1976-86 Jeep CJ5/CJ7/C8

Condenser Kit *with* Drier

(051011)

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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.

Additional Info: Please Read Before Beginning

- **This kit is designed to work with 1976-1986 Jeep CJ7/CJ5**
- **Due to the wide model year range, options, and variety of factory, dealer and aftermarket installed A/C systems available, some photos, steps, or procedures may not apply to your vehicle.**
- **This kit was developed on a 1984 Jeep CJ7 with dealer installed air conditioning.**

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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.

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 the battery (See Photo 1, below).
2. Evacuate the OEM A/C system (if equipped).
3. Drain the coolant (See Photos 2 and 3, below). **NOTE: The factory petcock may differ in appearance from the aftermarket drain options.**

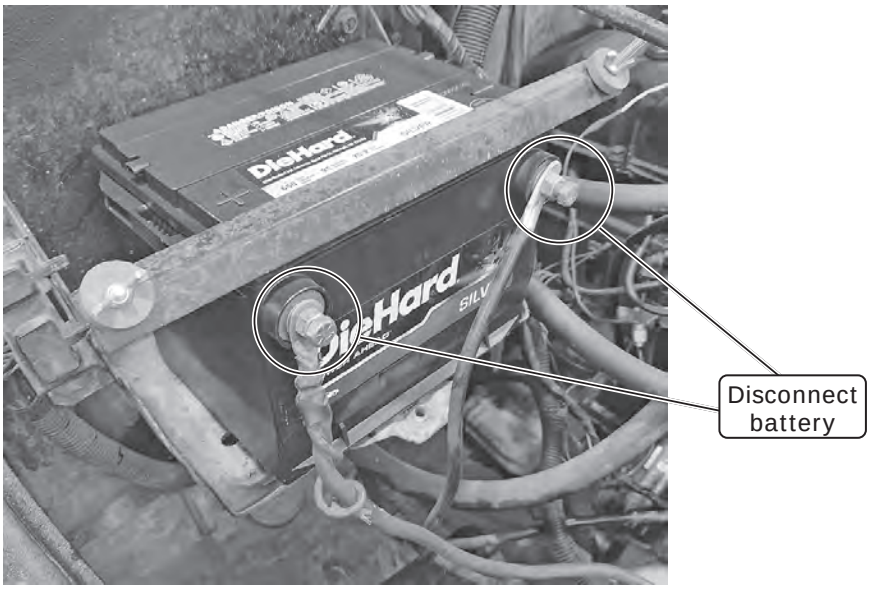

Photo 1

Photo 2

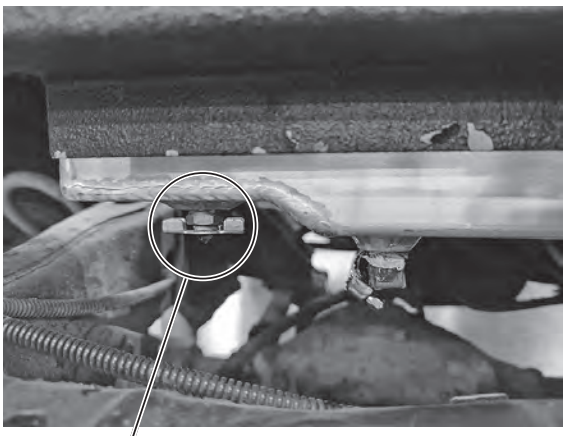

Photo 3

Engine Compartment Disassembly (Cont.)

4. Loosen the A/C compressor and power steering belts.
5. Remove the upper and lower radiator hoses (See Photos 4 and 5, below).
6. Remove the automatic transmission and integral transmission cooler lines from the bottom of the radiator (If equipped) (See Photo 6, below).

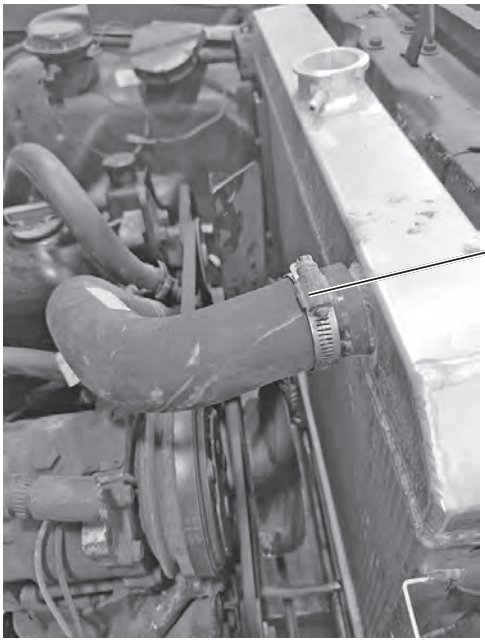

Photo 4

Photo 5

Photo 6

Engine Compartment Disassembly (Final)

7. Support the radiator, then remove the (4) mounting bolts (See Photos 7 and 8, below). **NOTE: The jeep in the images didn't have a fan shroud, but it is mounted with the same bolts that hold the radiator.**
8. Disconnect the A/C hoses from the condenser and the drier (If equipped).
9. Remove the (4) bolts that secure the condenser (If equipped). Then, remove the condenser.
10. Disconnect the drier and A/C hoses located behind the headlight buckets (If equipped).

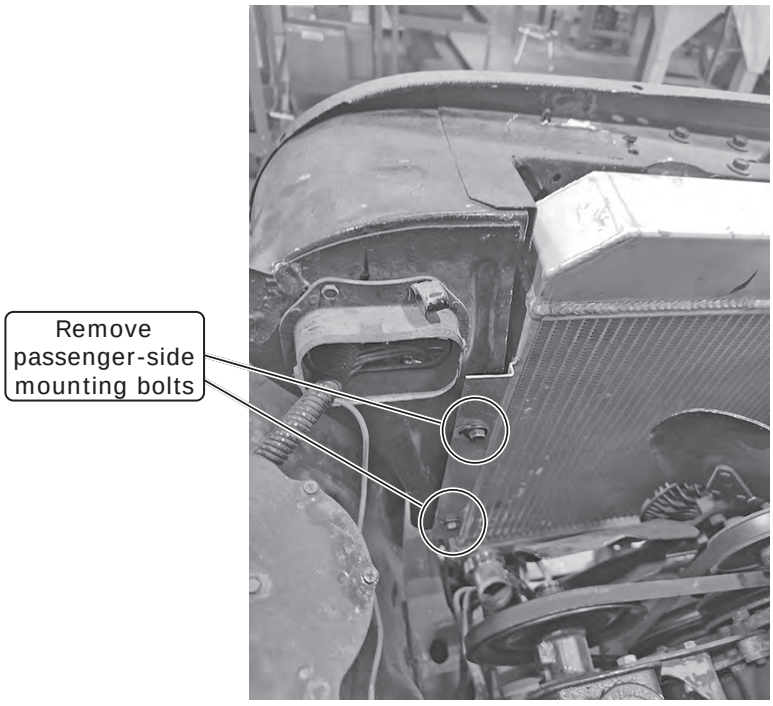

Photo 7

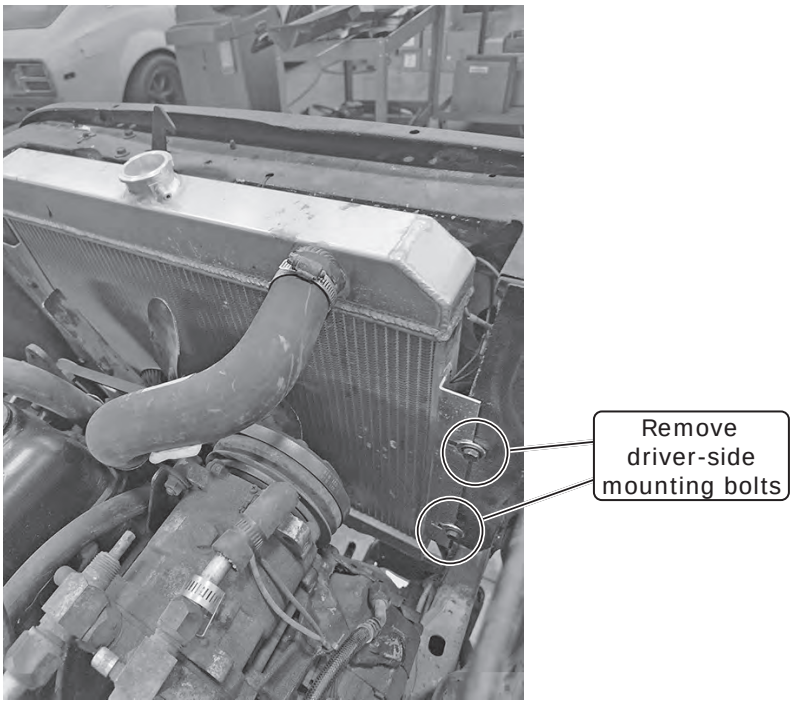

Photo 8

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Condenser Mounting Bracket Installation

1. On a workbench, place the condenser face down, with the ports on the left side and the #6 condenser port on the bottom as shown in Photo 1, below.
2. Install (4) #8 U-nuts onto the bottom row of the condenser through the 1st, 3rd, 14th and 16th holes (See Photo 2, below).
3. Install (2) lower condenser brackets onto the bottom of the condenser using (4) #8 x 1/2" pan head screws (See Photo 3, below). **NOTE: These brackets are identical.**
4. Flip the condenser over, and ensure both ports are on the right side as shown in Photo 4, below. **NOTE: Ensure the #6 condenser port is at the bottom as shown in Photo 4, below.**

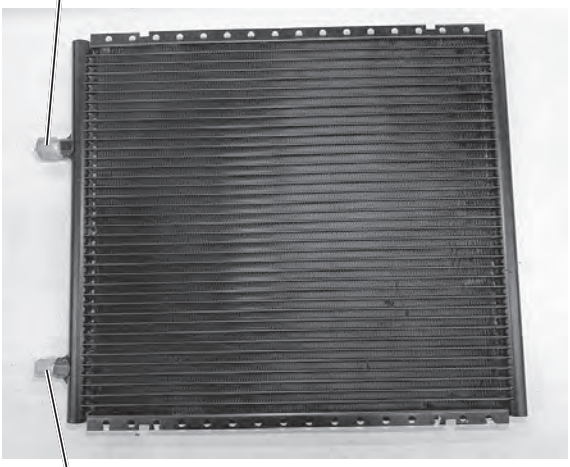

Photo 1

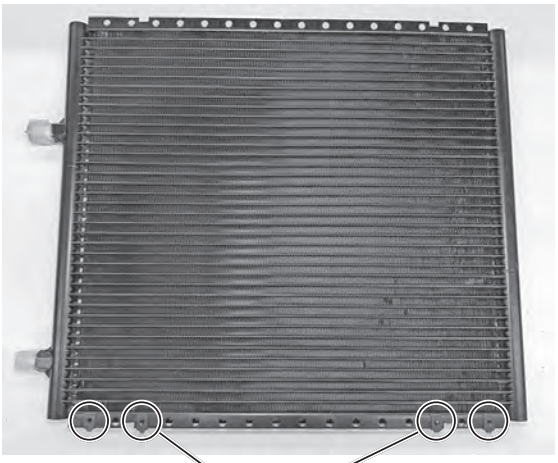

Photo 2

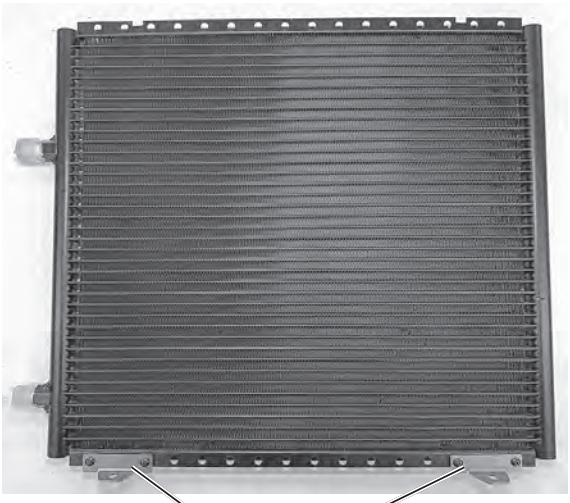

Photo 3

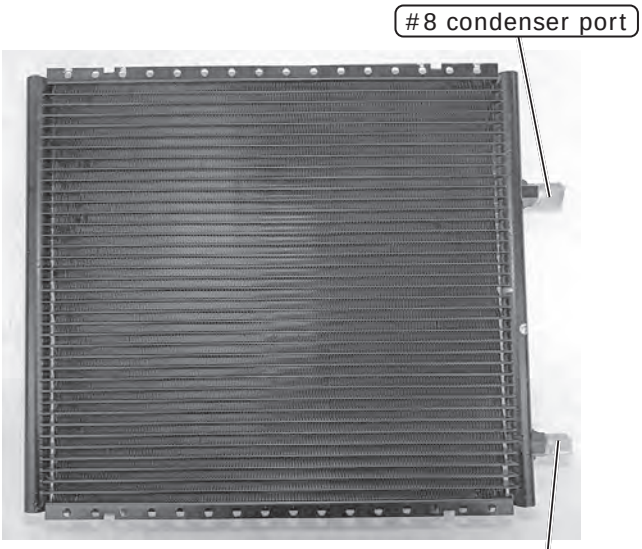

Photo 4

Condenser Mounting Bracket Installation (Cont.)

5. Install (4) #8 U-nuts onto the top row of the condenser through the 1st, 3rd, 14th and 16th holes as shown in Photo 5, below.
6. Place the (2) upper condenser brackets onto the top of the condenser, with the larger bracket on the left side, and the shorter one on the right side. Using (4) #8 x 1/2" pan head screws, loosely secure the brackets (See Photo 6, below). The brackets should be able to slide along of the slots. **NOTE: These screws will be tightened once mounted to the core support.**

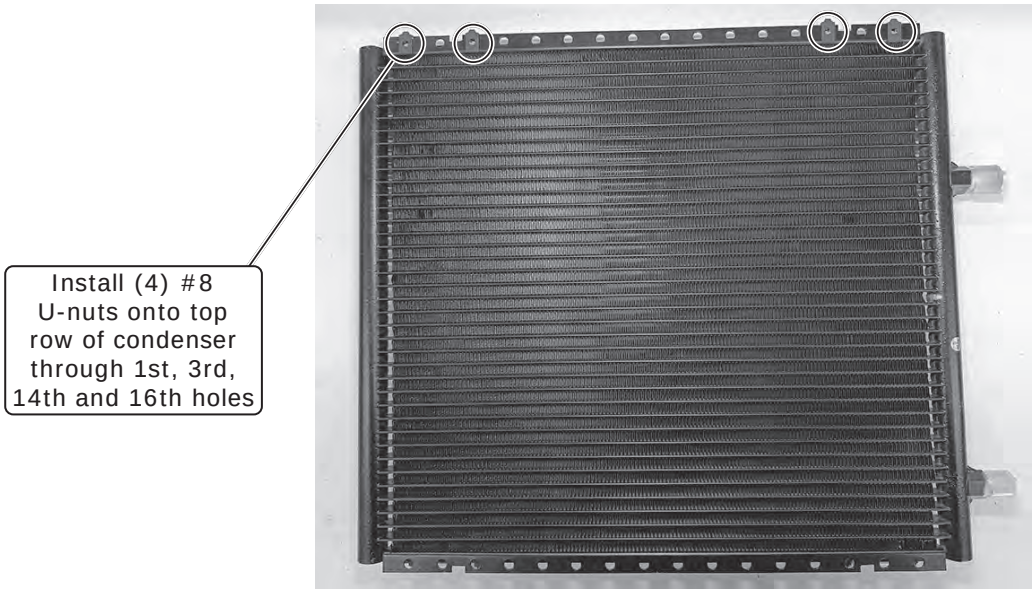

Photo 5

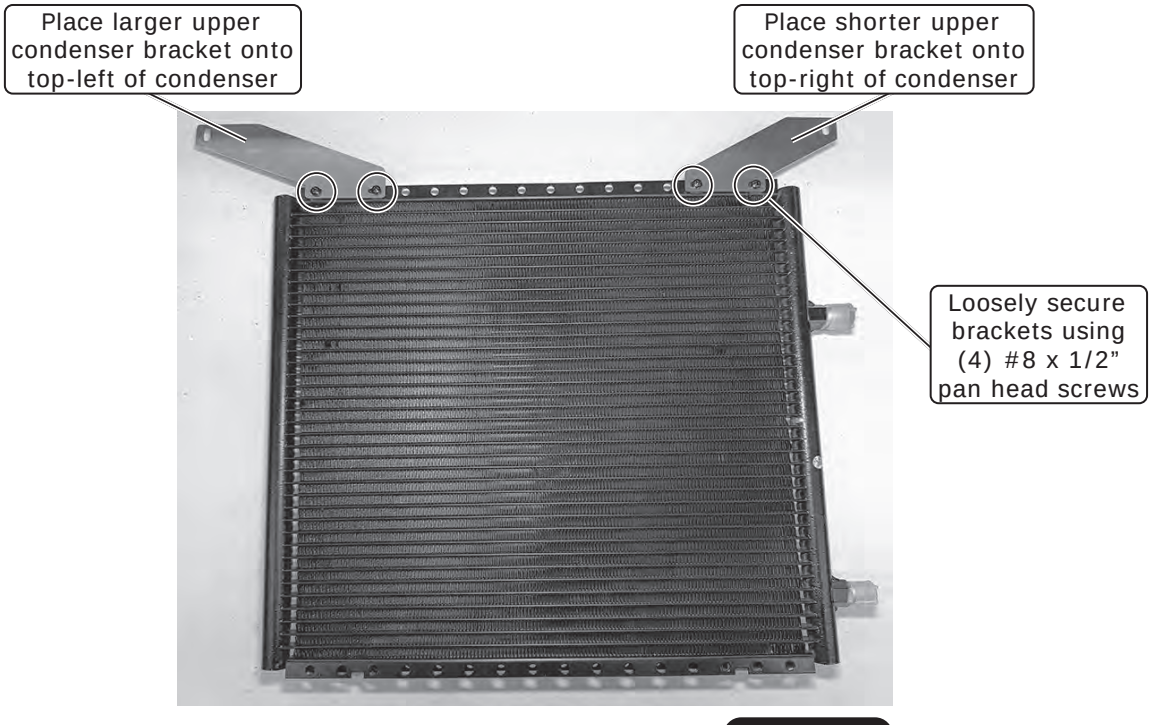

Photo 6

Condenser Installation

1. Rest the condenser onto the lower core support, using the lower condenser bracket flats. Line up the holes on the brackets to the factory holes in the lower core support as shown in Photo 1, below.
2. Install (2) 1/4-20 x 3/4" serrated flange black bolts through the top of the lower brackets (See Photo 2, below). Then, on the bottom of the core support, place (2) 1/4" I.D. x 9/32" O.D. fender washers and (2) 1/4-20 serrated flange nuts onto the (2) 1/4-20 x 3/4" serrated flange black bolts. Hand-tighten the hardware. **NOTE: These will be fully tightened at the end.**

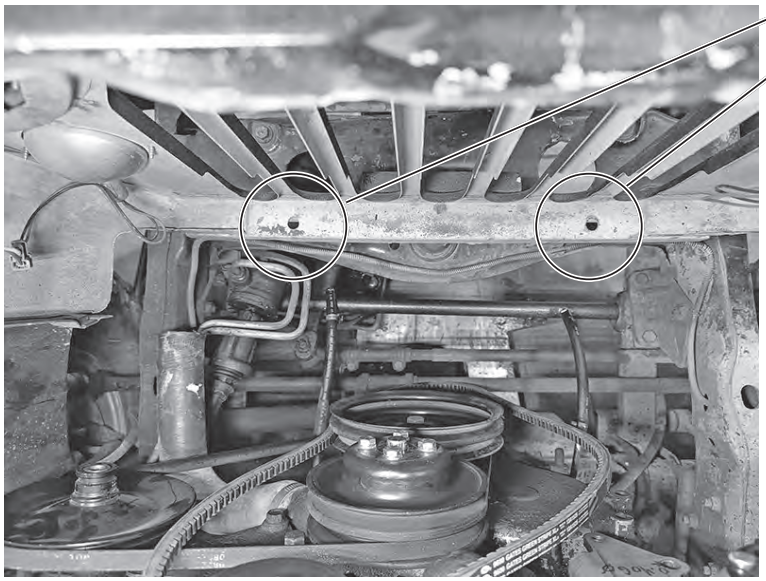

Photo 1

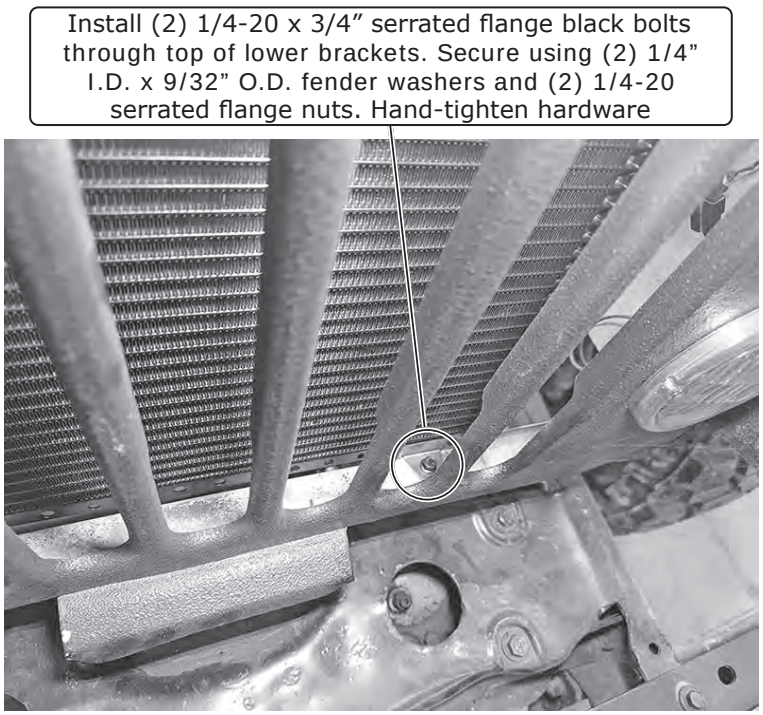

Photo 2

Condenser Installation (Cont.)

3. Align the top bracket holes with the pre-existing upper core support holes (See Photo 3, below).
4. Install (2) 1/4-20 x 1/2" serrated flange black bolts through the bracket and core support as shown in Photo 4, below. Loosely secure the top of the condenser using (2) 1/4-20 serrated flange nuts on the other side of the core support.

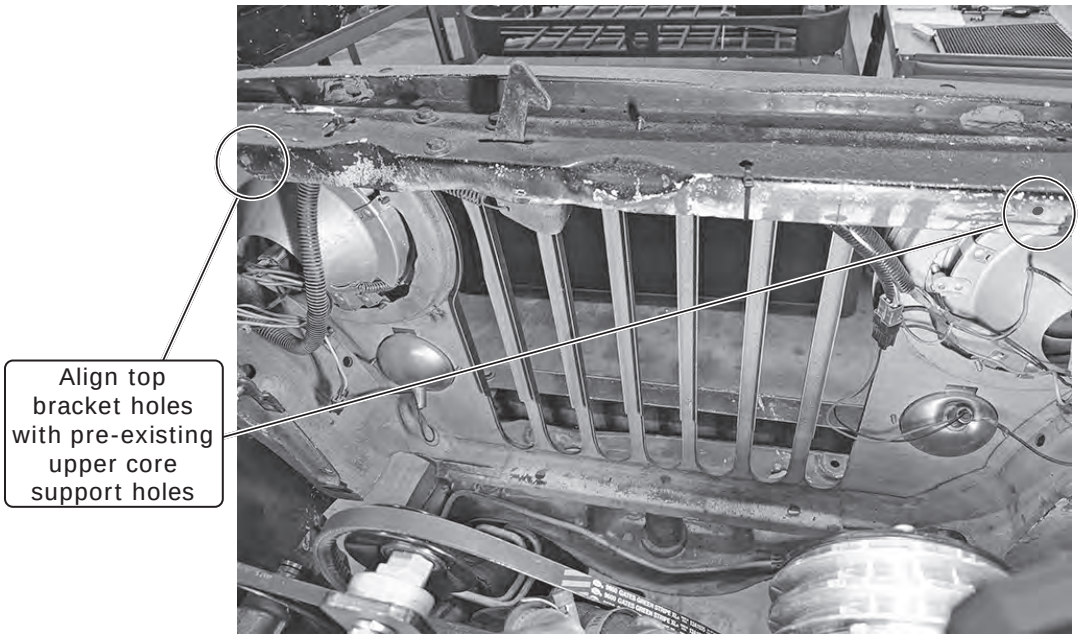

Photo 3

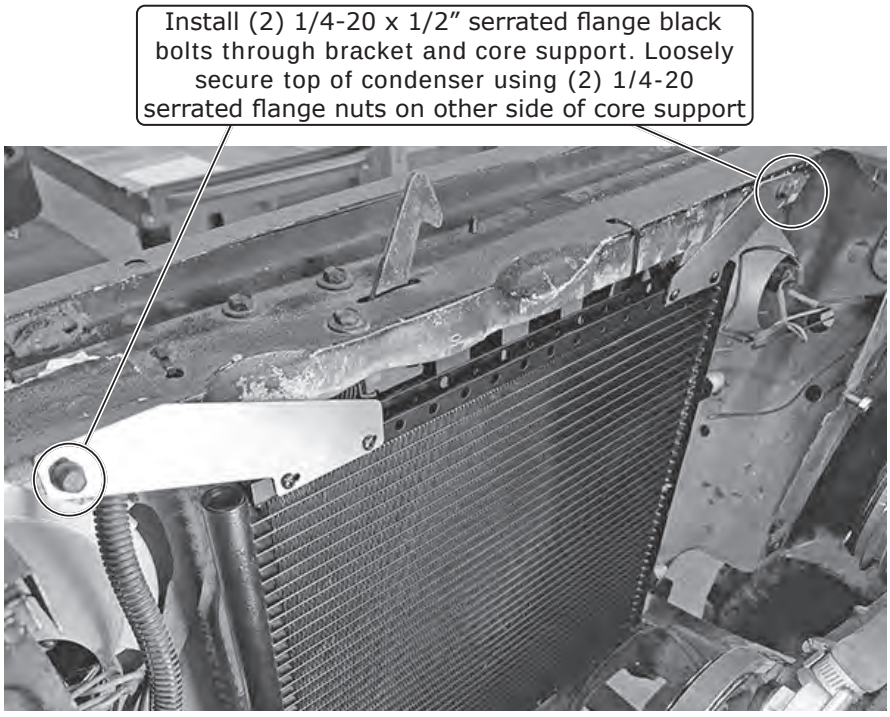

Photo 4

Condenser Installation (Final)

5. Tighten the (4) #8 x 1/2" pan head screws that secure the condenser bracket to the condenser at this time (See Photo 5, below).
6. Tighten all (4) 1/4-20 serrated flange nuts securing the condenser to the core support (See Photos 6 and 7, below).

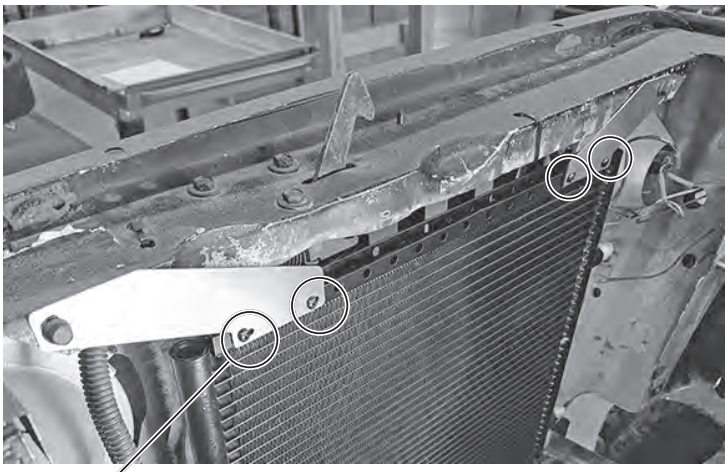

Photo 5

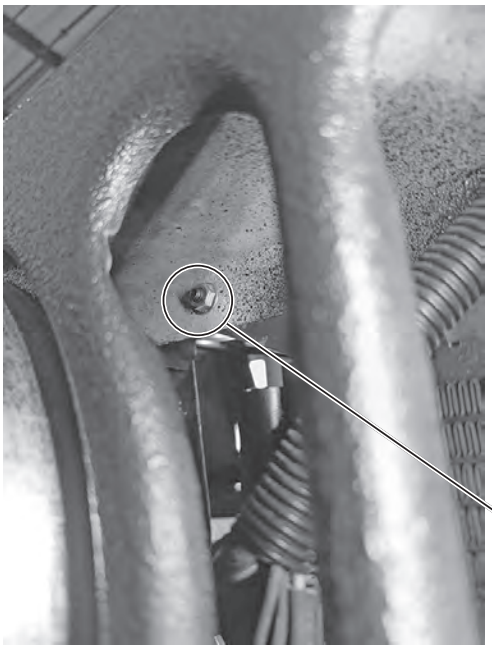

Photo 6

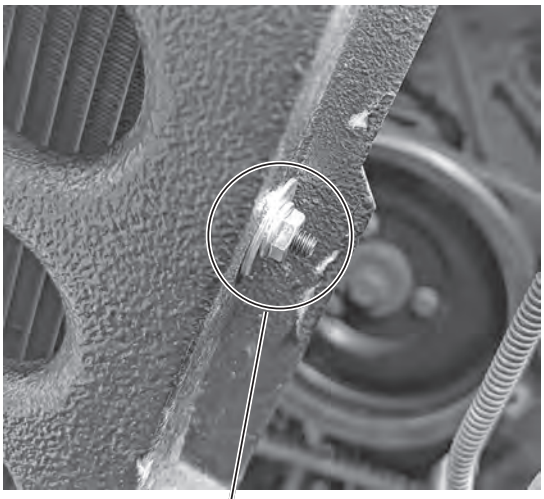

Photo 7

Drier 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. With the "IN" port facing left, remove the metal plug from the drier (See Photos 1 and 4, below). **NOTE: The plug should be under pressure.**
2. With a properly lubricated O-ring (See Lubricating O-rings and Fitting Torque Specs, Page 15), install the binary safety switch into the port of the drier as shown in Photo 2, below. **NOTE: The binary switch and the drier each come with an O-ring. Use the O-ring that comes with the binary safety switch.**
3. Install the drier mounting bracket onto the drier, ensuring the bracket mounting holes are on the left side of the drier (See Photo 3, below).

Photo 1

Photo 2

Photo 3

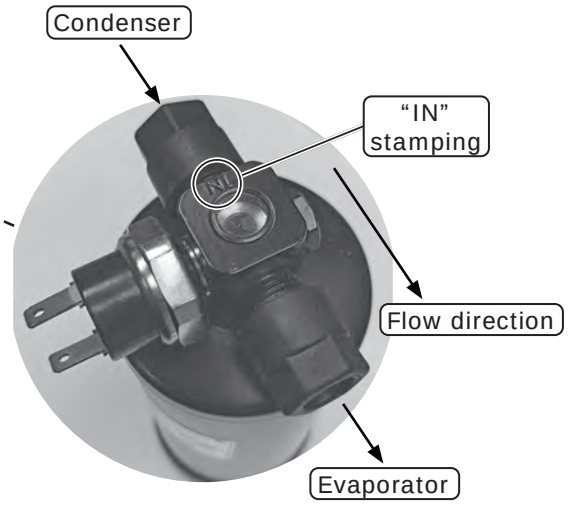

Photo 4

Drier Installation (Cont.)

4. Mark a line on the passenger inner fender, 1 ½" off the core support as shown in Photo 4, below.
5. Mark another line 4 ½" above the previously made mark (See Photo 5, below).
6. Punch and drill a 13/64" hole at the marked location (See Photo 6, below).

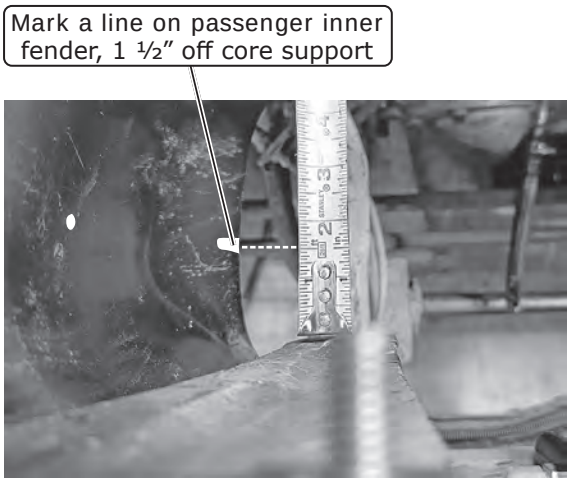

Photo 4

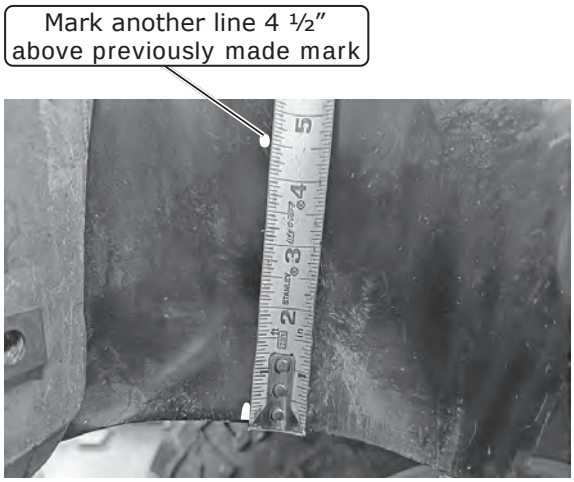

Photo 5

Photo 6

Drier Installation (Final)

7. Run a 10-24 x 3/4" serrated flange black bolt through the top mounting hole on the bracket, then through the previously drilled hole on the inner fender (See Photo 7, below).
8. Level the drier, and mark the lower hole as shown in Photo 7, below.
9. Remove the drier and bracket, then punch and drill a 13/64" hole at the marked location (See Photo 8, below). Deburr both drilled holes.
10. Mount the drier to the inner fender, and secure it using (2) 10-24 x 3/4" serrated flange black bolts, (2) #8 flat wide washers, and (2) 10-24 locknuts as shown in Photo 9, below.

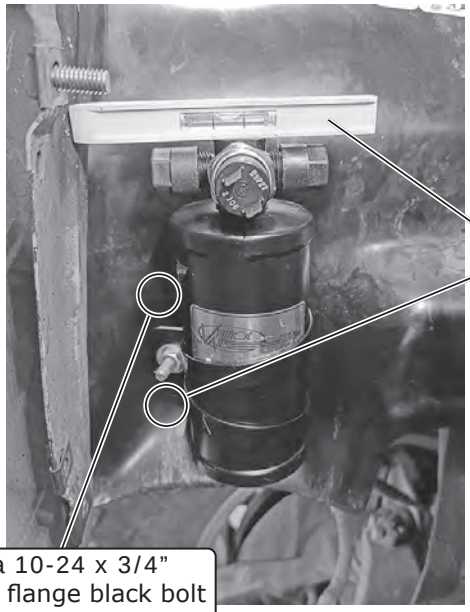

Photo 7

Photo 8

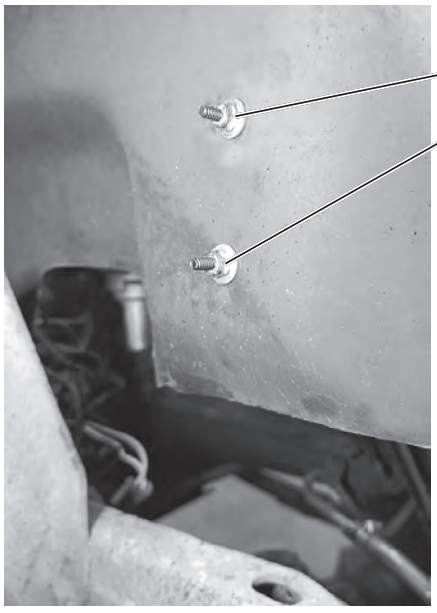

Photo 9

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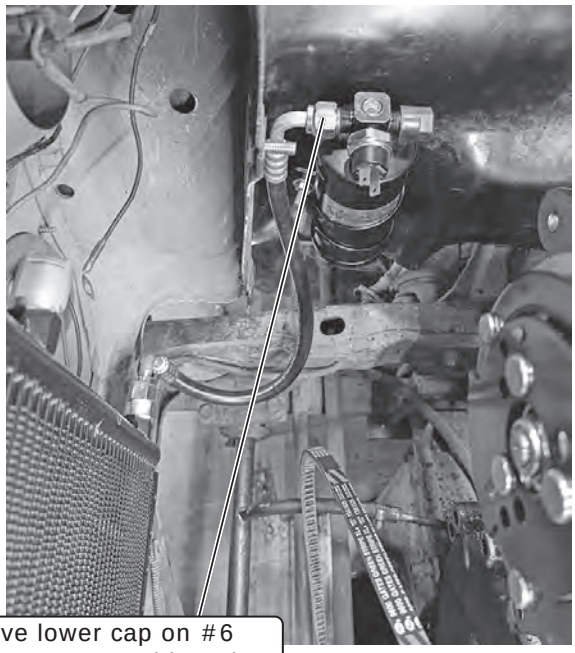
#6 Condenser/Drier A/C Hose Installation

1. Remove the lower cap on the #6 condenser port, and with a properly lubricated O-ring, loosely install one of the 90º fittings on the #6 condenser/drier A/C hose as shown in Photo 1, and Lubricating O-rings and Fitting Torque Specs, below.
2. Remove the inlet drier cap, and with a properly lubricated O-ring, loosely install the other 90º fitting end on the #6 condenser/drier A/C hose as shown in Photo 2, and Lubricating O-rings and Fitting Torque Specs, below.
3. Fully tighten both fittings.
4. Reinstall and/or reconnect all remaining items removed or disconnected in the Engine Compartment Disassembly instructions on Page 4. **NOTE: Leave the #8 condenser port cap and the outlet on the drier covered until stated otherwise in the "Evaporator Installations" instructions.**



Remove lower cap on #6 condenser port, and loosely install one of the 90º fittings on #6 condenser/drier A/C hose

Photo 1

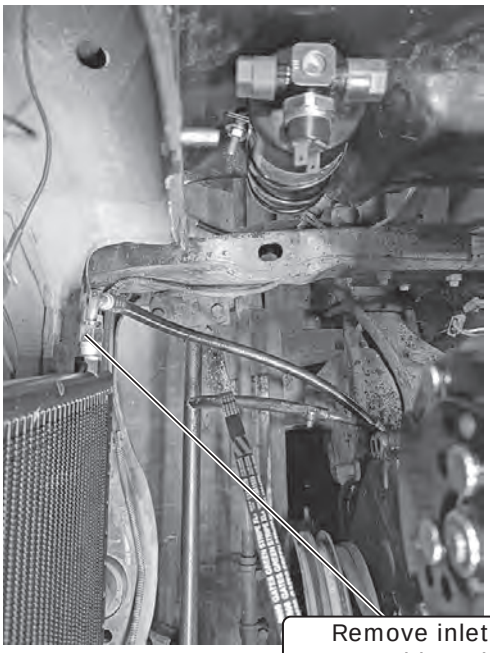
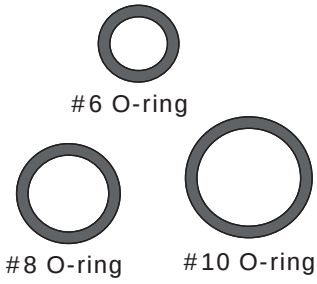
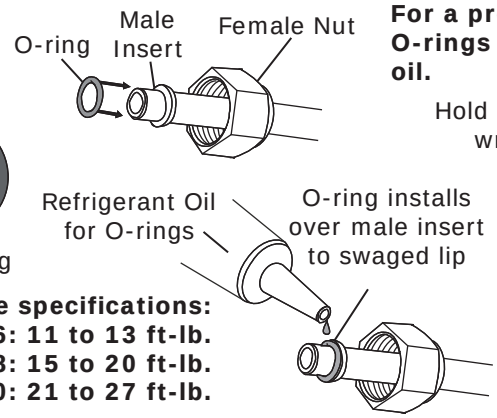


Photo 2

Remove inlet drier cap, and loosely install other 90º fitting on #6 condenser/drier A/C hose

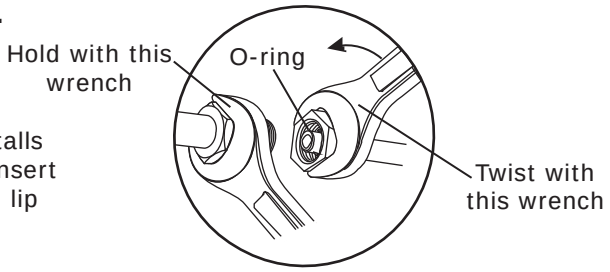
Lubricating O-rings & Fitting Torque Specs





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

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



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

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Packing List: Condenser Kit (051011)

	Qty		Part No	Description
	1	☐	11079-VUS	Binary Switch, Male
	4	☐	180054	Nut, 1/4-24, Serrated Flange
	2	☐	180381	Washer, 1/4" I.D. x 9/32" O.D., Fender
	2	☐	18145-VUB	Locknut, 10-24
	8	☐	18235-VUB	Screw, #8 x 1/2", Pan Head
	2	☐	182515	Bolt, 10-24 x 3/4", Serrated Flange, Black
	2	☐	182872	Bolt, 1/4-20 x 3/4", Serrated Flange, Black
	2	☐	182873	Bolt, 1/4-20 x 1/2", Serrated Flange, Black
	2	☐	186008-WSR	Washer, #8 Flat Wide
	8	☐	189801	U-nut, #8
	1	☐	23127-VUW	Compressor Lead, 72"
	48"	☐	238013	Flexo Sleeve, 1/4" Black

Packed By: _____

O-rings / Refrigerant Oil

	Qty		Part No	Description
	4	☐	33857-VUF	O-ring, #6
	3	☐	33858-VUF	O-ring, #8
	1	☐	41117-VUP	Refrigerant Oil

Packed By: _____

Brackets

	Qty		Part No	Description
	1	☐	071130	Drier Clamp
	1	☐	643298	Bracket, Upper Condenser PS
	2	☐	643299	Bracket, Lower Condenser
	1	☐	643300	Bracket, Upper Condenser Driver-Side

Packed By: _____

Hardlines / Hoses

	Qty		Part No	Description
	1	☐	091276	Hose, #6 A/C, Condenser/Drier

Packed By: _____

Condenser / Drier

	Qty		Part No	Description
	1	☐	037031	Condenser, 16" x 18"
	1	☐	07321-VUC	Drier

Packed By: _____

Inspected By: _____

Date: _____