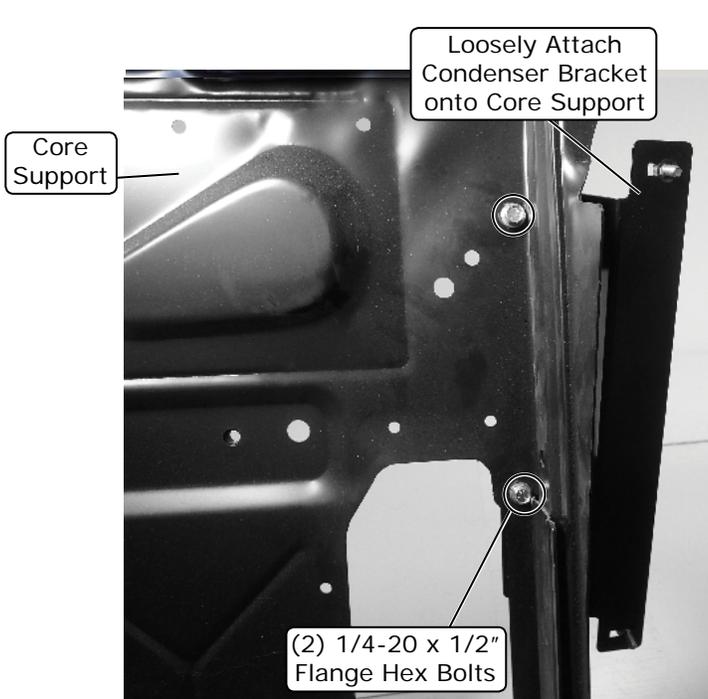
Install Binary Switch onto Drier

Photo 2

Condenser Installation

NOTE: Vintage Air recommends protecting the condenser surface to avoid damage during the installation.

1. Loosely attach the condenser bracket onto the core support using (2) 1/4-20 x 1/2" flange hex bolts (See Photo 1, below).
2. Secure the condenser assembly to the bracket using (2) 10-24 nuts with star washers (See Photo 2, below).
3. Tighten all mounting hardware at this time.

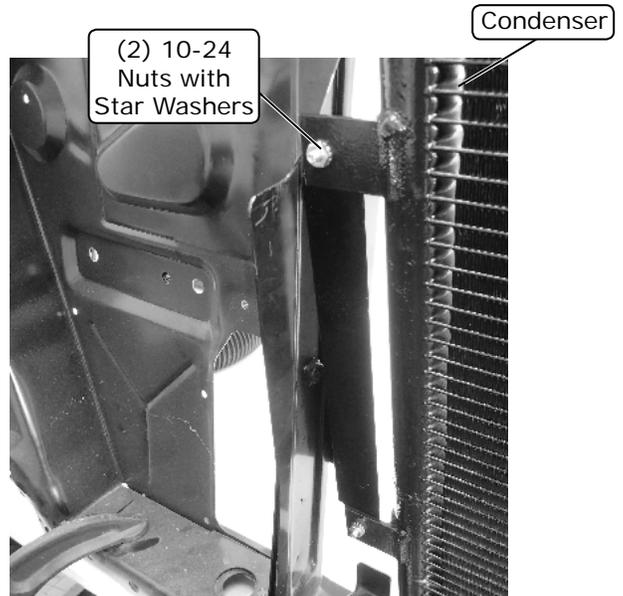


Core Support

Loosely Attach Condenser Bracket onto Core Support

(2) 1/4-20 x 1/2" Flange Hex Bolts

Photo 1



Condenser

(2) 10-24 Nuts with Star Washers

Photo 2



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#8 Hardline Installation

1. With a properly lubricated #8 O-ring (See Lubricating O-rings, Page 9), install the #8 condenser hardline onto the #8 condenser fitting (See Photo 1, below).

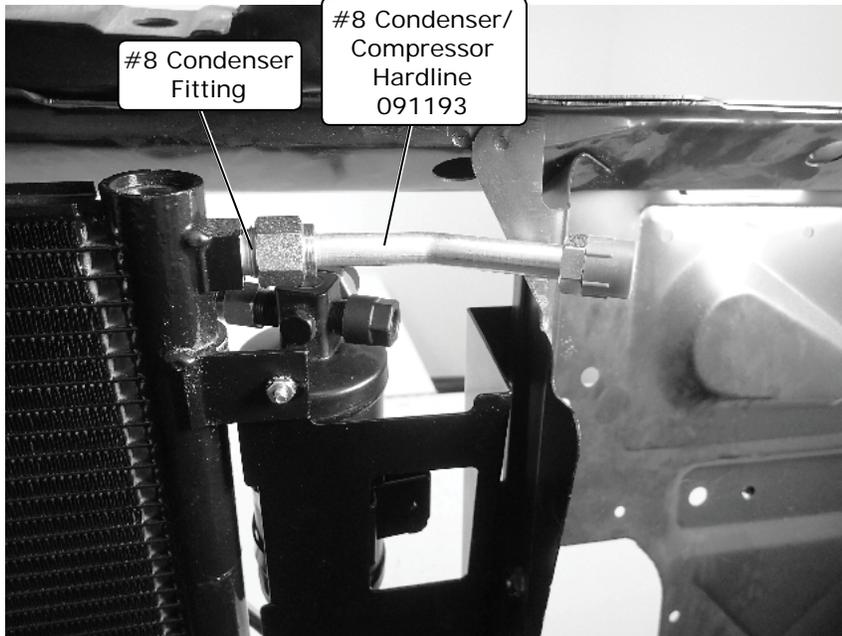


Photo 1

Final Steps

1. Reinstall and/or reconnect all remaining items removed or disconnected in the Engine Compartment Disassembly instructions on Page 6. 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 on Page 6.**



Finished Installation

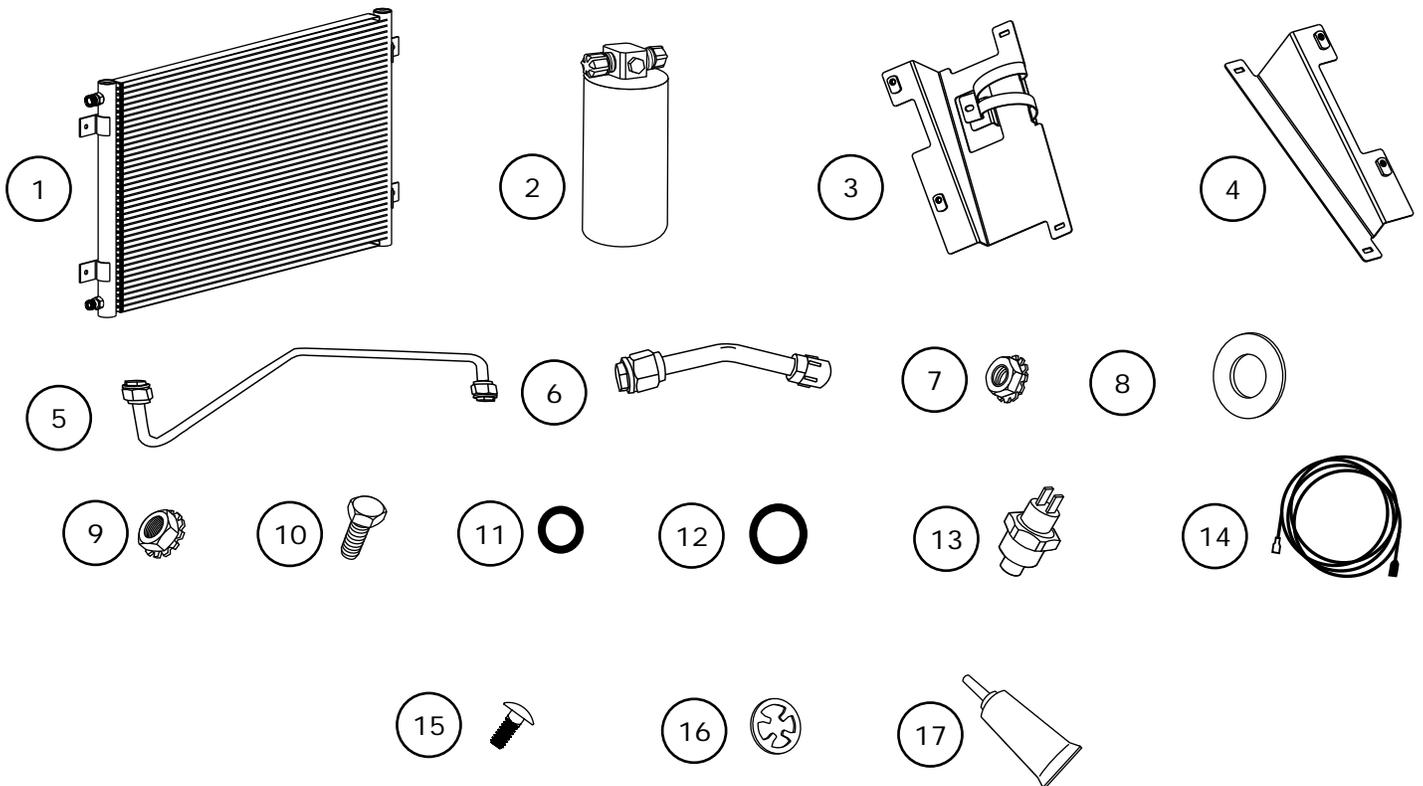


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8.	1	186011	Washer, 9/32"
9.	1	18152-VUB	Nut with Star Washer, 1/4-20, Hex
10.	4	182870	Bolt, 1/4-20 x 1/2", Hex Flange
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12.	1	33858-VUF	O-ring, #8
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16.	4	65976-VUE	Push-on Ring, 3/16"
17.	1	41117-VUP	Refrigerant Oil

Checked By: _____
 Packed By: _____
 Date: _____



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