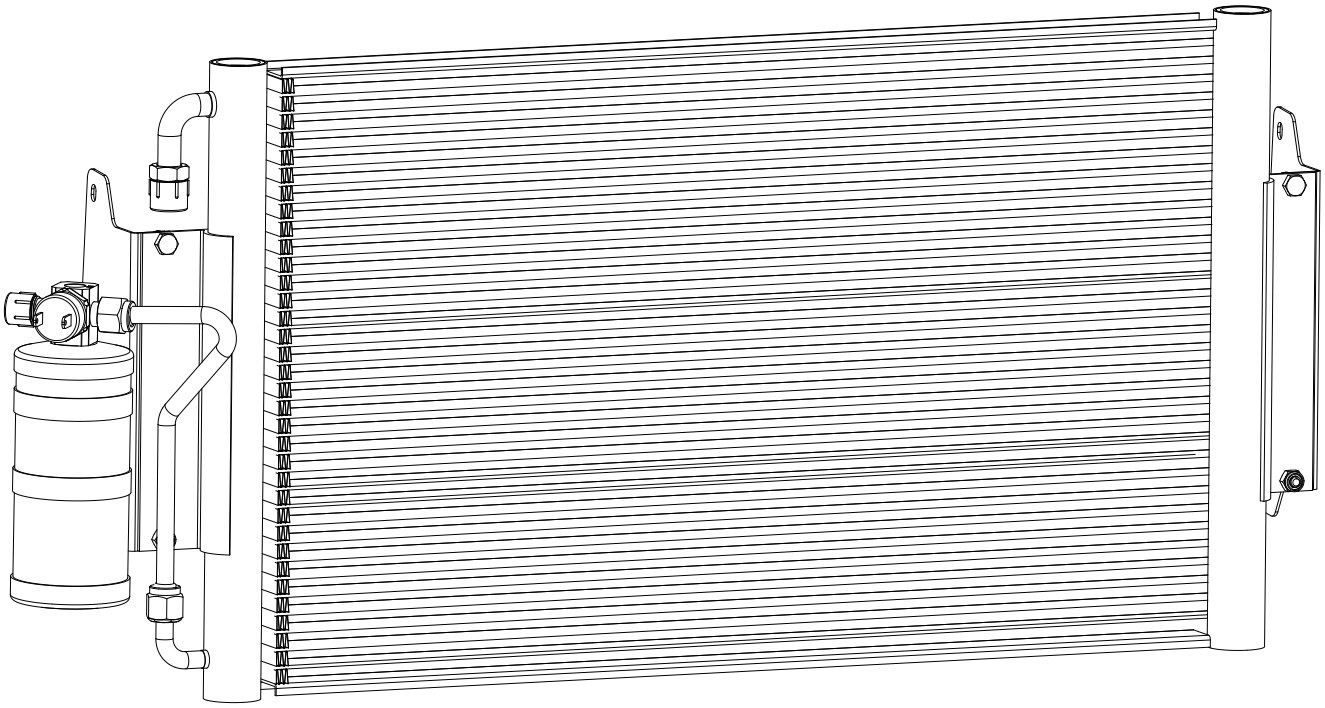
1967-91 Jeep Wagoneer / Cherokee

Condenser Kit *with* Drier (051000)



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

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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.

ATTENTION, IMPORTANT INFO:

THE 14" X 25" X 1.03" PARALLEL FLOW CONDENSER (PN: 037035) HAS BEEN 100% HELIUM LEAK DETECTION TESTED BY THE MANUFACTURER, ASSURING NO DEFECTS TO THE FINAL PRODUCT.

Additional Info: Please Read Before Beginning

- **This kit is designed to work with 1967-1991 Jeep Wagoneer (SJ-Series) as well as the 1970-1988 Jeep Pickup (J-Series)**
- **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 1978 Jeep Wagoneer Custom with factory installed A/C.**
- **Vehicles equipped with external transmission cooler may need to have cooler relocated.**

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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: Due to the wide 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 disassembly.

Perform the following:

1. Disconnect the battery.
2. Evacuate the OEM A/C system.
3. Drain the coolant.
4. Loosen the A/C compressor and the power steering belts.
5. Remove the upper and lower the radiator hoses.
6. Remove the (4) nuts that secure the radiator fan, as shown in Photo 1, below. Remove the radiator fan.
7. Remove the (4) bolts that retain the fan shroud and the radiator (See Photos 2 and 3, below). Remove both.

Photo 1

Photo 2

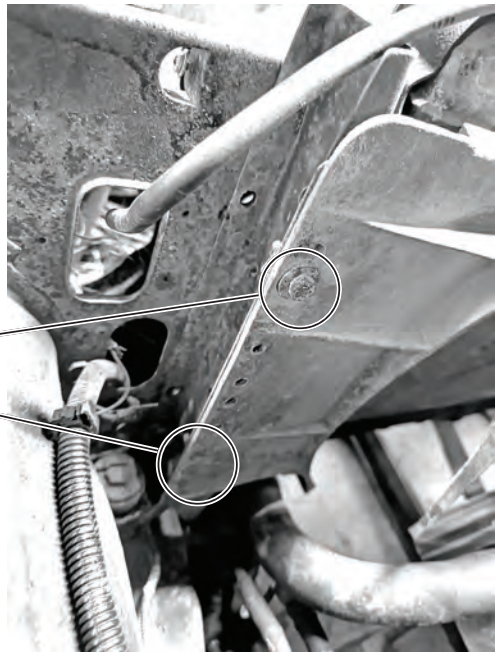

Photo 3

Remove (4) bolts that retain fan shroud and radiator

Engine Compartment Disassembly (Cont.)

8. Remove the (5) bolts at the top and the (7) screws at the bottom that secure the grille to the grille support (See Photo 4, below).
9. Pull the grille away from the core support, then disconnect the fog lights by the pig tails. Remove the grille.
10. Disconnect the A/C hoses from the condenser and the drier as show in Photo 5, below.
11. Remove the (4) screws that secure the condenser as show in Photos 6 and 7, below.

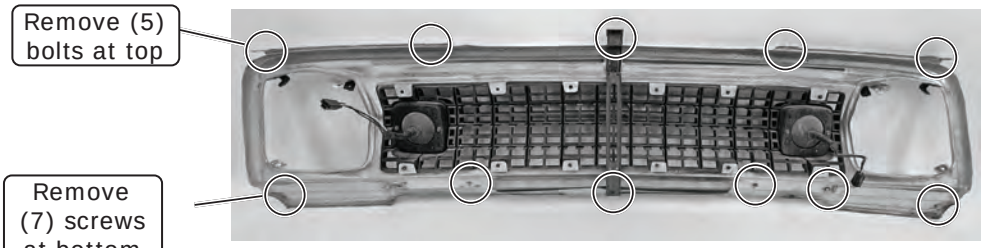

Photo 4

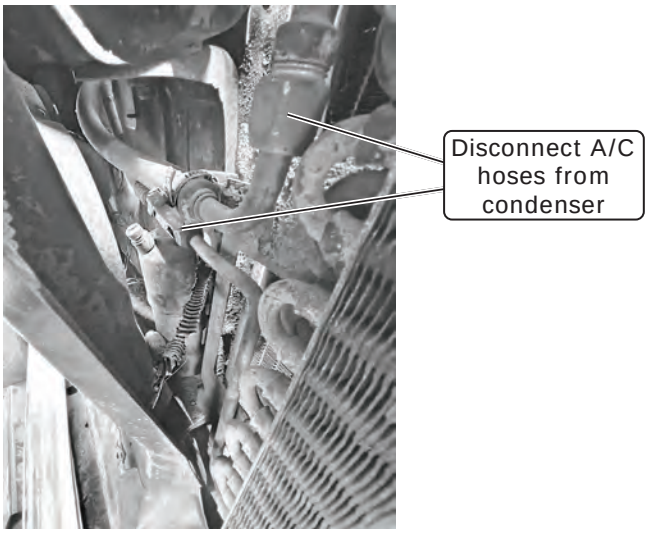

Photo 5

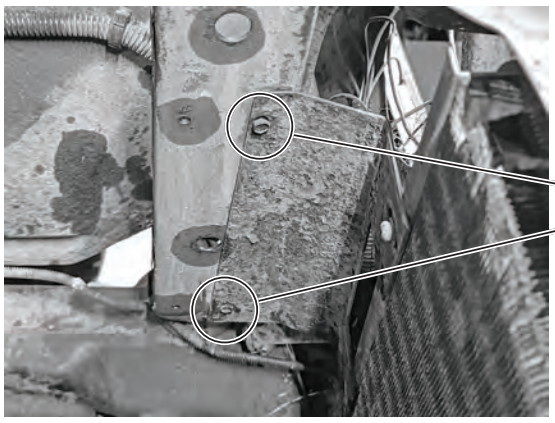

Photo 6

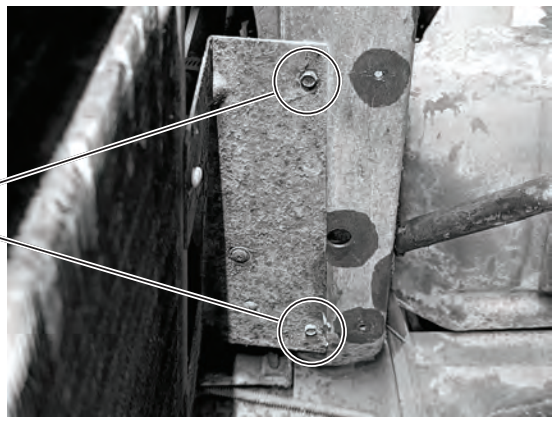

Photo 7

Engine Compartment Disassembly (Final)

12. Remove the condenser.

13. Disconnect the drier and the A/C hoses located behind the headlight buckets as shown in Photo 8, below.

14. Disconnect the hoses and remove the hose clamps on the top of the fenderwell as shown in Photo 9, below.

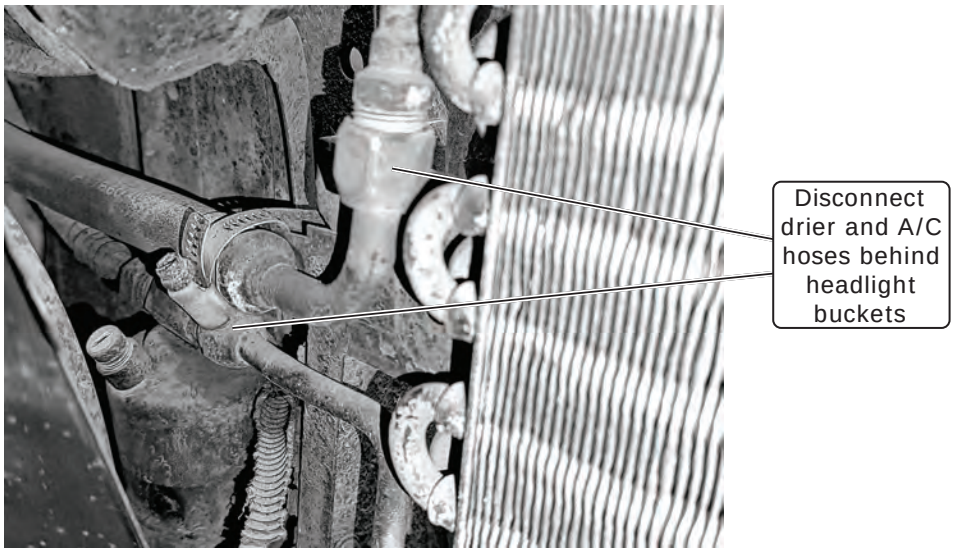

Photo 8

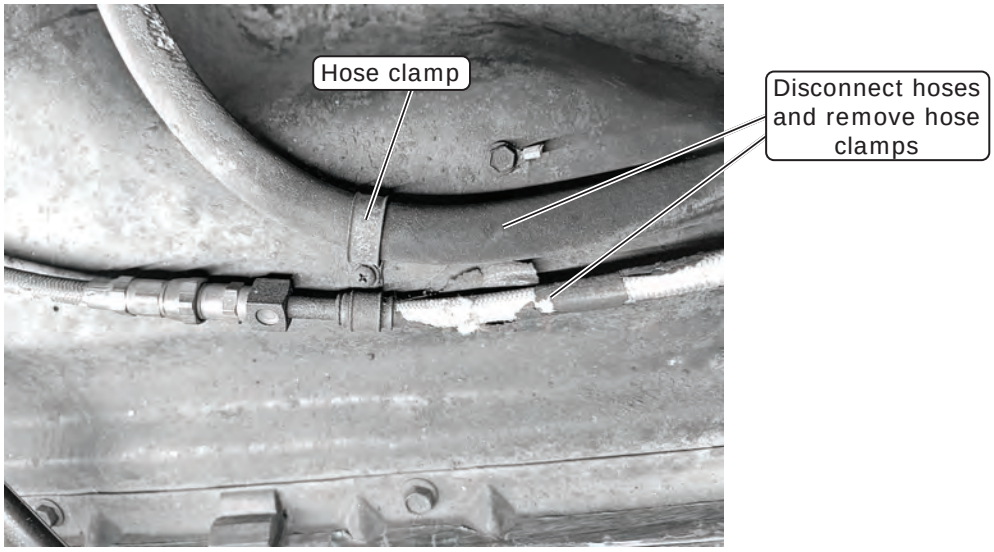

Photo 9

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Condenser Mounting Bracket Installation

1. On a workbench, place the condenser with the larger #8 port on the top-left as shown in Photo 1, below. **NOTE: This is how the condenser will be installed from the front of the vehicle with the left side as the passenger-side.**
2. Install the passenger-side condenser bracket under the passenger-side condenser tabs. Secure it using (2) 1/4-20 x 1/2" hex bolts and the (2) 1/4-20 locknuts, with the hardware facing as shown in Photo 2, below. **NOTE: Leave the brackets loose enough to allow for side-to-side adjustment provided by slots.**
3. Install the driver-side condenser bracket on the driver side of the condenser using (2) 1/4-20 x 1/2" hex bolts and (2) 1/4-20 locknuts (See Photo 3, below).

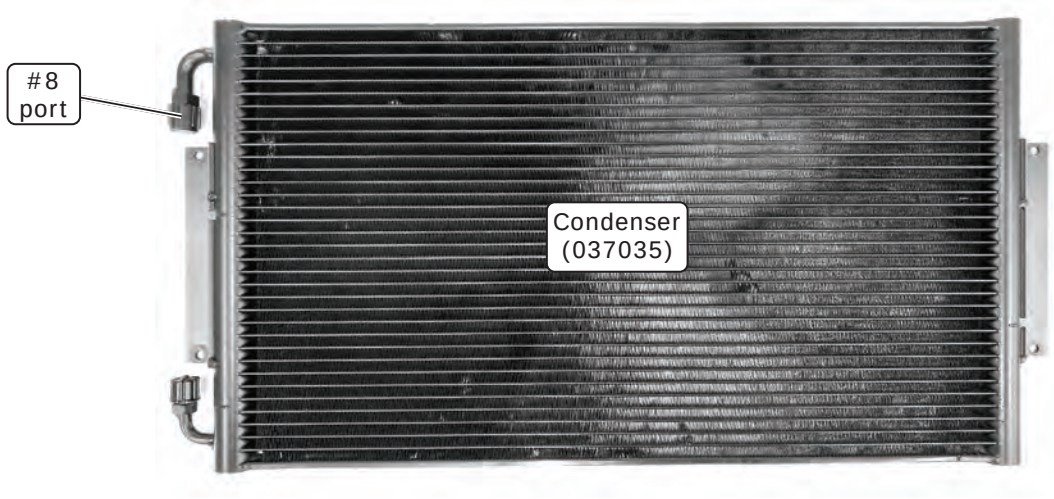


Photo 1

Photo 2

Photo 3

Condenser Mounting Bracket Installation (Cont.)

4. Temporarily install the condenser assembly into the core support using (4) #12 x 1/2” self-tapping screws (See Photo 4 and 5, below).
5. Tighten the hardware securing the condenser brackets to the condenser, then remove the assembly from the core support.

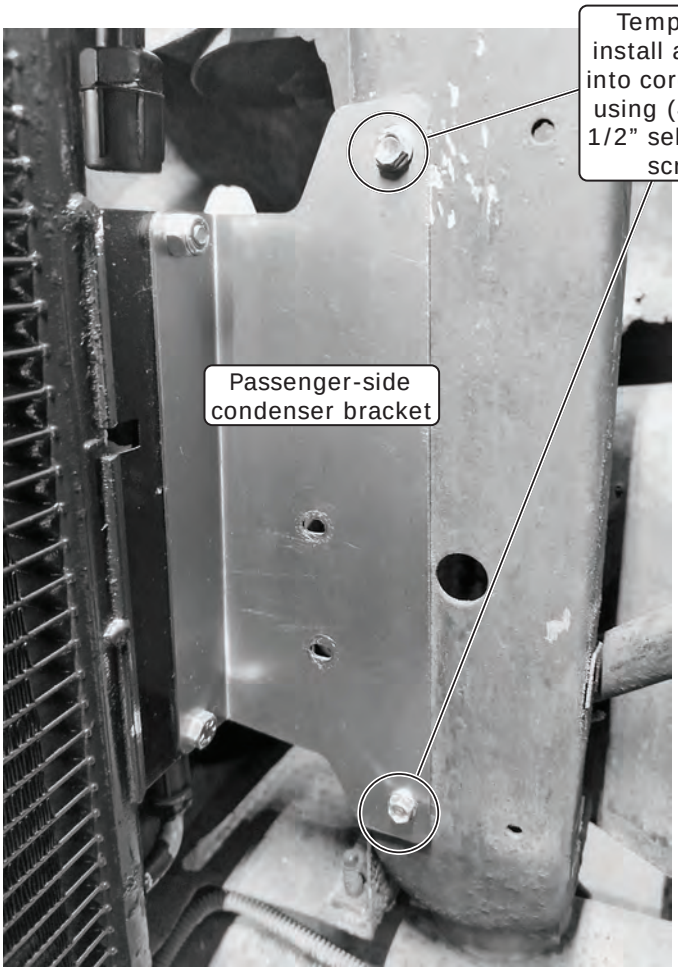


Photo 4

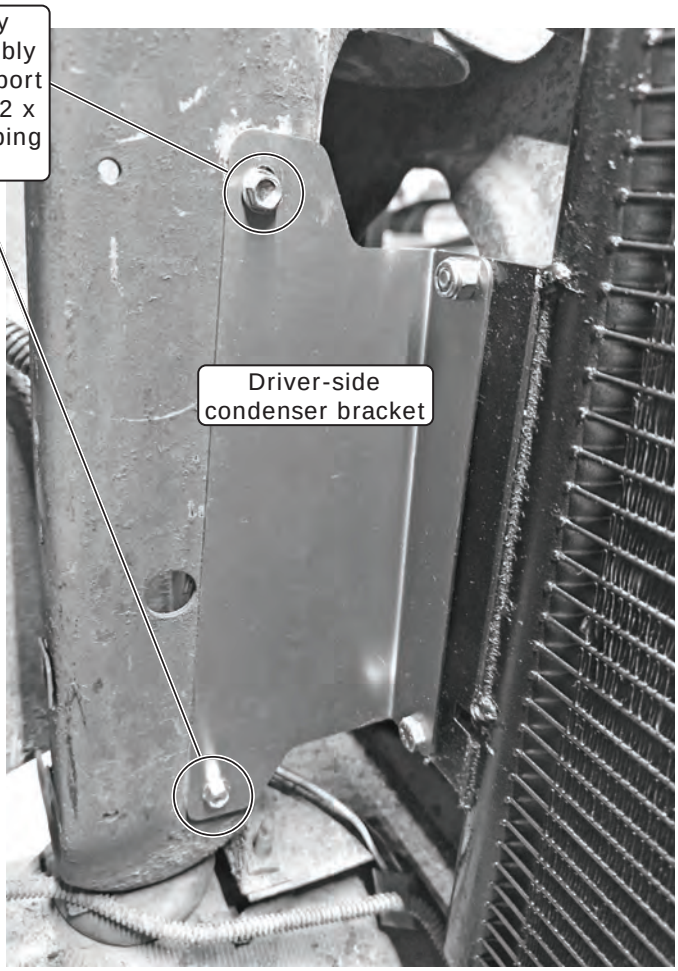


Photo 5

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 right, remove the metal plug from the drier (See Figure 1 and Photo 1, below). **NOTE: The plug should be under pressure.**
2. With a properly lubricated O-ring (See Lubricating O-rings, Page 12), install the binary safety switch into the port of the drier as shown in Photo 2, below.
3. Install the (2) drier clamps onto the drier (See Photo 3, below). **NOTE: Refrigerant flow through drier is IN from condenser, OUT to evaporator.**

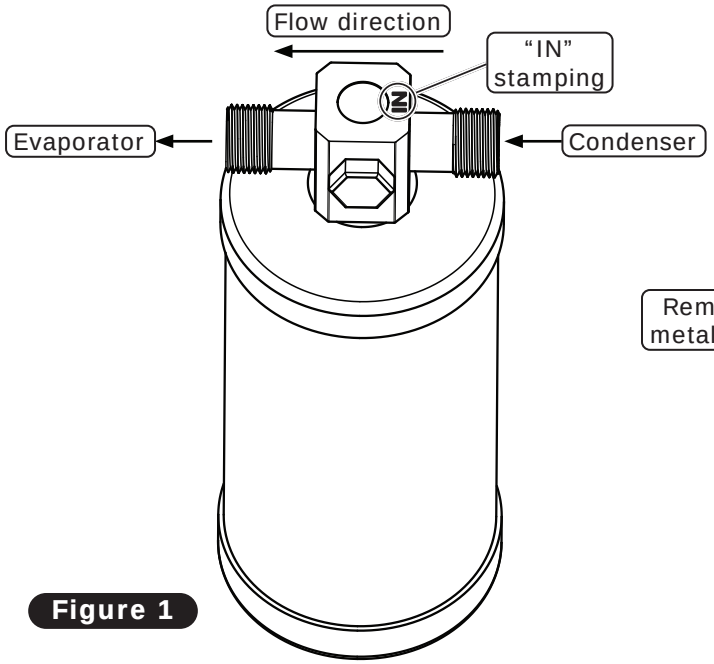


Figure 1

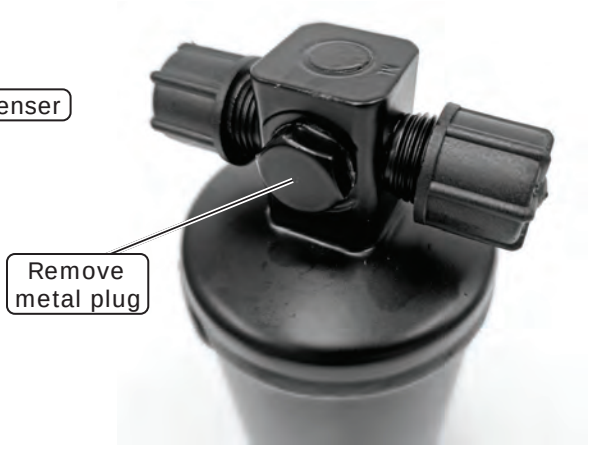


Photo 1

Photo 2

Photo 3

Drier Installation (Cont.)

4. Secure the drier clamps to the passenger-side condenser bracket using (2) 10-32 x 3/4" screws and (2) 10-32 nuts with star washers (See Photo 4, below). Position the drier at approximately a 45° angle from the front of the condenser. Leave loose.
5. Remove the lower #6 cap from the condenser and the "IN" port cap from the drier (See Photo 5, below). **NOTE: Condenser cap should be under pressure.**
6. With (2) properly lubricated O-rings (See Lubricating O-rings, Page 12), install the #6 condenser hardline onto the condenser and the drier as shown in Photo 6, below. Tighten fittings.
7. With the hardline aligning the drier to the condenser, tighten the (2) 10-32 x 3/4" screws that secure the drier clamps (See Photo 7, below).
8. Crack the seal on the upper #8 cap on the condenser and the outlet cap on the drier for easier removal later.

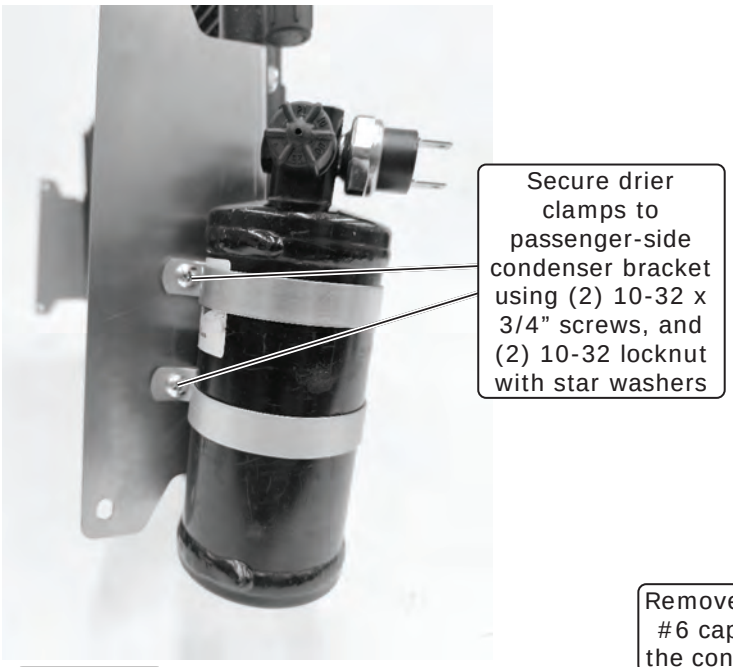


Photo 4

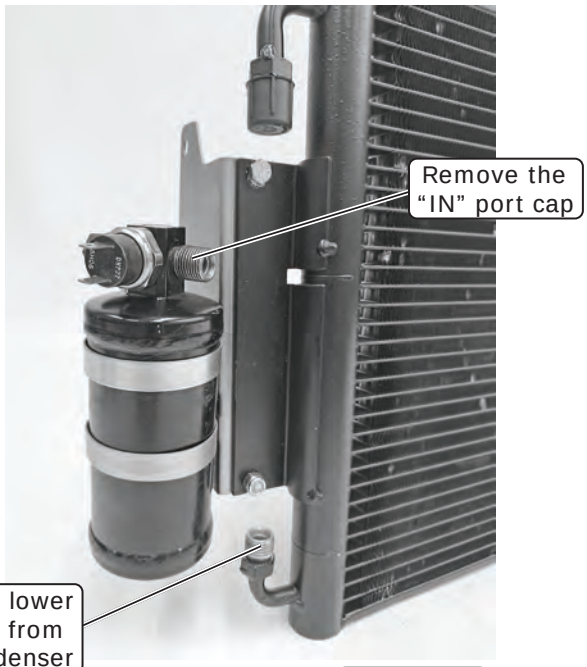


Photo 5

Photo 6

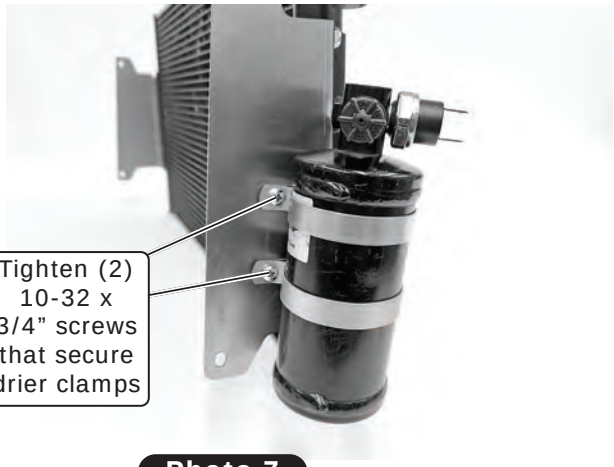


Photo 7

Condenser Installation

1. Install the condenser assembly into the core support and secure with (4) #12 x 1/2" self-tapping screws (See Photos 1 and 2, below).
2. Installed condenser and drier assembly is shown in Photo 3, below.

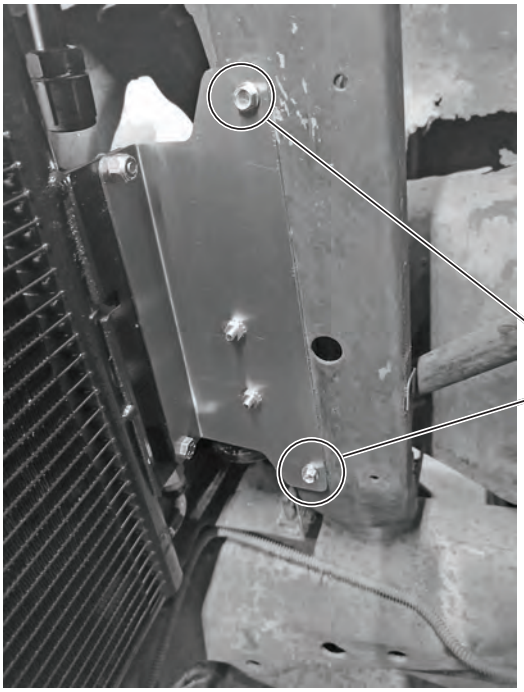


Photo 1

Install condenser assembly into core support and secure with (4) #12 x 1/2" self-tapping screws

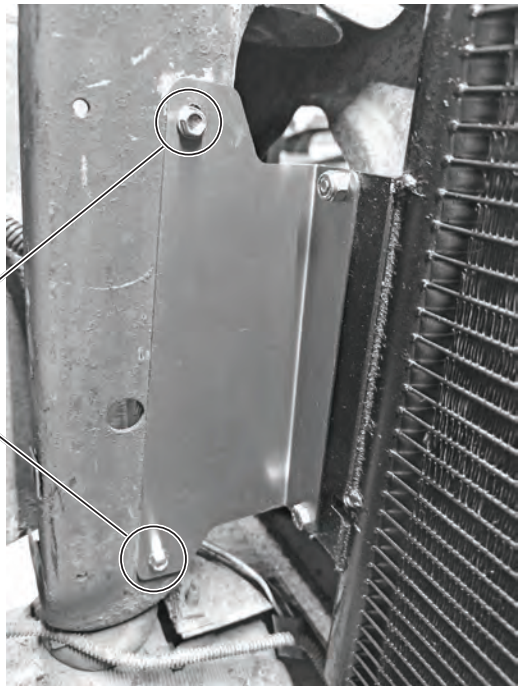


Photo 2

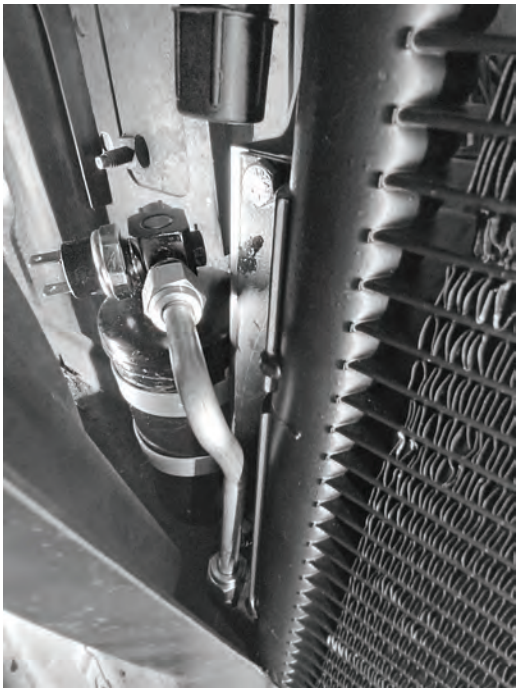
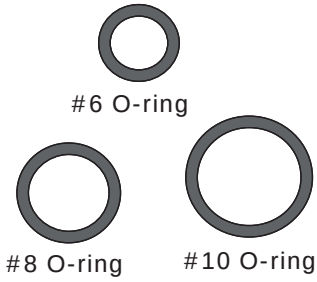
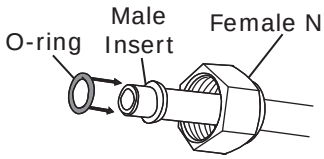


Photo 3

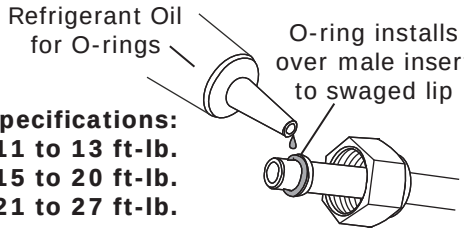
Installed Condenser and Drier Assembly

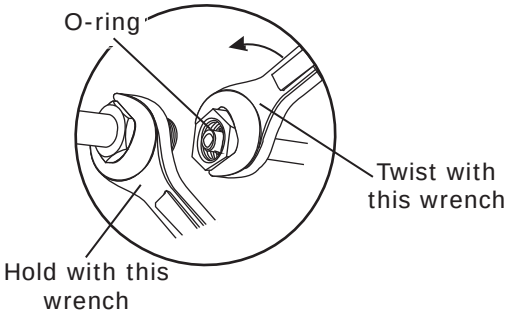
Lubricating O-rings





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.

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Packing List: Condenser Kit (051000)

	Qty		Part No	Description
	1	☐	11079-VUS	Binary Switch, Male
	4	☐	181490	Locknut, 1/4-20
	4	☐	182465	Screw, #12 x 1/2", Self-Tapping
	2	☐	18251-VUB	Nut with Star Washer, 10-32
	2	☐	18258-VUB	Screw, 10-32 x 3/4"
	4	☐	18287-VUB	Bolt, 1/4-20 x 1/2", Hex
	1	☐	21300-VUP	Tie Wrap, 11"
	1	☐	23127-VUW	Compressor Lead, 72"
	48"	☐	238013	Flexo Sleeve, 1/4"

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	☐	051001	Bracket, Condenser, Driver-Side
	1	☐	051002	Bracket, Condenser, Passenger-Side
	2	☐	07113-VUB	Drier Clamp

Packed By: _____

Hardlines

	Qty		Part No	Description
	1	☐	101020	Hardline, #6, Condenser/Drier

Packed By: _____

Condenser/Drier

	Qty		Part No	Description
	1	☐	037035	Condenser, 14" x 25", Parallel Flow
	1	☐	07321-VUC	Drier

Packed By: _____

Inspected By: _____
Date: _____