1953-56 Ford F-100

Condenser Kit *with* Drier
(011088)

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Table of Contents

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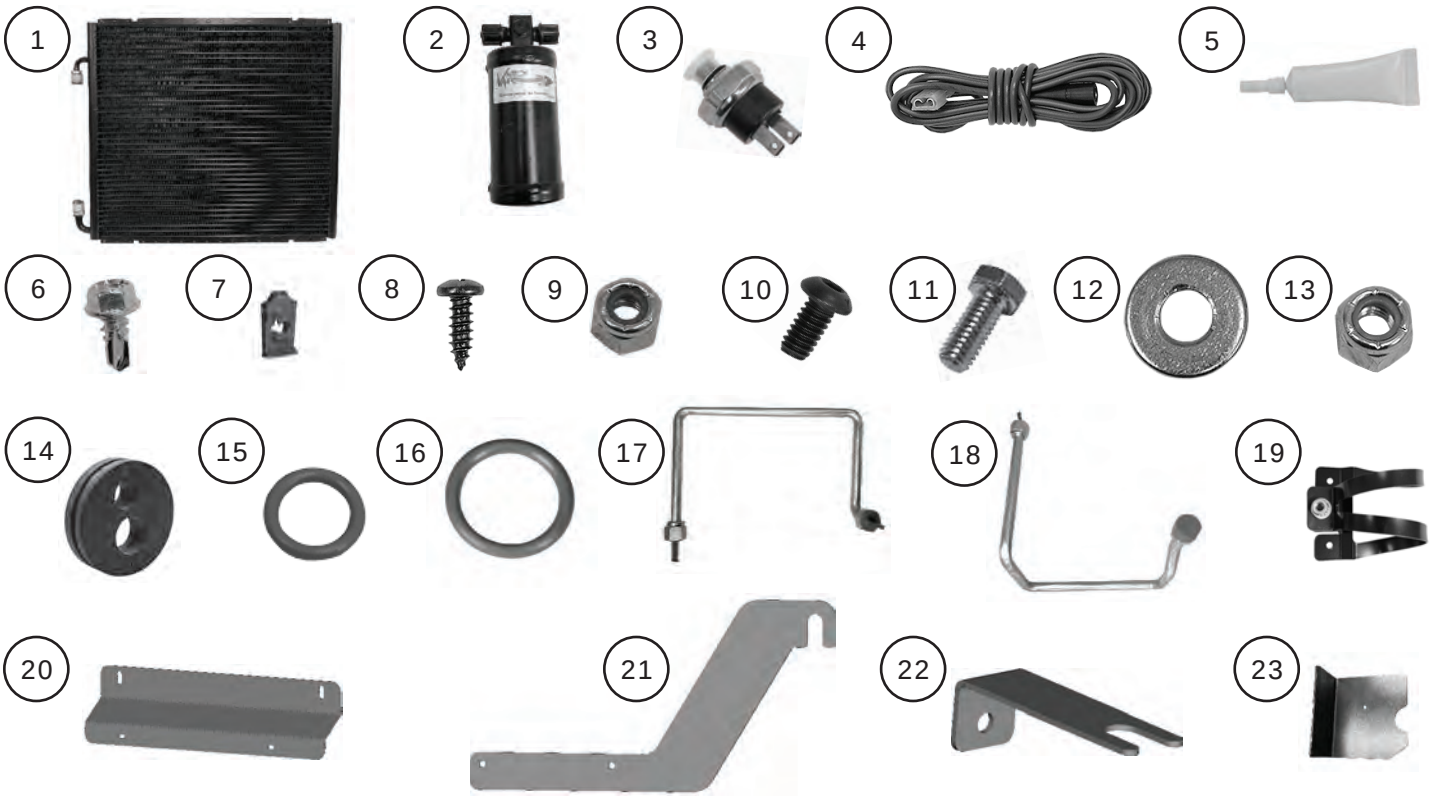
Packing List: Condenser Kit (011088)

No.	Qty.	Part No.	Description
1.	1	037036	Condenser, 17” x 19”, Parallel Flow
2.	1	07321-VUC	Drier
3.	1	11079-VUS	Binary Switch, Male
4.	1	23135-VUW	Compressor Lead
5.	1	41117-VUP	Refrigerant Oil
6.	2	182465	Screw, #12 x 1/2”, Self-Tapping
7.	7	189801	U-nut, #8
8.	7	18235-VUB	Screw, #8 x 1/2”, Pan Head
9.	2	181490	Locknut, 1/4-20
10.	2	18300-BSR	Screw, 1/4-20 x 1/2”, Button Head
11.	1	18605-VUB	Bolt, 5/16-18 x 3/4”, Hex
12.	2	18611-VUB	Washer, 5/16”, Flat
13.	1	18151-VUB	Locknut, 5/16-18
14.	1	33134-VUI	Grommet, 2-Hole
15.	2	33857-VUF	O-ring, #6
16.	1	33858-VUF	O-ring, #8
17.	1	081073	Hardline, #6 Condenser/Drier
18.	1	081074	Hardline, #8 Condenser/Compressor
19.	1	071130	Drier Clamp
20.	1	640047	Bracket, Upper Condenser
21.	2	640048	Bracket, Lower Condenser
22.	1	640051	Bracket, Center Support
23.	1	644200	Template, Core Support Hardline

**** 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 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:

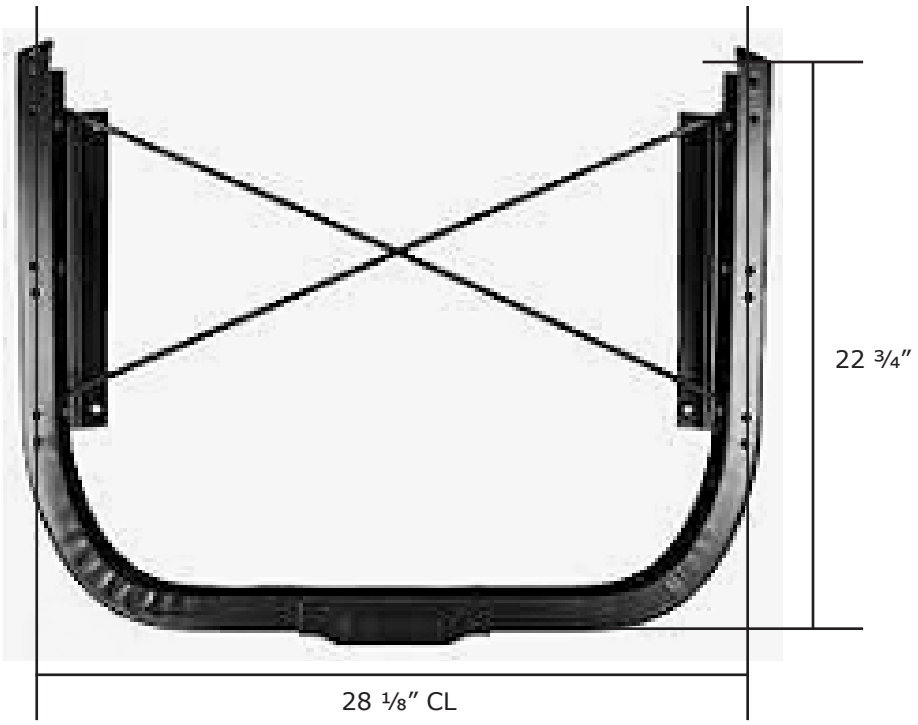
To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

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 1953 Ford F-100.

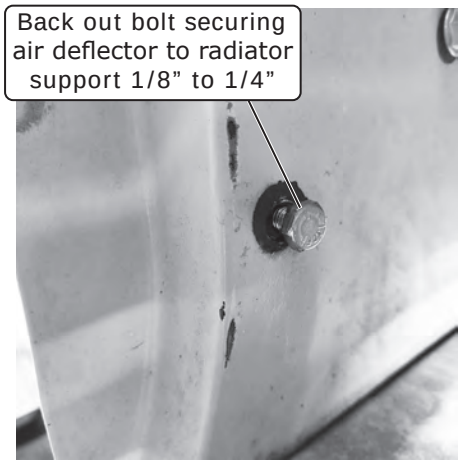


Engine Compartment Disassembly

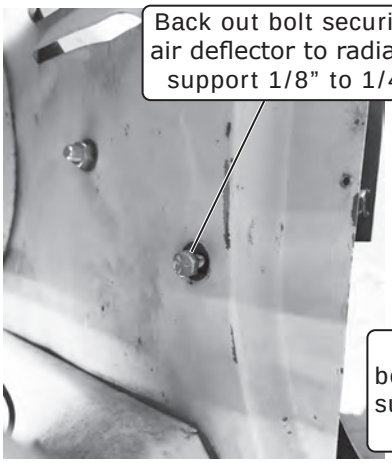
NOTE: Before starting the installation, check the function of the vehicle (horn, lights, etc.) for proper operation, and study the instructions, illustrations, photos & diagrams. Retain all OEM bolts, washers and nuts, as some hardware will be reused.

Perform the following:

1. Drain the radiator.
2. Remove the fan and fan shroud.
3. Disconnect the upper and lower radiator hoses.
4. Disconnect and cap the transmission cooler lines (if equipped).
5. Remove the radiator.
6. Remove the OEM hardware from the (2) middle holes on the upper radiator valance. **NOTE: If wire retainers or Adel clamps are installed here, they may be reinstalled after the condenser is mounted.**
7. On both sides, back out the lower mounting bolts that secure the air deflectors to the radiator support. Only 1/8" to 1/4" is needed (See Photos 1 and 2, below).
8. Remove the lower bolt that secures the grille support bracket to the splash guard (See Photo 3, below).



Driver Side View **Photo 1**



Passenger Side View **Photo 2**

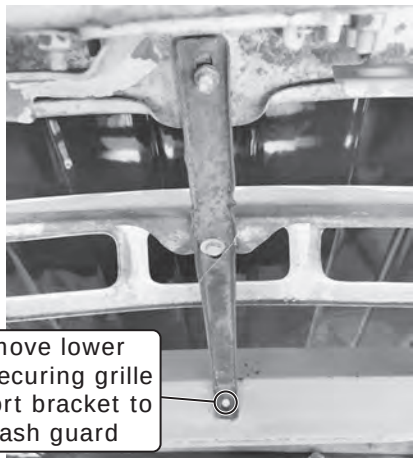


Photo 3

Core Support Modification

1. Position the template against the core support and OEM hardware, then mark the center hole (See Photo 1, below). Remove the template, then drill to 1 ¼" for the 2-hole grommet (See Photo 2, below). **NOTE: The hardline template was based on a .675" O.D. washer. If using a different size washer, align the template to the center of the bolt.**

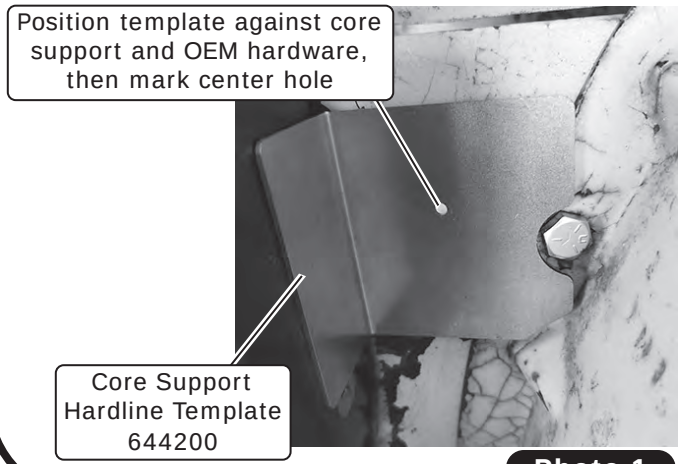


Photo 1

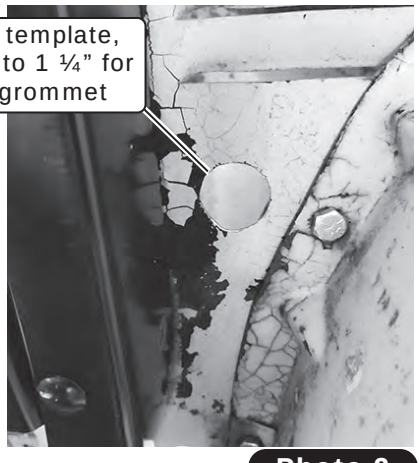


Photo 2

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Condenser Mounting Bracket Installation

1. Place the condenser onto a workbench with the larger #8 condenser fitting on the top left as shown in Photo 1, below.
2. Install (2) #8 U-nuts onto the top rail into the 5th holes from the left and right sides (See Photo 1, below).
3. Install (3) #8 U-nuts onto the bottom rail in the 1st, 5th and 9th holes from the left side (See Photo 1, below).
4. Install (2) #8 U-nuts onto the bottom rail in the 2nd and 6th holes from the right side (See Photo 1, below).
5. Arrange the brackets as shown in Photo 2, below.
6. Install the upper condenser bracket onto the #8 U-nuts on the top rail with the small notch towards the left side with the condenser fittings using (2) #8 x 1/2" pan head screws (See Photo 3, below). **NOTE: There are slots in the bracket to allow side-to-side adjustment if necessary, but should be initially installed centered.**
7. Install the (2) lower condenser brackets onto the outer #8 U-nuts on the bottom rail using (4) #8 x 1/2" pan head screws as shown in Photos 4 and 5, below.
8. Install the center support bracket onto the center #8 U-nut on the bottom rail using a #8 x 1/2" pan head screw as shown in Photo 6, below.

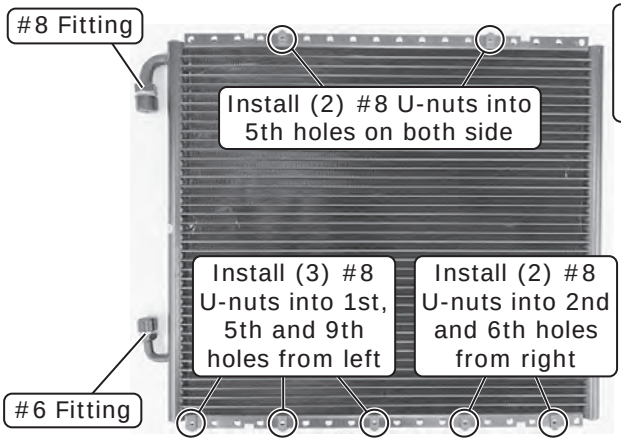
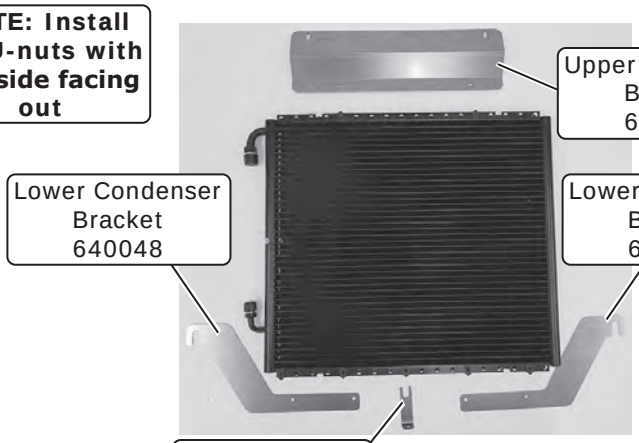


Photo 1

NOTE: Install #8 U-nuts with flat side facing out



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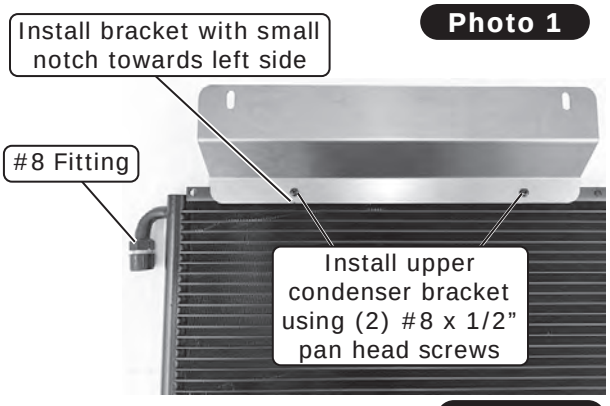

Photo 3

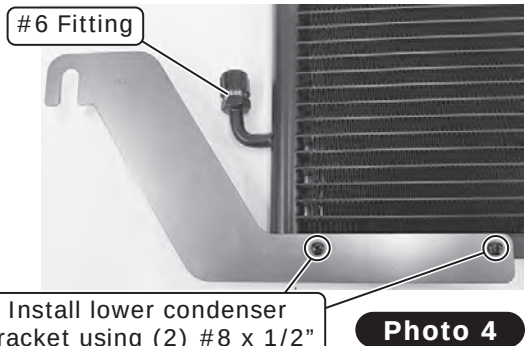

Photo 4

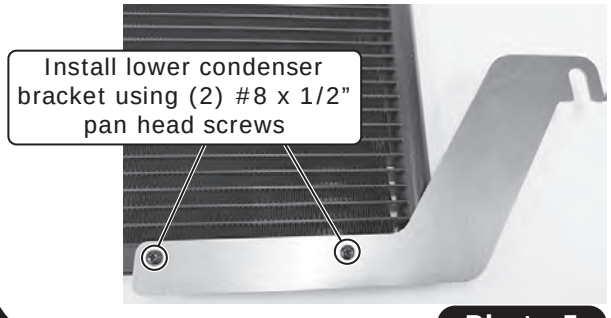

Photo 5

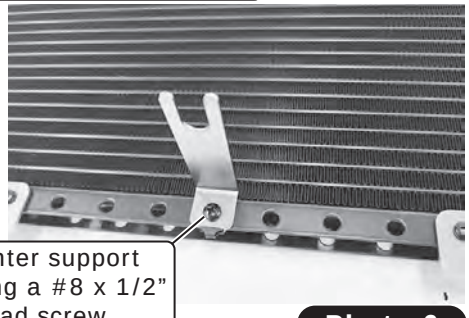

Photo 6

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Condenser Assembly Installation

1. Bring the condenser assembly into the engine bay.
2. Slide one side of the lower condenser bracket into the space between the air deflectors and the grille, followed by the other side (See Photo 1, below).
3. Align the center support bracket with the grille support bracket (See Photo 2, below).
4. Slide the lower condenser bracket slots onto the previously loosened lower bolts (See Photos 3 and 4, below).
5. Align the upper condenser bracket with the holes in the radiator support variance, then secure using (2) 1/4-20 x 1/2" button head screws and (2) 1/4-20 locknuts (See Photo 5, below).
6. Secure the center support bracket using a 5/16-18 x 3/4" hex bolt, (2) 5/16" flat washers and a 5/16-18 locknut (See Photo 6, below).

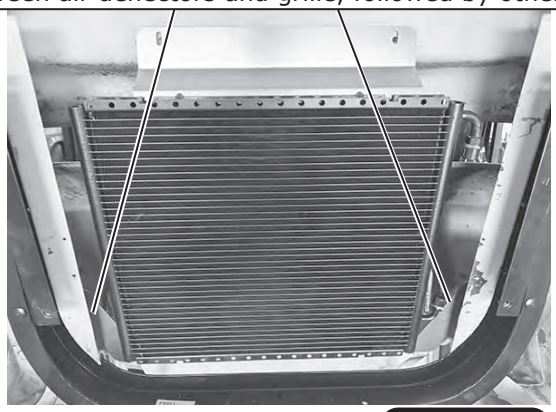


Photo 1

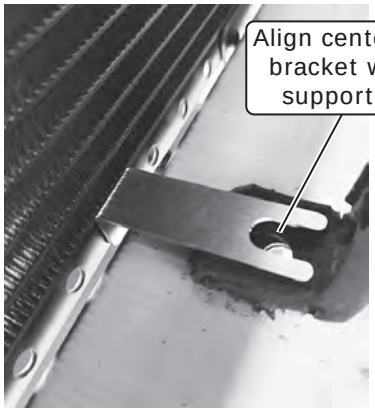


Photo 2

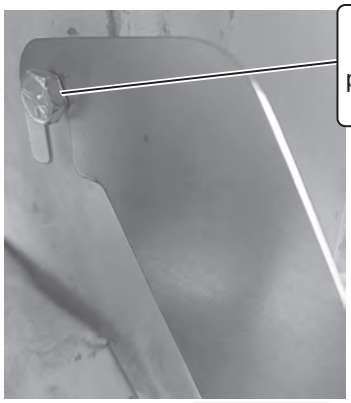
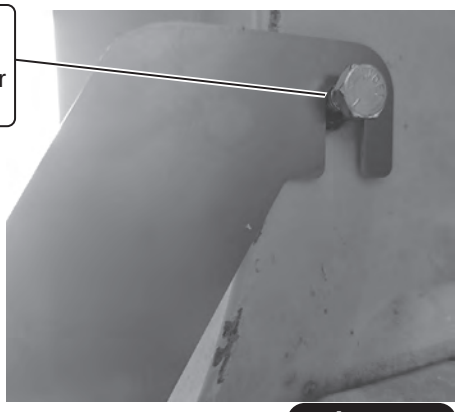


Photo 3



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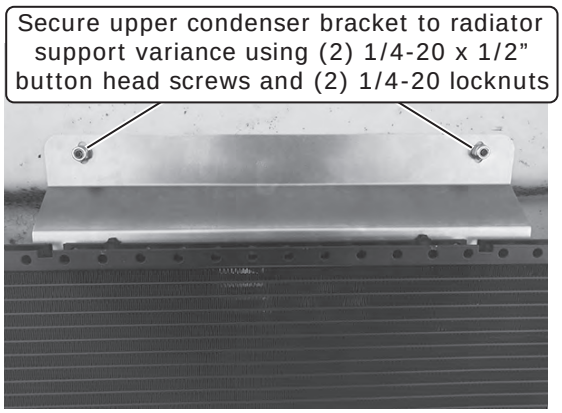


Photo 5

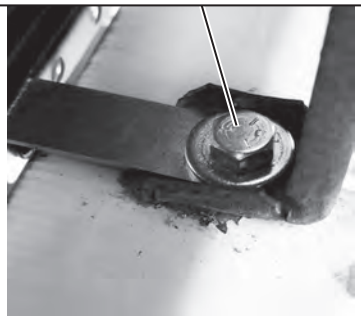
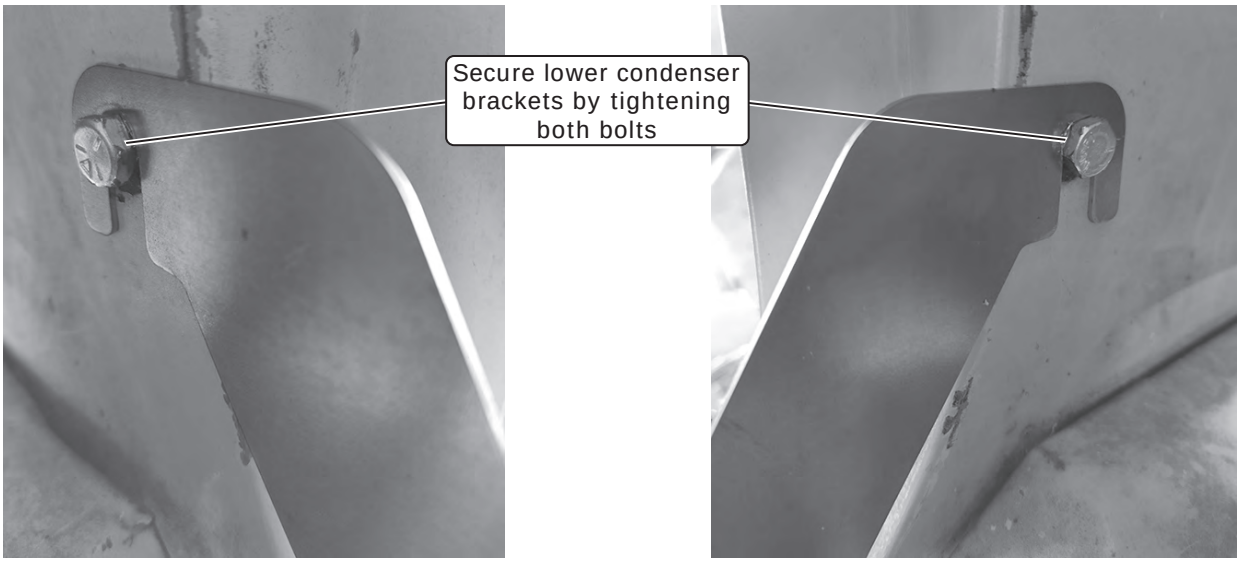


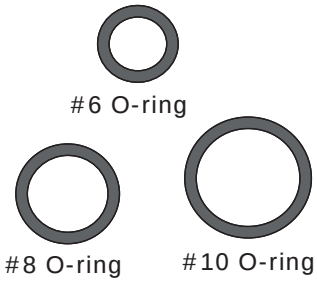
Photo 6

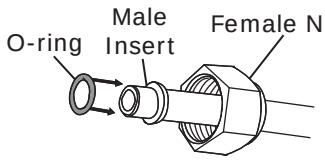
Condenser Assembly Installation (Cont.)

7. Secure the lower condenser brackets by tightening both bolts (See Photos 7 and 8, below).

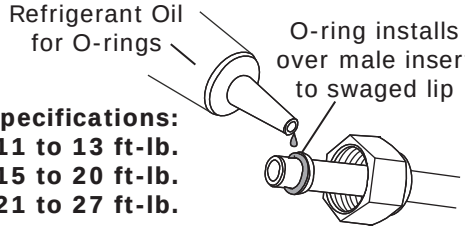


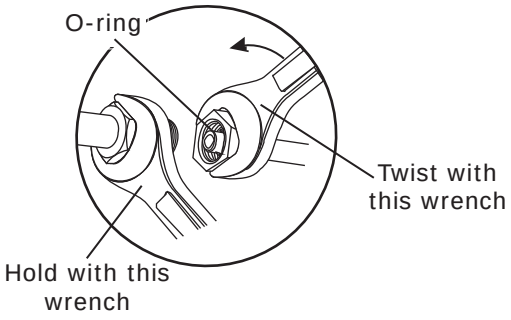
Lubricating O-rings





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.

Hardline & 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. The use of a backup wrench is important when installing the hardlines to avoid damage to the condenser.

1. Route the #6 condenser/drier hardline through the previously drilled 1 ¼" hole in the core support (See Photo 1, below).
2. With a properly lubricated #6 O-ring (See Lubricating O-rings, Page 9), connect the #6 condenser/drier hardline to the #6 fitting on the condenser (See Photo 1, below). **NOTE: Do not fully tighten the fitting at this time.**
3. Route the #8 condenser/compressor hardline through the 1 ¼" hole in the core support. With a properly lubricated #8 O-ring (See Lubricating O-rings, Page 9), connect the hardline to the #8 fitting on the condenser (See Photo 2, below). **NOTE: Do not fully tighten the fitting at this time.**
4. Install the 2-hole grommet into the 1 ¼" hole in the core support (See Photo 3, below).
5. Locate the drier clamp and loosen the nut, then insert the drier (See Photo 4, below). **NOTE: Refrigerant flow through the drier is IN from the condenser, OUT to the evaporator. Do not fully tighten the drier clamp hardware at this time.**

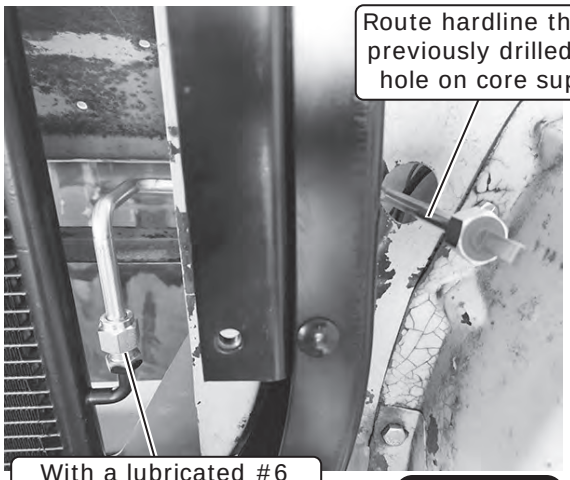


Photo 1

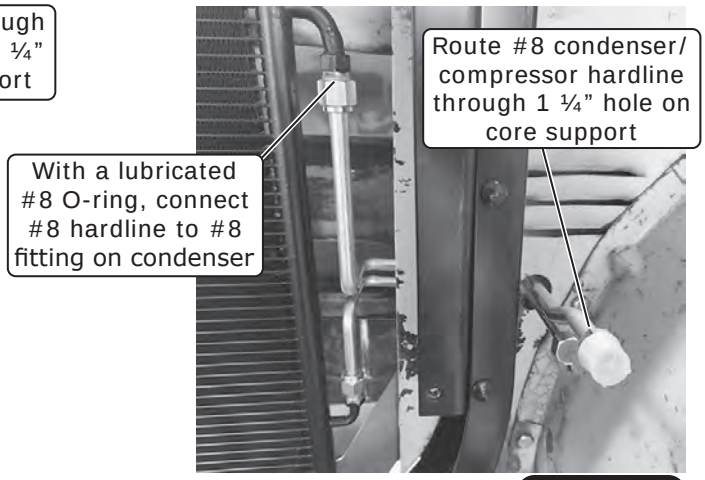


Photo 2

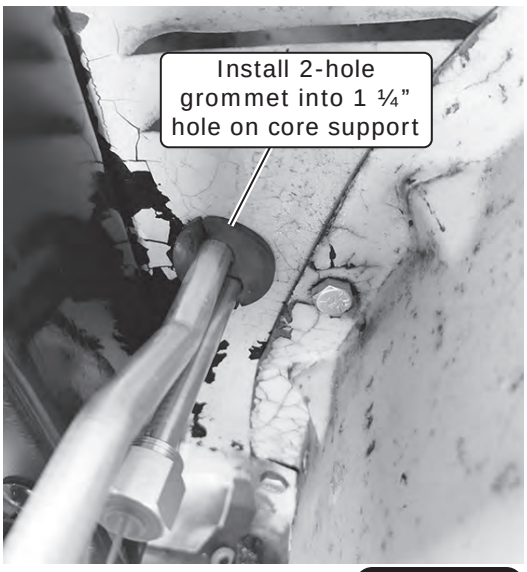


Photo 3

Photo 4

Hardline & Drier Installation (Cont.)

6. With a properly lubricated O-ring (See Lubricating O-rings, Page 9), install the #6 condenser/drier hardline onto the drier (See Photo 5, below). **NOTE: Do not fully tighten the fitting at this time.**
7. Adjust the drier clamp on the inner fender well, then secure it using (2) #12 x 1/2" self-tapping screws (See Photo 5, below).
8. Tighten all hardlines and the drier hardware at this time.
9. Remove the plug from the front port of the drier. Using a properly lubricated O-ring (See Lubricating O-rings, Page 9), install the binary switch into the drier port (See Photo 6, below). **NOTE: The binary switch and the drier each come with an O-ring. Only use the binary switch O-ring.**

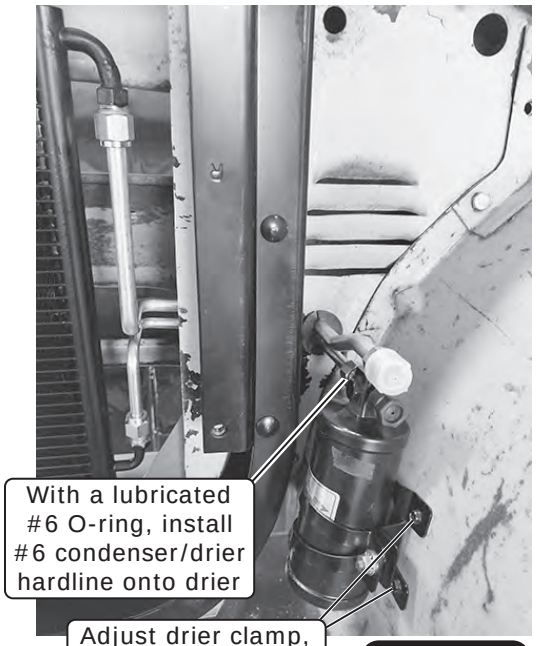


Photo 5

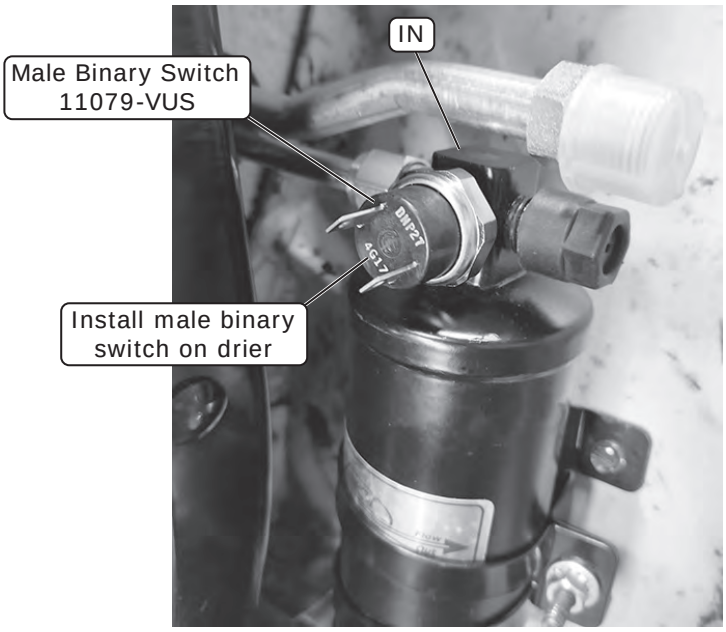


Photo 6

Final Steps

1. Reinstall the radiator and secure using the OEM hardware.
2. 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.

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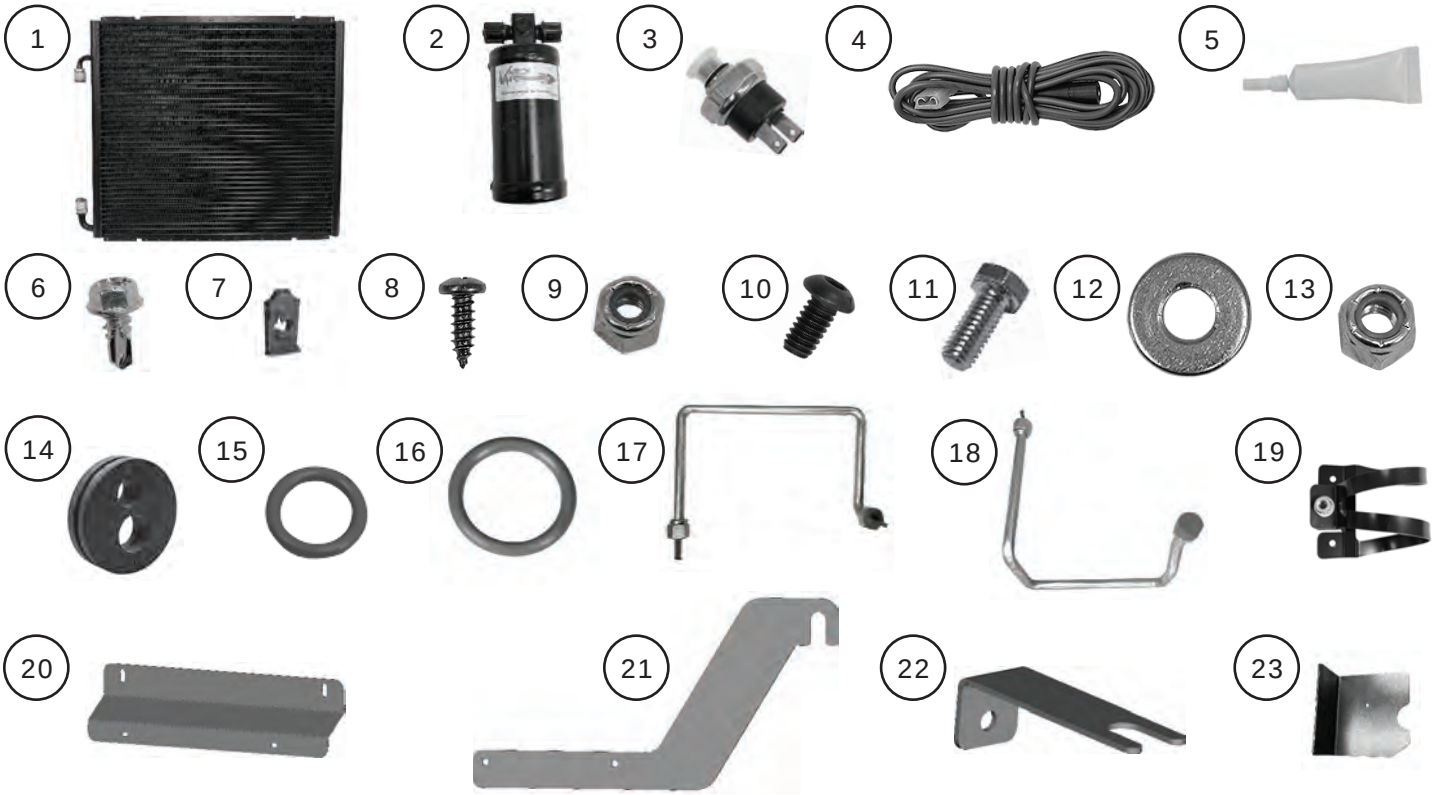
23.	1	644200	Template, Core Support Hardline	

Checked By: _____

Packed By: _____

Date: _____



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