



# 1979-93 Ford Mustang

Condenser Kit *with* Drier  
(011075)



18865 Goll St. San Antonio, TX 78266  
Phone: 800-862-6658  
Sales: [sales@vintageair.com](mailto:sales@vintageair.com)  
Tech Support: [tech@vintageair.com](mailto:tech@vintageair.com)  
[www.vintageair.com](http://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.



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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):

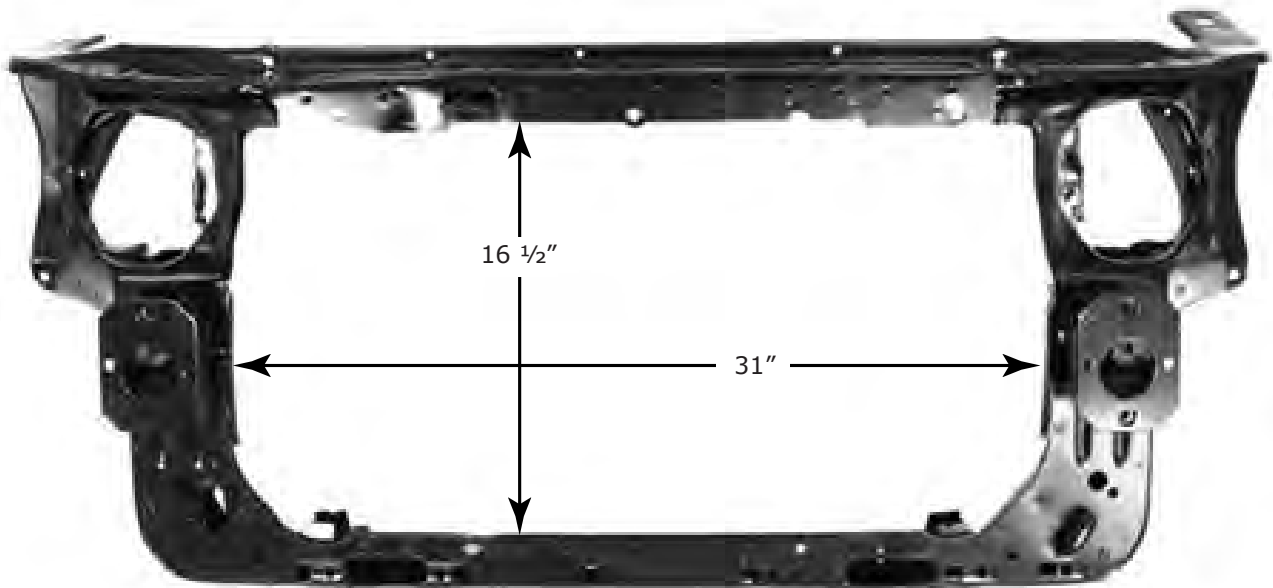
Heater hose may be purchased from Vintage Air (Part#31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



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## Core Support Measurements

This kit was developed based on the measurements below, which were taken from a 1982 Ford Mustang 6 cylinder without factory air, 1986 Ford Mustang 5.0 V8 with factory air, and a 1990 Ford Mustang 5.0 V8 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, photos & diagrams.

Perform the following:

1. Disconnect the battery and drain the radiator.
2. Evacuate the A/C system (If equipped).
3. Disconnect the radiator overflow hose from the radiator cap connection.
4. Remove the bolts holding the fan to the water pump, then gently place fan in the bottom of the shroud.  
**NOTE: Take care not to damage the radiator.**
5. Remove the fan shroud by removing the (2) bolts at the top of the radiator (See Photo 1, below), then pull the shroud and fan out together.
6. Disconnect the automatic transmission cooler lines from the radiator (If equipped).
7. Disconnect the upper and lower radiator hoses from the radiator.
8. Remove the bolts securing both radiator hold down clamps, then remove the clamps (See Photo 2, below).
9. Raise the radiator up and out of the engine bay.
10. Disconnect the A/C hoses from the condenser using a proper spring lock tool (See Photo 3, below).
11. Remove the (2) mounting bolts located along the top edge of the condenser (See Photo 4, below).
12. Pull the condenser up and out of the engine bay.
13. Remove the OEM lower condenser mounting brackets (See Photo 5, below).

Remove fan shroud by removing (2) bolts at top of radiator



Photo 1

Remove bolts securing radiator hold down clamps, then remove clamps



Photo 2

Disconnect A/C hoses from condenser



Photo 3

Remove (2) mounting bolts located along top edge of condenser



Photo 4

Remove OEM lower condenser mounting brackets

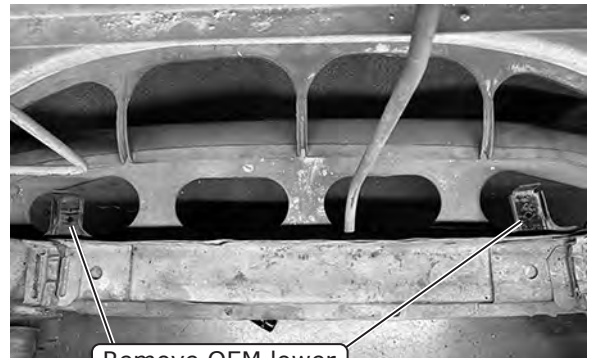
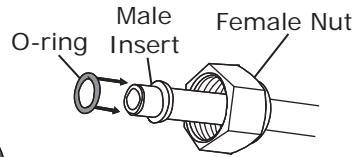
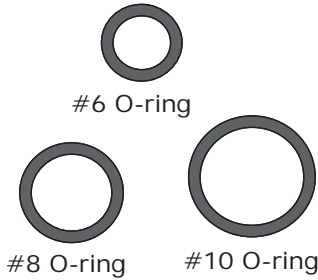


Photo 5

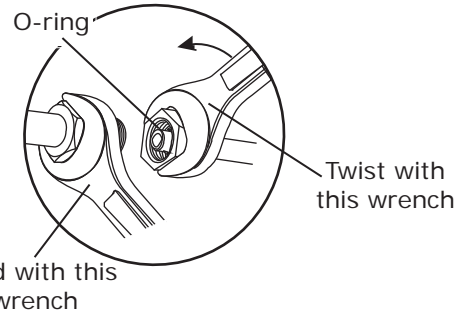
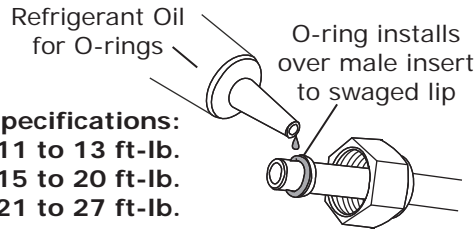


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## Lubricating O-rings



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.

## Condenser 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. Lubricate the O-ring (See Lubricating O-rings, above) on the binary switch. **NOTE: The binary switch and the drier each come with an O-ring. Only use the binary switch O-ring.**
2. Thread the binary switch onto the drier in the port shown in Photo 1, below.
3. Install the binary switch boot onto the binary switch terminals (See Photo 2, below).
4. Insert the drier into the passenger-side condenser bracket (See Photo 3, below). **NOTE: Refrigerant flow through drier is IN from condenser, OUT to evaporator.** Insert a 1/4-20 x 1" hex bolt through the tail end of the drier clamp and out the base of the clamp, then secure using a 1/4-20 locknut (See Photo 4, below). **NOTE: Leave the drier clamp hardware loose at this time so it can be easily adjusted for hardline alignment.**

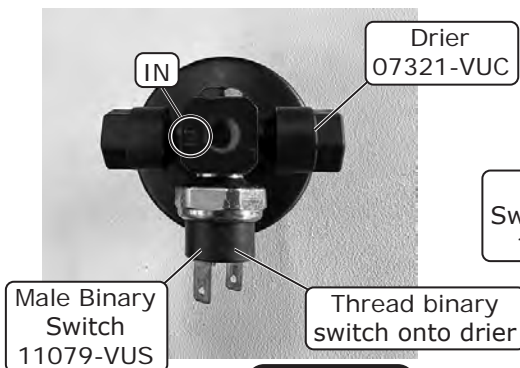


Photo 1

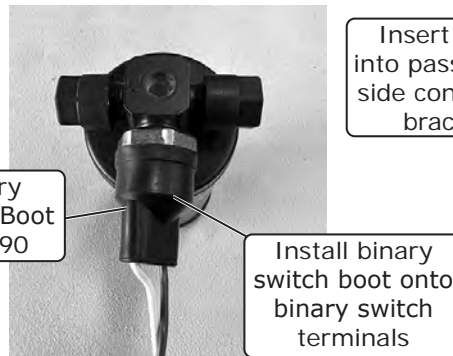


Photo 2

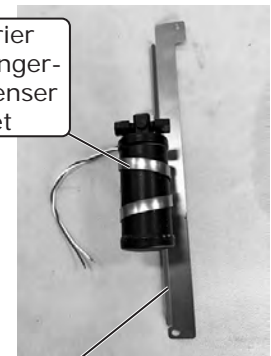


Photo 3

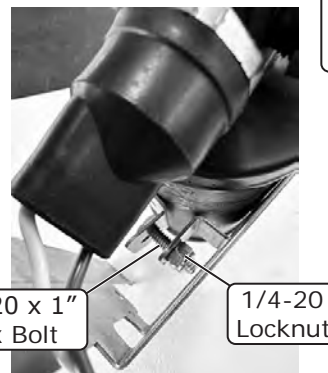


Photo 4



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## Condenser Installation (Cont.)

- Secure the passenger-side condenser bracket to the condenser mounting tabs using (2) 1/4-20 x 1/2" hex bolts and (2) 1/4-20 locknuts (See Photo 5, below). **NOTE: Bolts insert through the condenser mounting tab and into passenger-side condenser bracket (See Photo 6, below). Leave bolts slightly loose until the condenser is installed into the vehicle for an easier installation.**
- Lubricate (2) #6 O-rings (See Lubricating O-rings, Page 6) and install them onto each end of the #6 condenser/drier hardline. Install the hardline onto the #6 condenser fitting and drier inlet as shown in Photos 7 and 8, below. **NOTE: The drier clamp hardware can be tightened at this time.**
- Lubricate a #6 O-ring (See Lubricating O-rings, Page 6) and install it onto the end of the #6 drier/evaporator hardline. Install the hardline onto the outlet side of the drier (See Photo 9, below). **NOTE: Leave the connecting nut loose at this time.**
- Lubricate a #8 O-ring (See Lubricating O-rings, Page 6) and install it onto the end of the #8 compressor/condenser hardline. Install the hardline onto the #8 condenser fitting (See Photo 10, below). **NOTE: Leave the connecting nut loose at this time.**

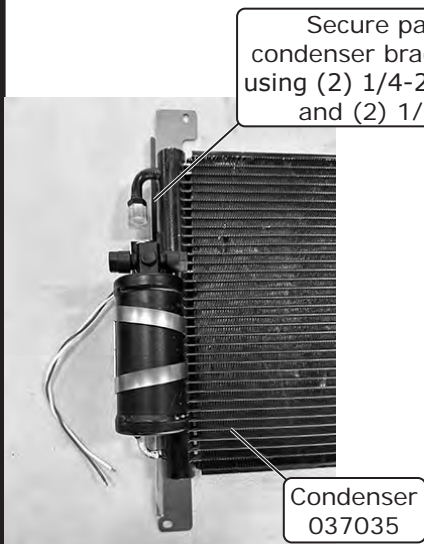


Photo 5

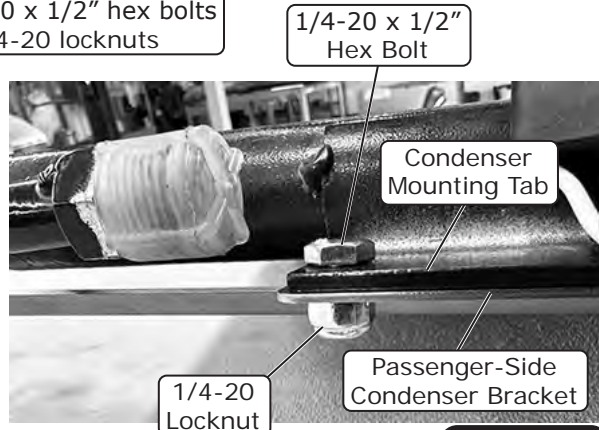


Photo 6

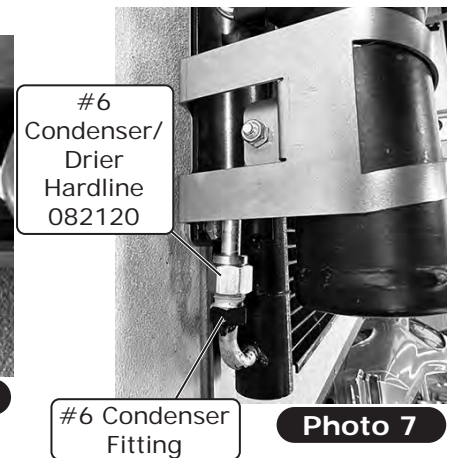


Photo 7

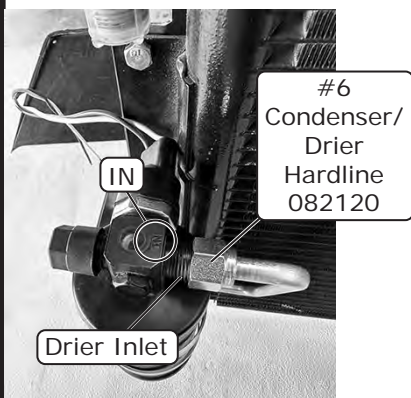


Photo 8

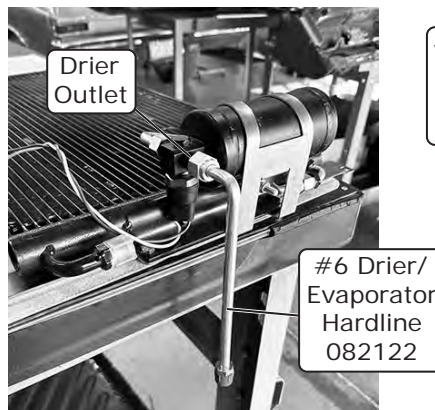


Photo 9



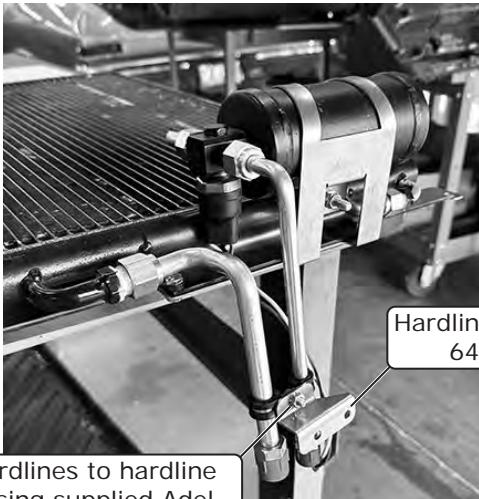
Photo 10



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## Condenser Installation (Cont.)

9. Orient the #6 and #8 hardlines parallel to each other and at a right angle to the condenser. Using the supplied Adel clamps, secure the hardlines to the hardline bracket using a 10-32 x 1/2" pan head screw and a 10-32 nut with star washer (See Photo 11, below). **NOTE: The #6 and #8 hardline connecting nuts can be tightened at this time.**
10. Wrap the wires on the binary switch boot with the 1/4" flexo sleeve and secure the end nearest to the binary switch with a tie wrap. Route the wires along the hardlines, securing with tie wraps (See Photo 12, below). **NOTE: These wires will be connected to the ECU and compressor. Do not cut the flexo sleeve at this time, as the remaining length will be used to cover the wire that connects to the compressor.**
11. Secure the driver-side condenser bracket to the condenser mounting tab using (2) 1/4-20 x 1/2" hex bolts and (2) 1/4-20 locknuts (See Photo 13, below). **NOTE: Bolts insert through the condenser mounting tab and into driver-side condenser bracket. Leave bolts slightly loose until the condenser is installed into the vehicle for an easier installation.**
12. If the vehicle has the OEM condenser mounting hardware, it can be reused. If OEM hardware is missing or damaged, use the supplied hardware. Insert 1/4-20 U-nuts into all (4) OEM condenser mounting locations, top and bottom, left and right (See Photo 14, below).



Hardline Bracket  
644322

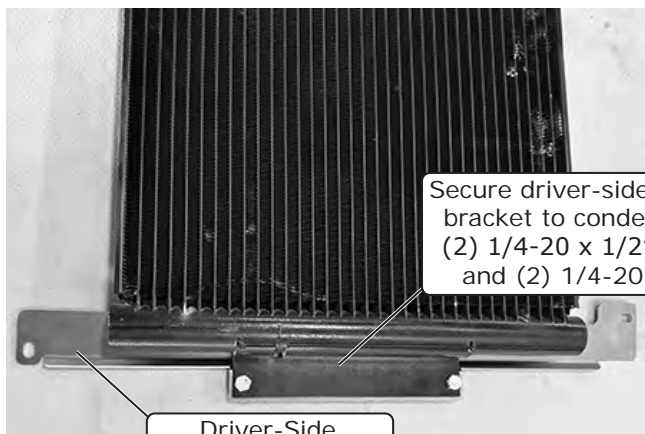
Secure hardlines to hardline bracket using supplied Adel clamps and a 10-32 x 1/2" pan head screw and 10-32 nut with star washer

Photo 11



Wrap binary switch boot wires with 1/4" flexo sleeve and route along hardline, securing with tie wraps

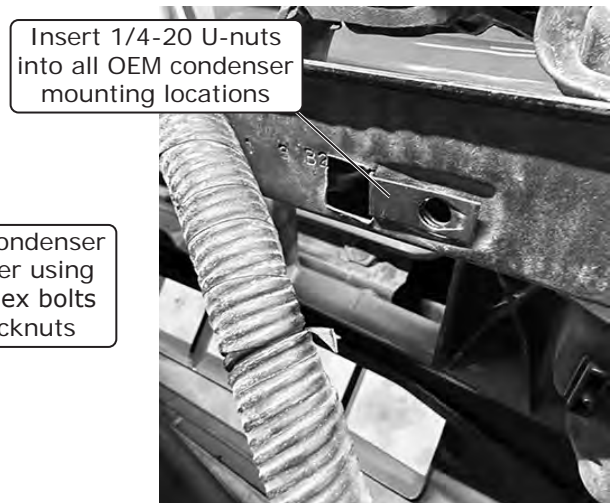
Photo 12



Driver-Side  
Condenser Bracket  
644313

Secure driver-side condenser bracket to condenser using (2) 1/4-20 x 1/2" hex bolts and (2) 1/4-20 locknuts

Photo 13



Insert 1/4-20 U-nuts into all OEM condenser mounting locations

Photo 14



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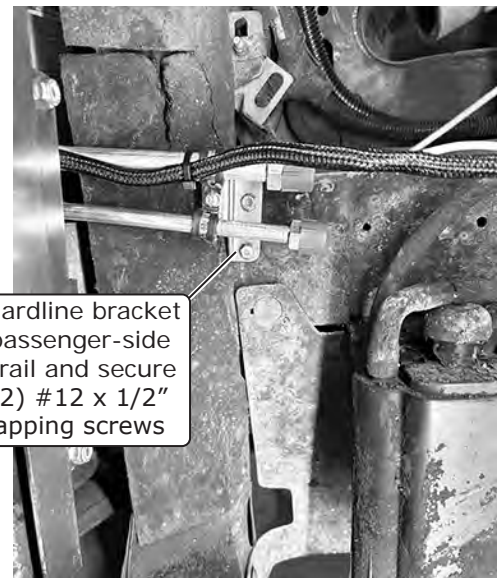
## Condenser Installation (Final)

13. Install the condenser assembly into the core support opening and secure it using the 1/4-20 x 1" hex bolts and 9/32" flat washers or the OEM hardware at all (4) original mounting points (See Photo 15, below).
14. Place the hardline bracket onto the passenger-side frame rail. Using the bracket as a template, install (2) #12 x 1/2" self-tapping screws into the frame rail to secure the hardlines (See Photo 16, below).

Install condenser assembly into core support opening and secure using 1/4-20 x 1" hex bolts and 9/32" flat washers or OEM hardware at all (4) original mounting points



Photo 15



Place hardline bracket onto passenger-side frame rail and secure with (2) #12 x 1/2" self-tapping screws

Photo 16

## Final Steps

1. Reinstall and/or reconnect all remaining items removed or disconnected in the Engine Compartment Disassembly instructions on Page 5. This concludes the condenser kit portion of your installation.



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# Packing List: Condenser Kit (011075)

## O-rings/Refrigerant Oil

	Qty		Part No	Description
	1	<input type="checkbox"/>	11079-VUS	Binary Switch, Male
	1	<input type="checkbox"/>	110790	Binary Switch Boot
	5	<input type="checkbox"/>	181490	Locknut, 1/4-20
	2	<input type="checkbox"/>	182465	Screw, #12 x 1/2", Self-Tapping
	1	<input type="checkbox"/>	18250-VUB	Screw, 10-32 x 1/2", Pan Head
	1	<input type="checkbox"/>	18251-VUB	Nut with Star Washer, 10-32
	1	<input type="checkbox"/>	18287-VUB	Bolt, 1/4-20 x 1/2", Hex
	5	<input type="checkbox"/>	18290-VUB	Bolt, 1/4-20 x 1", Hex
	4	<input type="checkbox"/>	186011	Washer, 9/32", Flat
	4	<input type="checkbox"/>	189780	U-nut, 1/4-20
	3	<input type="checkbox"/>	21300-VUP	Tie Wrap, 11"
	1	<input type="checkbox"/>	23127-VUW	Compressor Lead
	48"	<input type="checkbox"/>	238013	Flexo Sleeve, 1/4"
	1	<input type="checkbox"/>	31600-VUD	Adel Clamp, 3/8" I.D.
	1	<input type="checkbox"/>	31603-VUD	Adel Clamp, 1/2" I.D.

Packed By: \_\_\_\_\_

	Qty		Part No	Description
	4	<input type="checkbox"/>	33857-VUF	O-ring, #6
	3	<input type="checkbox"/>	33858-VUF	O-ring, #8
	1	<input type="checkbox"/>	41117-VUP	Refrigerant Oil

Packed By: \_\_\_\_\_

## Brackets

	Qty		Part No	Description
	1	<input type="checkbox"/>	644313	Bracket, Condenser, Driver-Side
	1	<input type="checkbox"/>	644314	Bracket, Condenser, Passenger-Side
	1	<input type="checkbox"/>	644322	Bracket, Hardline

Packed By: \_\_\_\_\_

## Hardlines

	Qty		Part No	Description
	1	<input type="checkbox"/>	082120	Hardline, #6 Condenser/Drier
	1	<input type="checkbox"/>	082121	Hardline, #8 Compressor/Condenser
	1	<input type="checkbox"/>	082122	Hardline, #6 Drier/Evaporator

Packed By: \_\_\_\_\_

## Condenser/Drier

	Qty		Part No	Description
	1	<input type="checkbox"/>	037035	Condenser, 14" x 25", Parallel Flow
	1	<input type="checkbox"/>	07321-VUC	Drier

Packed By: \_\_\_\_\_

Inspected By: \_\_\_\_\_  
Date: \_\_\_\_\_