an ISO 9001:2015 Registered Company

1970-72 Chevrolet Chevelle

Condenser Kit *with* Drier (021170)

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Table of Contents

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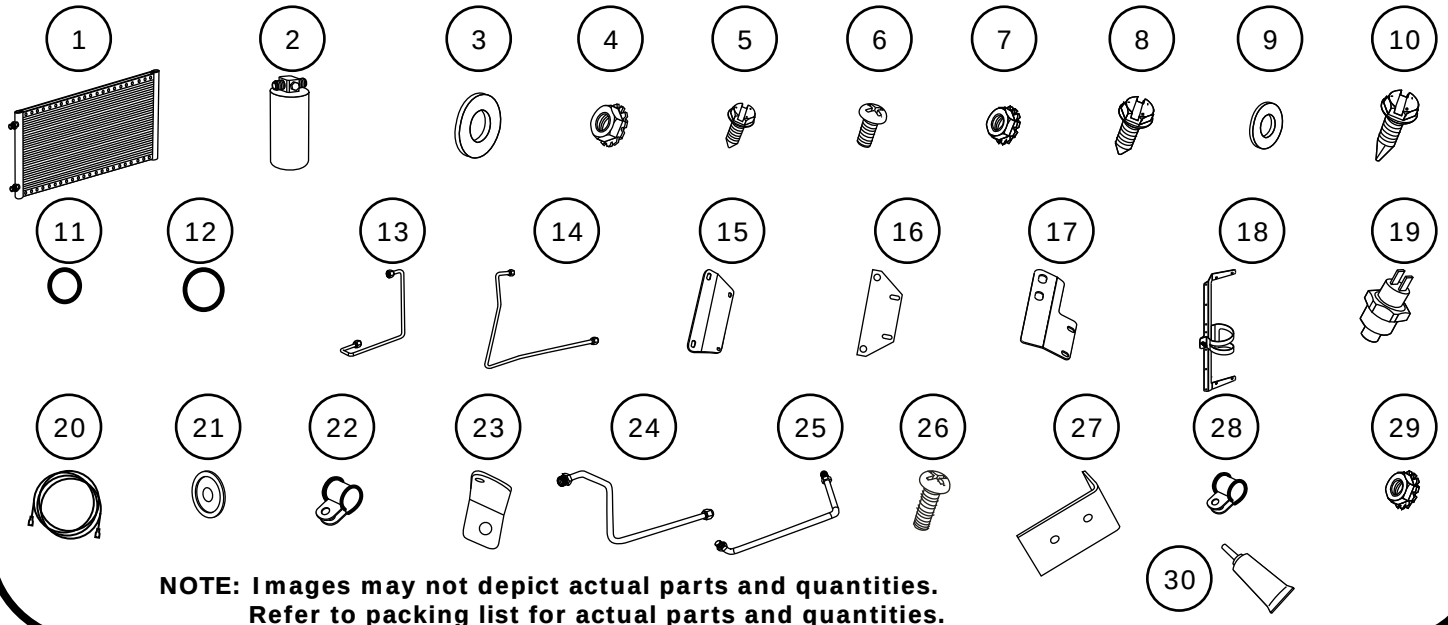
Packing List: Condenser Kit (021170)

No.	Qty.	Part No.	Description
1.	1	03767-VUC	Condenser, 14" x 24", Parallel Flow
2.	1	07321-VUC	Drier
3.	1	18125-VUB	Washer, 5/16"
4.	1	18152-VUB	Nut with Star Washer, 1/4-20
5.	1	18247-VUB	Screw, #10 x 1/2", Sheet Metal
6.	13	18249-VUB	Screw, 10-24 x 3/8", Pan Head
7.	13	18260-VUB	Nut with Star Washer, 10-24
8.	1	18266-VUB	Screw, #14 x 3/4", Sheet Metal
9.	1	18611-VUB	Washer, 5/16", Flat
10.	2	182360	Screw, 5/16-18 x 3/4", Self-Tapping
11.	3	33857-VUF	O-ring, #6
12.	2	33858-VUF	O-ring, #8
13.	1	35368-VCG	Hardline, #6 Drier/Condenser
14.	1	09169-FFD	Hardline, #8 Condenser
15.	1	644074	Bracket, Top Mounting
16.	1	644071-FCB	Bracket, Bottom Mounting
17.	1	644163	Bracket, Support
18.	1	659981	Bracket, Drier
19.	1	11079-VUS	Binary Switch, Male
20.	1	23127-VUW	Compressor Lead
21.	2	33137-VUI	Grommet, Large
22.	3	31603-VUD	Adel Clamp, #4
23.	1	644170	Bracket, #8 Condenser Hardline
24.	1	091173	Hardline, #6 Drier/Core
25.	1	091172	Hardline, #8 Condenser/Compressor
26.	1	18258-VUB	Screw, 10-32 x 3/4"
27.	1	64139-VUB	Bracket, Super Control Pod, Right
28.	1	31600-VUD	Adel Clamp, #2
29.	1	18251-VUB	Nut with Star Washer, 10-32
30.	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:

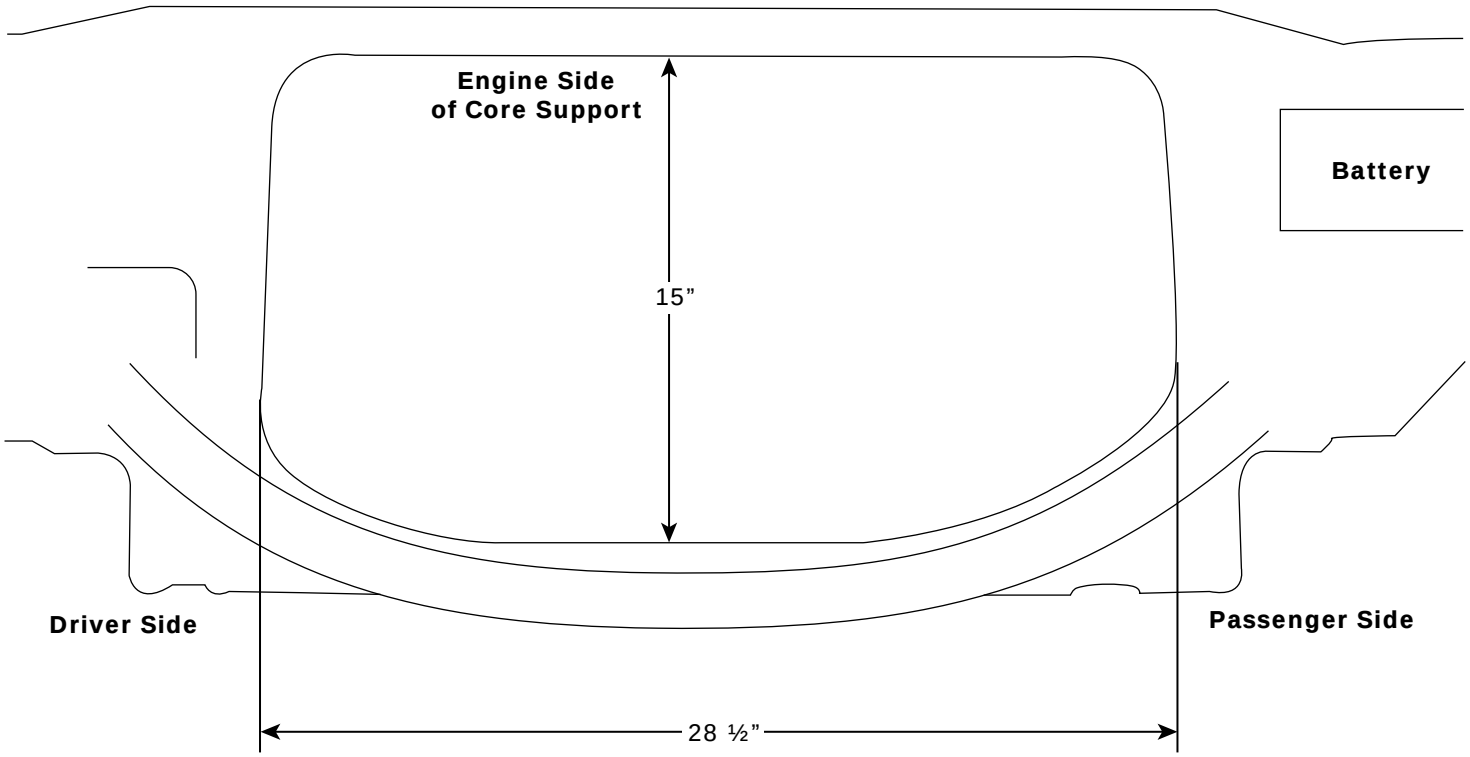
To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

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.

Core Support Measurements

This kit was developed based on the measurements below, which were taken from a 1970 Chevrolet Chevelle with Factory Air core support.



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Radiator and Hood Latch Assembly Removal

1. Drain the radiator.
2. Remove the upper and lower radiator hoses.
3. Remove the radiator.
4. Remove the OEM hood latch assembly (See Figure 1, below).

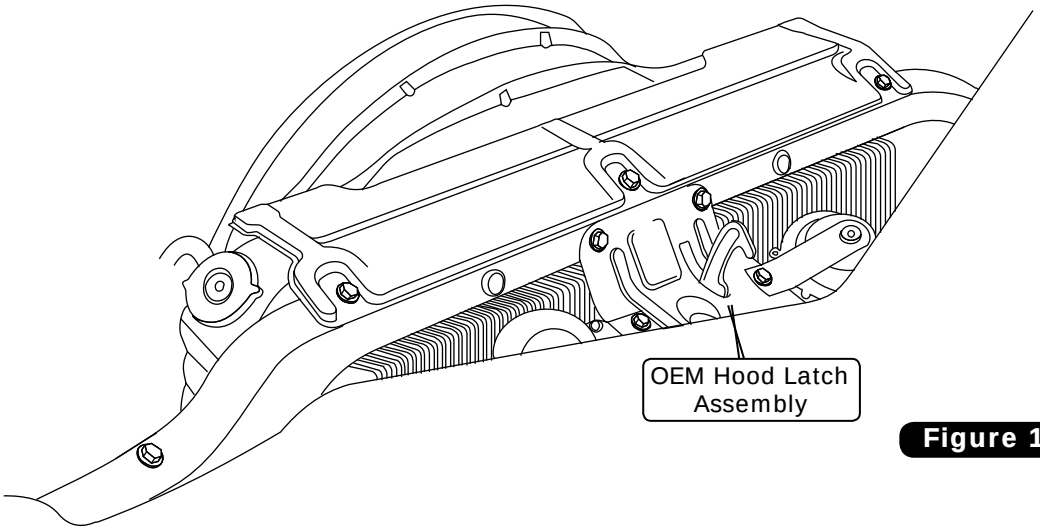

Figure 1

Core Support Modification (Factory Non-Air Models Only)

1. Cut out the templates provided on Page 14. Place the templates on the engine side of the core support as shown in Figure 1, below.
2. Using a 1 ¼" hole saw, drill (2) holes through the core support.

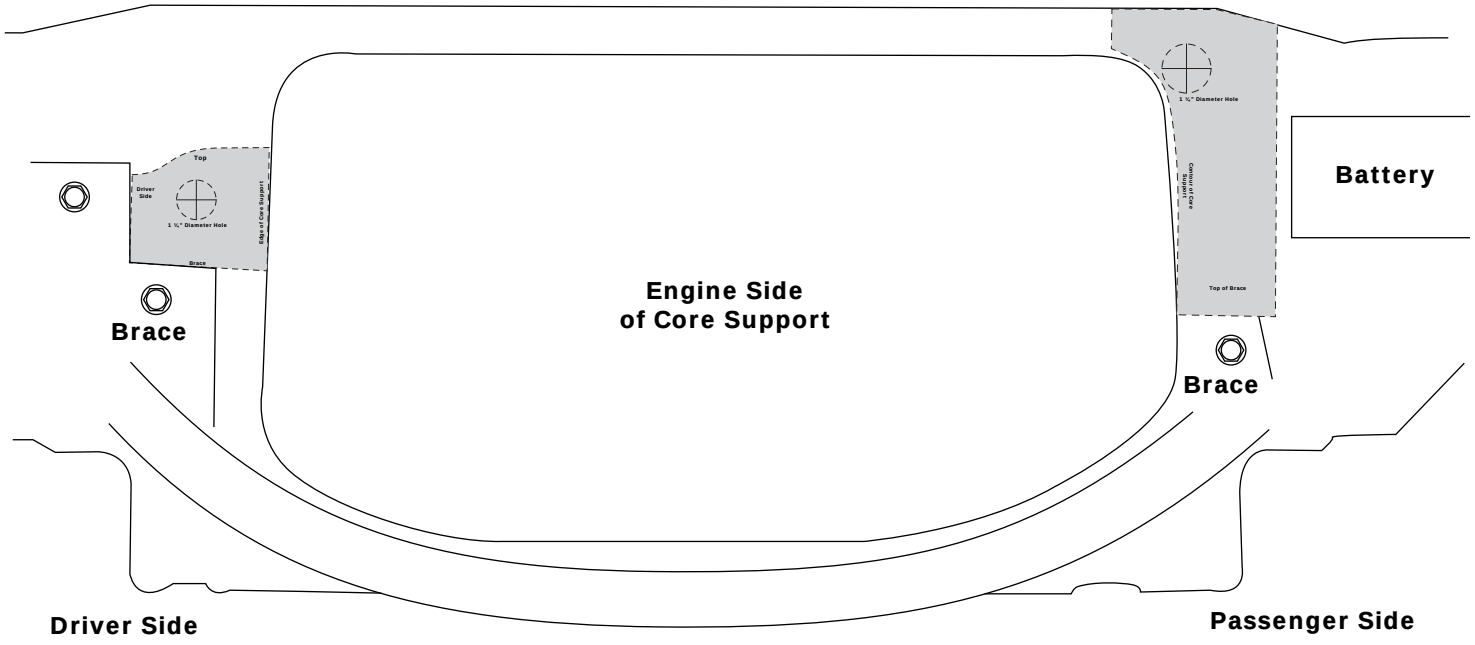

Figure 1

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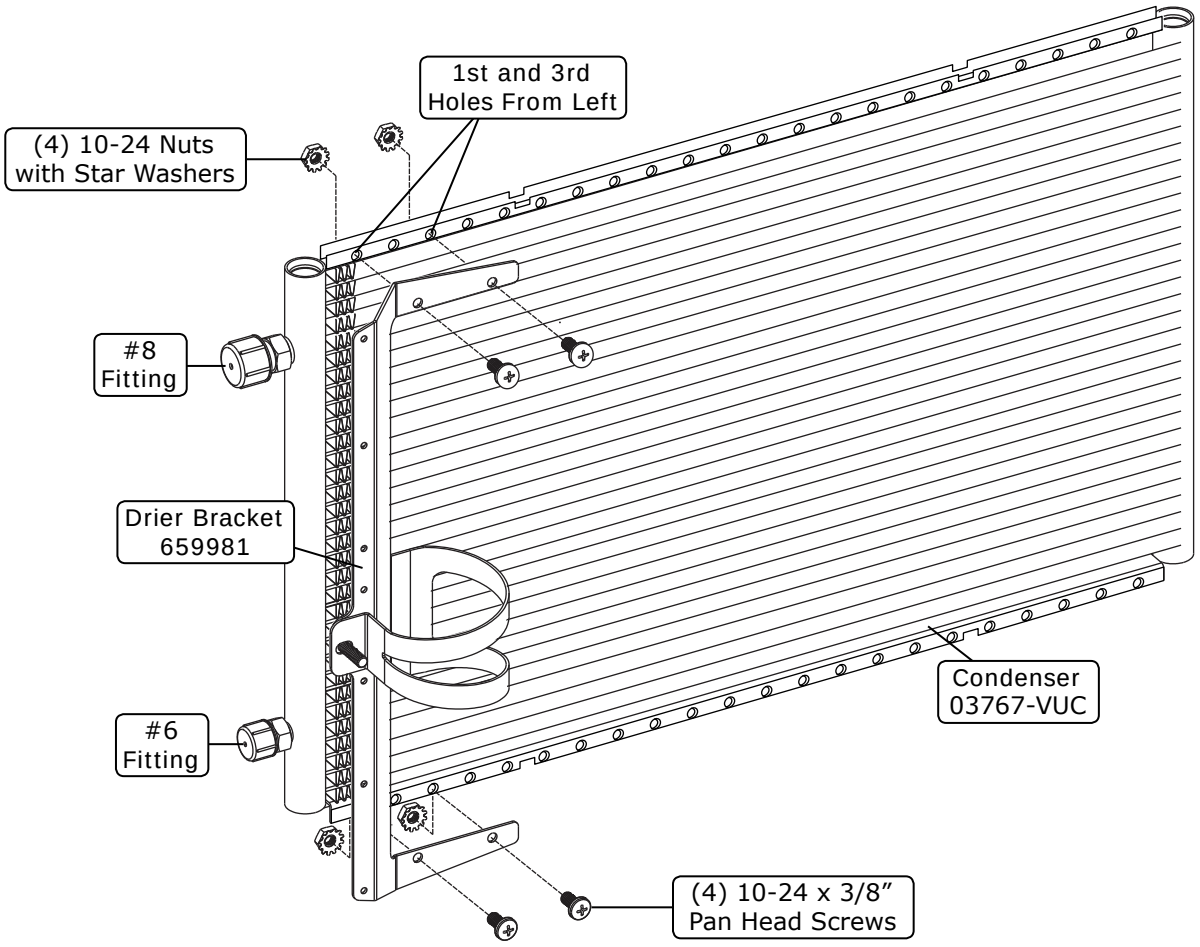
Drier Bracket Installation

1. On a workbench, install the drier bracket onto the condenser using (4) 10-24 x 3/8" pan head screws and (4) 10-24 nuts with star washers (See Figure 1, below). **NOTE: The drier bracket mounts through the 1st and 3rd holes from the left side of the condenser.**



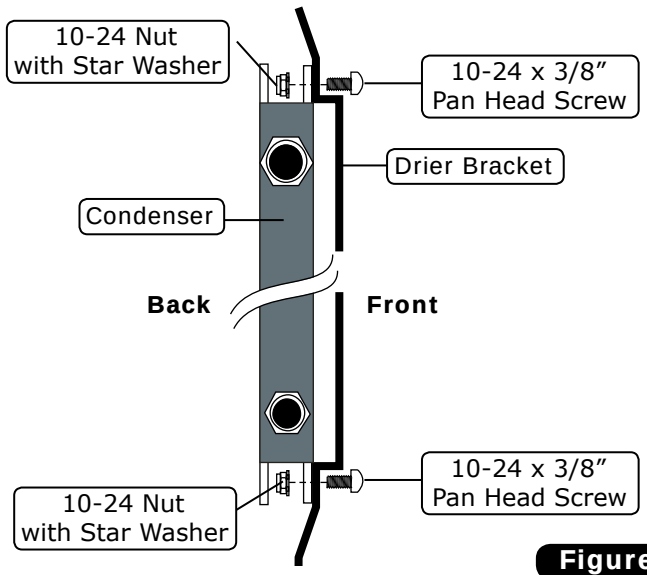


Figure 1

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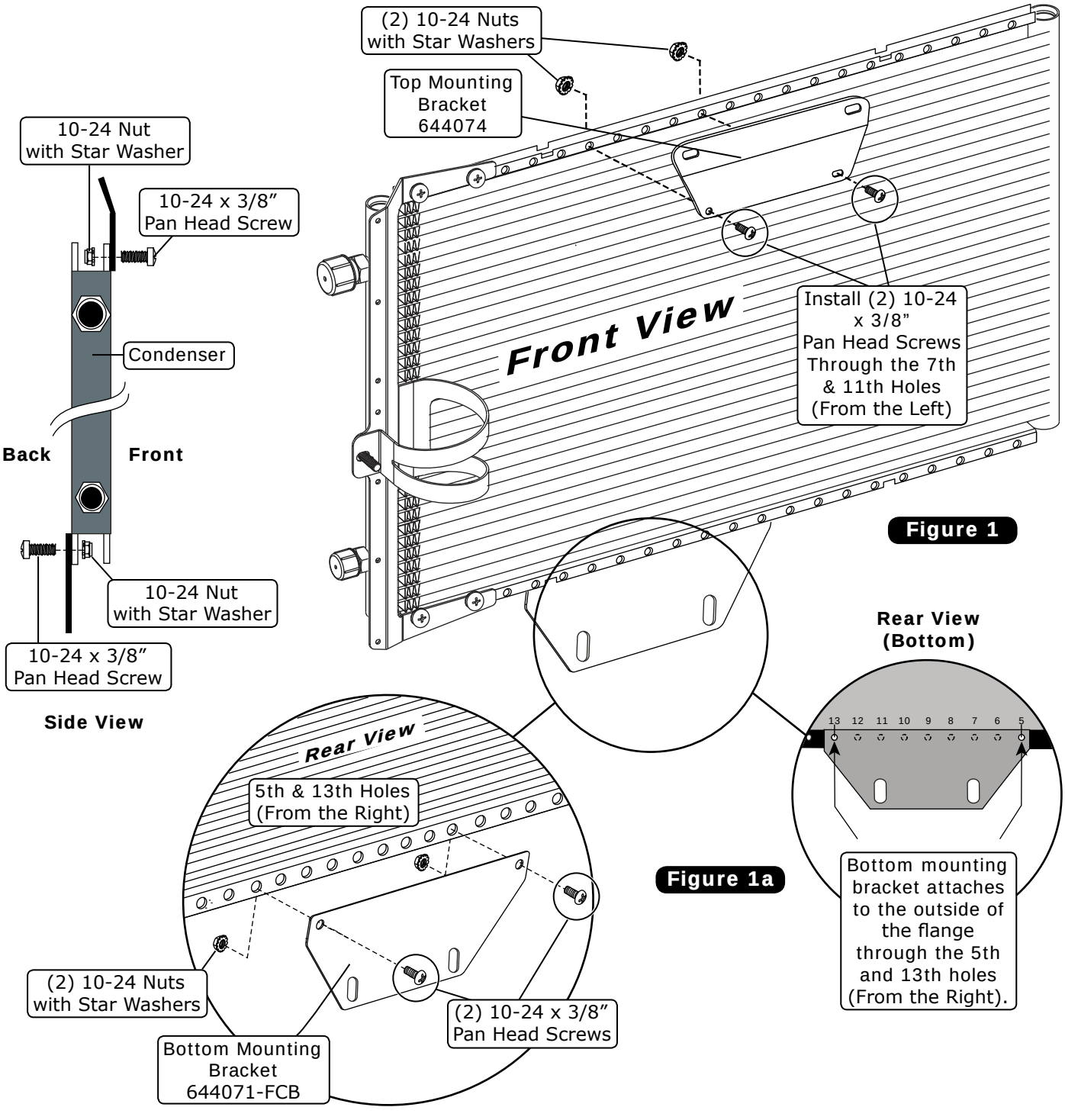
Mounting Bracket Installation

1. Install the top mounting bracket onto the condenser using (2) 10-24 x 3/8" pan head screws and (2) 10-24 nuts with star washers (See Figure 1, below). **NOTE: The bracket mounts to the outside of the flange through the 7th & 11th holes from the left side of the condenser.**
2. Install the bottom mounting bracket onto the condenser using (2) 10-24 x 3/8" pan head screws and (2) 10-24 nuts with star washers (See Figure 1a, below). **NOTE: The bracket mounts to the outside of the flange through the 5th & 13th holes from the right side of the condenser (Rear View).**



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.

Perform the Following:

1. Insert the drier into the drier bracket (See Figure 1, below).
2. Loosely secure the drier into the drier bracket using a 1/4-20 nut with star washer as shown in Figure 1, below. **NOTE: Do not fully tighten the nut at this time. Refrigerant flow through the drier is IN from the condenser, out to the evaporator.**
3. Install the condenser support bracket using (2) 10-24 x 3/8" pan head screws and (2) 10-24 nuts with star washers. **NOTE: The bracket mounts to the outside of the flange through the 18th and 20th holes from the left side of the condenser.**
4. With all the brackets installed, temporarily install the condenser into the core support. Adjust the brackets to ensure the condenser is level. Tighten condenser to bracket hardware, then remove the condenser and continue with the installation.

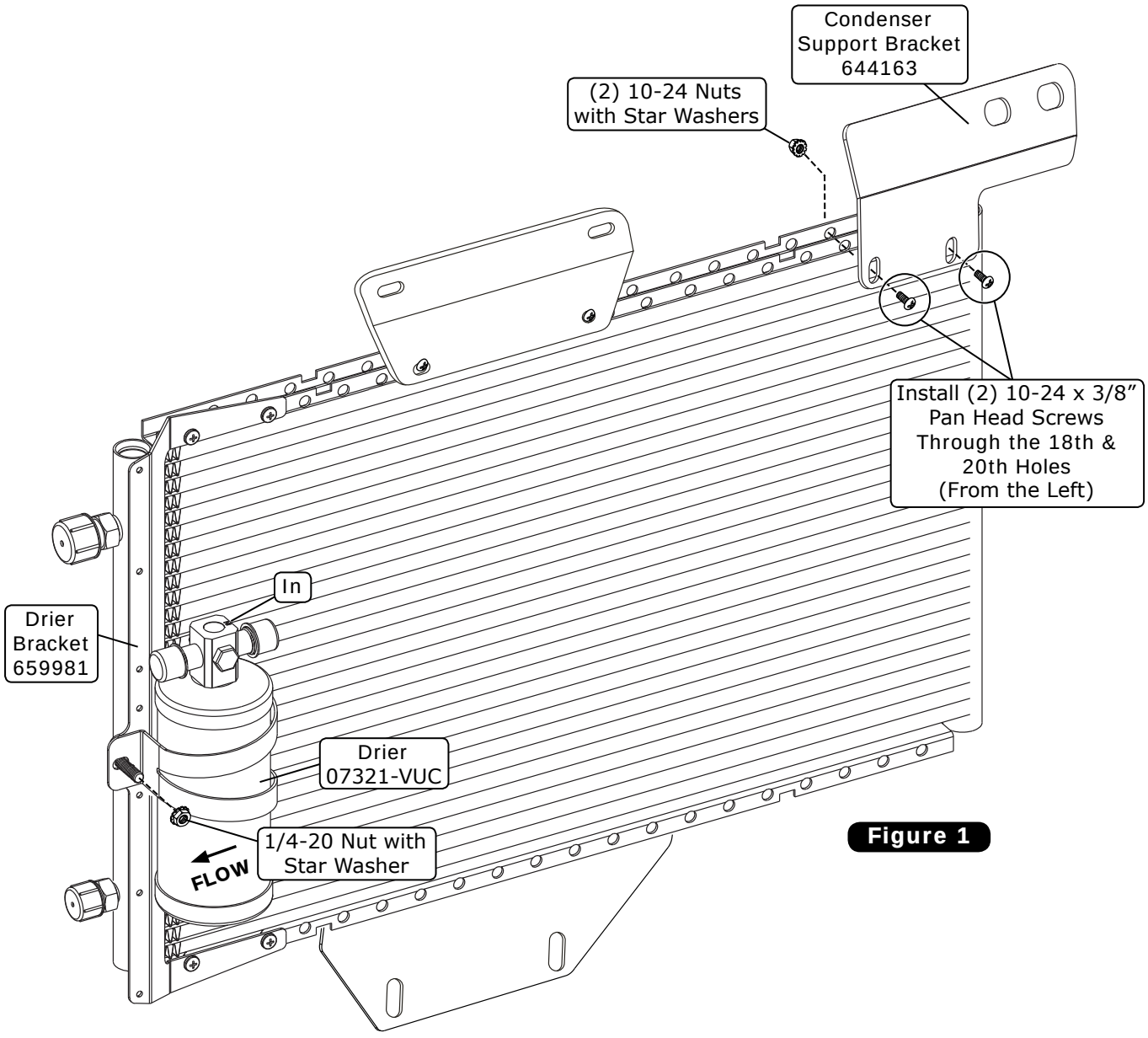
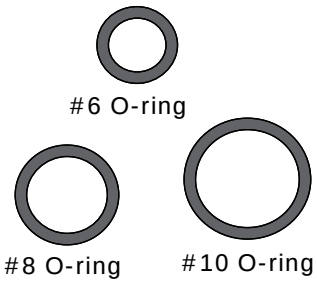
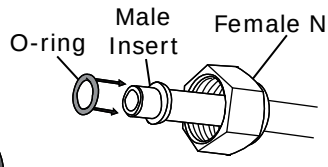


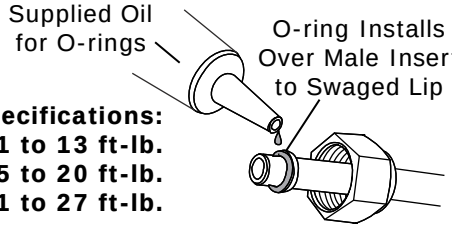
Figure 1

Lubricating O-rings





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



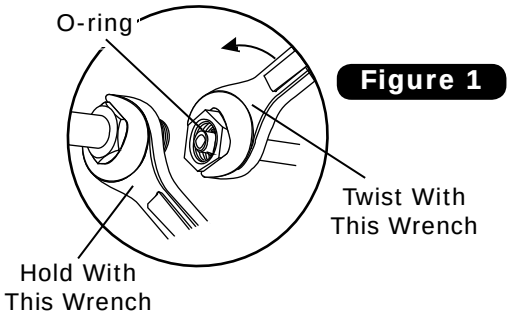


Figure 1

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

Hardline Installation

1. Lubricate (2) #6 O-rings, and install (1) onto each end of the #6 drier/condenser hardline as shown in Figure 1, above, and Figure 1, below.
2. Install the #6 drier/condenser hardline onto the #6 condenser fitting, and then onto the drier (See Figure 1, below). Tighten the fittings as shown in Figure 1, above.
3. Lubricate a #8 O-ring, and install it onto the #8 condenser hardline as shown in Figure 1, above, and Figure 1, below.
4. Install the #8 condenser hardline onto the #8 condenser fitting as shown in Figure 1, below. Tighten fittings as shown in Figure 1, above.
5. Install (2) #4 Adel clamps onto the #8 condenser hardline, and secure them to the bottom of the condenser using (2) 10-24 x 3/8" pan head screws and (2) 10-24 nuts with star washers as shown in Figure 1, below.

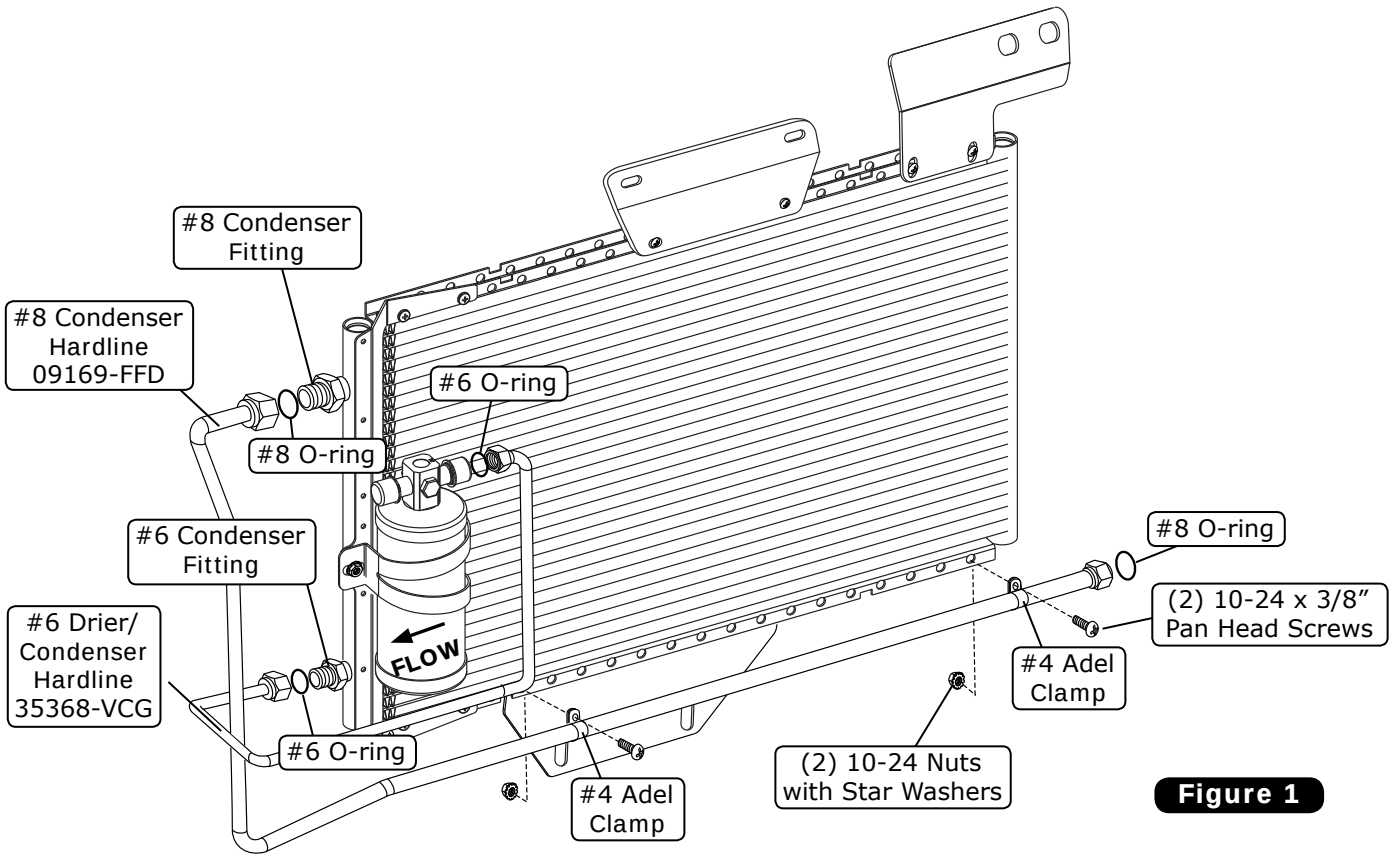


Figure 1

Condenser Installation

1. Lower the condenser assembly into the vehicle from the engine side of the core support (See Figure 1, below). **NOTE: The top mounting bracket mounts on the front side of the core support (See Figure 2, below).**
2. Secure the bottom passenger side of the condenser to the core support using the OEM bolt (See Figure 2, below).
3. Using the driver side mounting hole as a guide, drill a 3/16" hole in the core support (See Figure 2, below).
4. Secure the bottom driver side of the condenser to the core support using a #14 x 3/4" sheet metal screw and a 5/16" flat washer (See Figure 2, below). **NOTE: The radiator can be reinstalled at this time.**

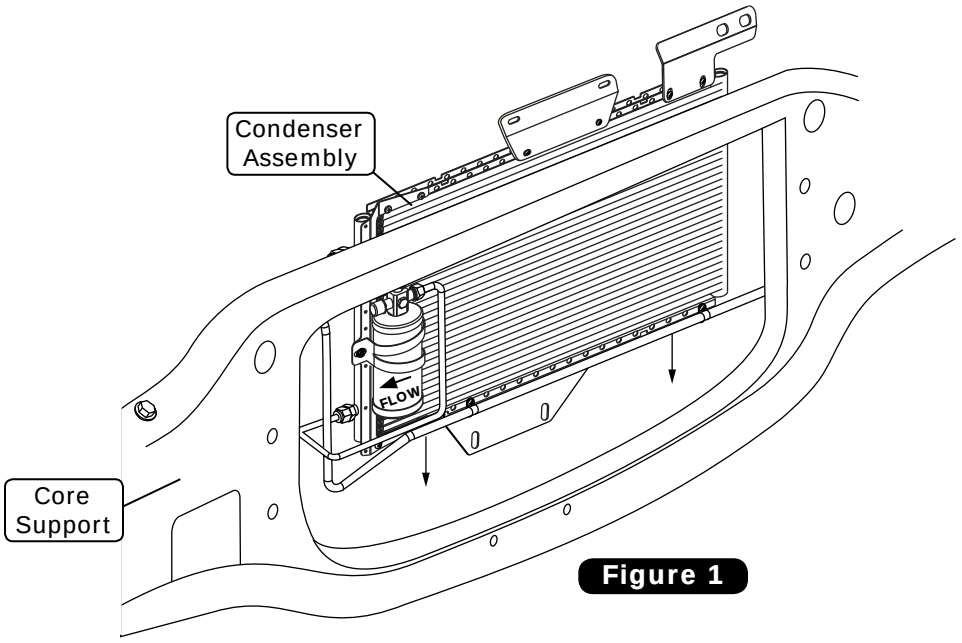


Figure 1

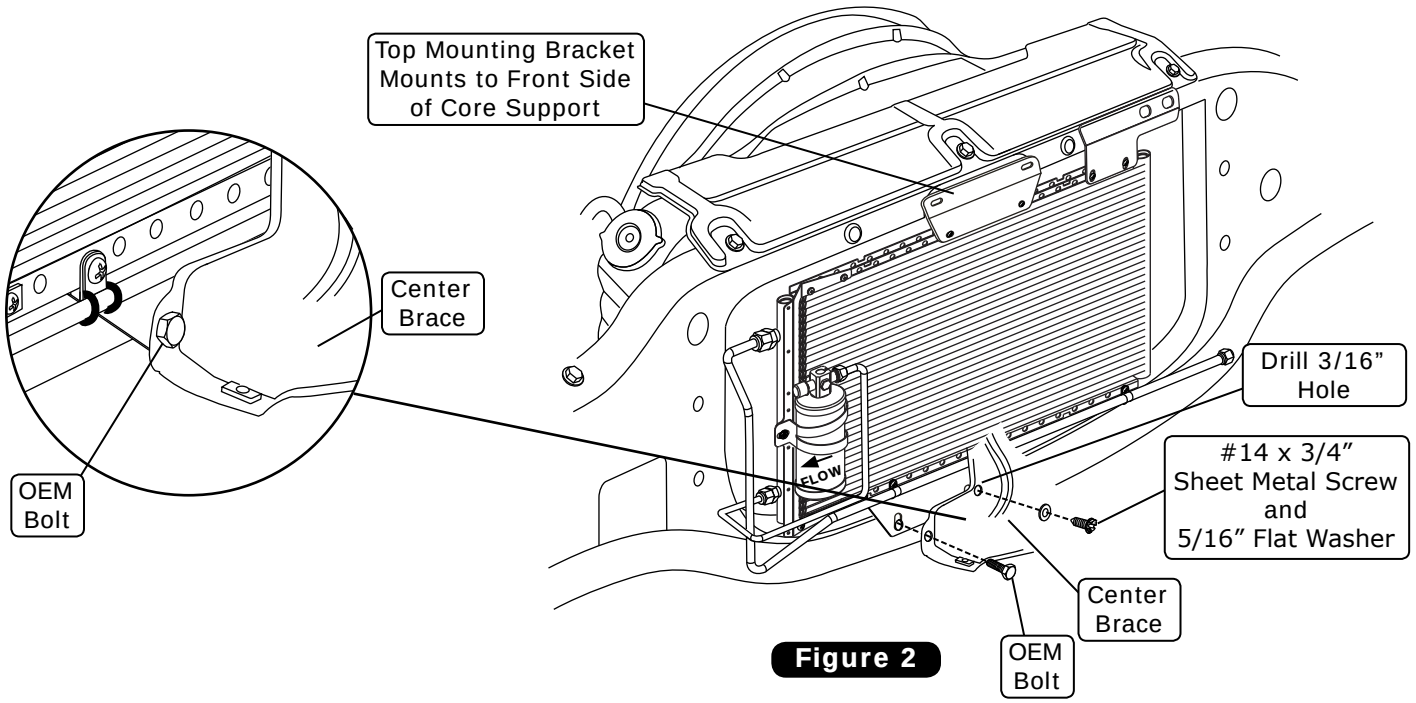


Figure 2

Condenser Installation (Cont.)

5. Reinstall the hood latch assembly using the OEM bolts. Install the OEM bolts through the hood latch assembly, top mounting bracket and core support (See Figure 3, below).
6. Install the condenser support bracket to the core support using (2)5/16-18 x 3/4" self-tapping screws (See Figure 3, below).
7. Enlarge the OEM holes on the core support to 1 ¼" diameter as shown in Figure 3, below. **NOTE: For vehicles without factory air, see the core support modification instructions on Page 6.**
8. Install (2) large grommets into the 1 ¼" diameter holes on the core support as shown in Figure 3, below.

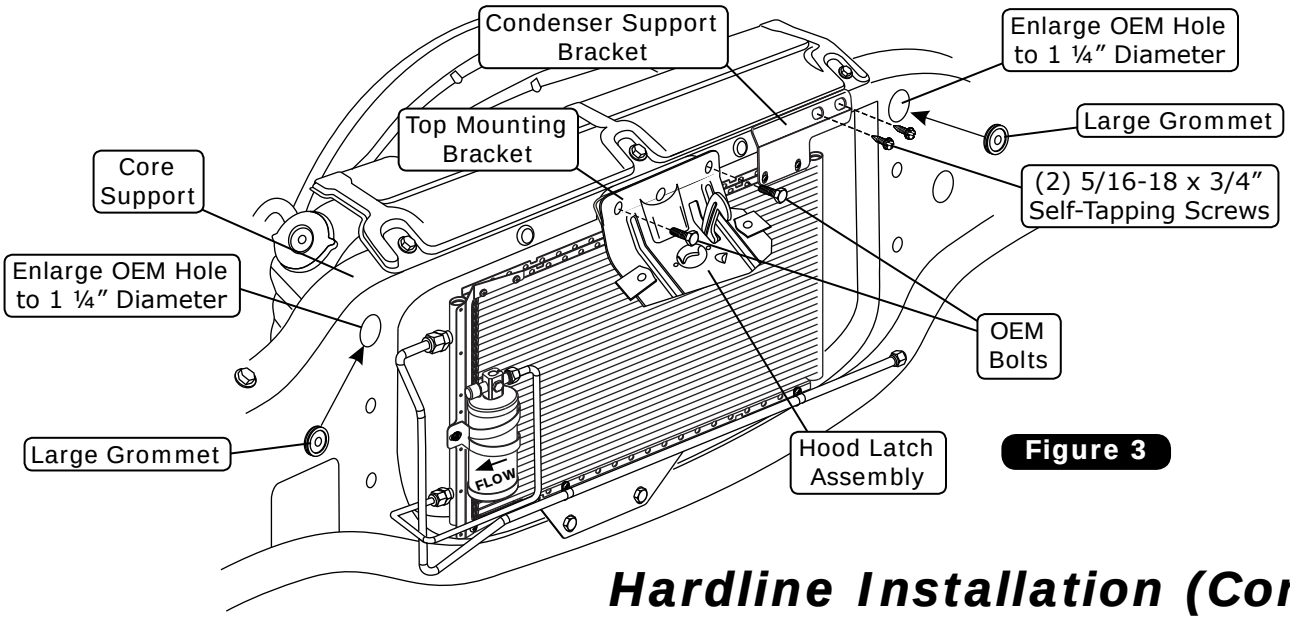


Figure 3

Hardline Installation (Cont.)

1. Lubricate a #8 O-ring, and install it onto the #8 condenser hardline as shown in Lubricating O-rings, Page 10, and Figure 1, below.
2. Install the #8 condenser/compressor hardline onto the #8 condenser hardline as shown in Figure 1, below. Tighten the fittings as shown in Lubricating O-rings, Page 10.
3. Install the #8 hardline bracket onto the core support using the OEM bolt, and secure it to the #8 condenser/compressor hardline with a #4 Adel clamp (See Figure 1a, below).

Figure 1

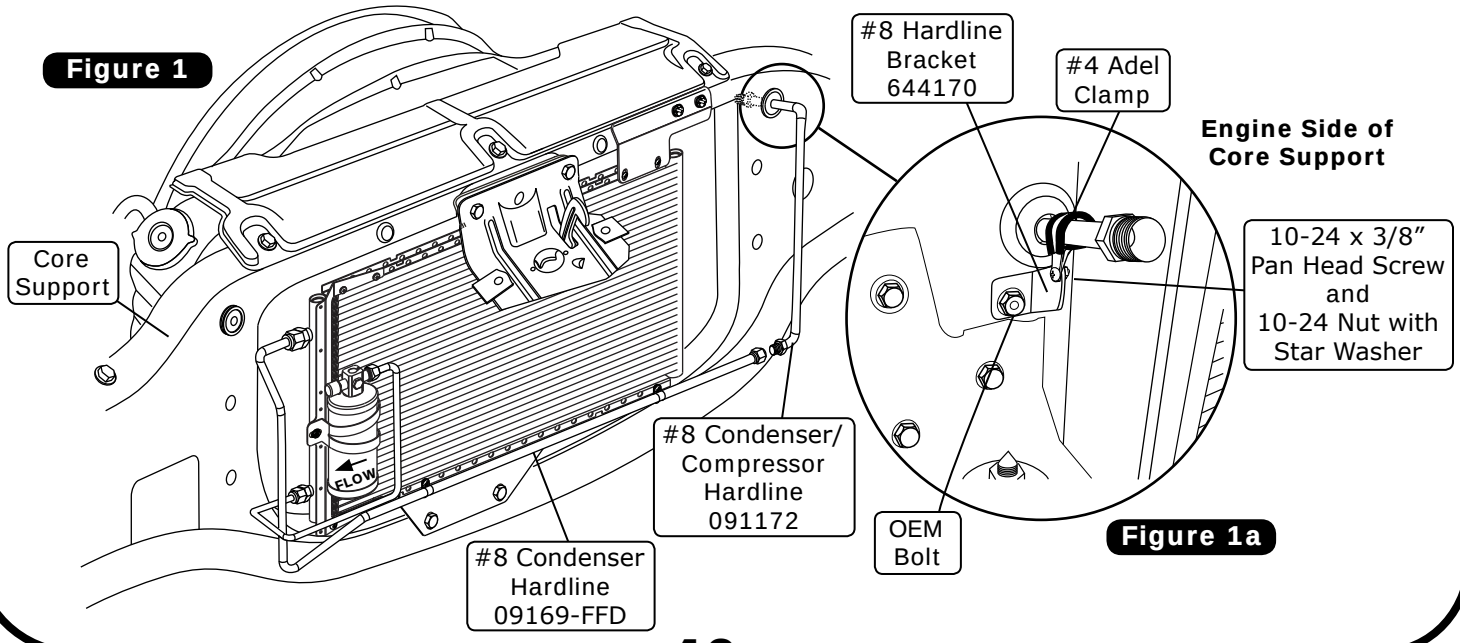


Figure 1a

Hardline Installation (Final)

4. Lubricate a #6 O-ring and install it onto the #6 drier/core hardline as shown in Figure 1, Page 10, and Figure 2, below.

5. Install the #6 drier/core hardline onto the drier as shown in Figure 2, below. Tighten the fittings as shown in Figure 1, Page 10, and Figure 2, below.

6. Install the #6 hardline bracket onto the core support using a 10-32 x 3/4" pan head screw and 10-32 nut with star washer, and secure it to the #6 drier/core hardline with a #2 Adel clamp (See Figure 2a, below).

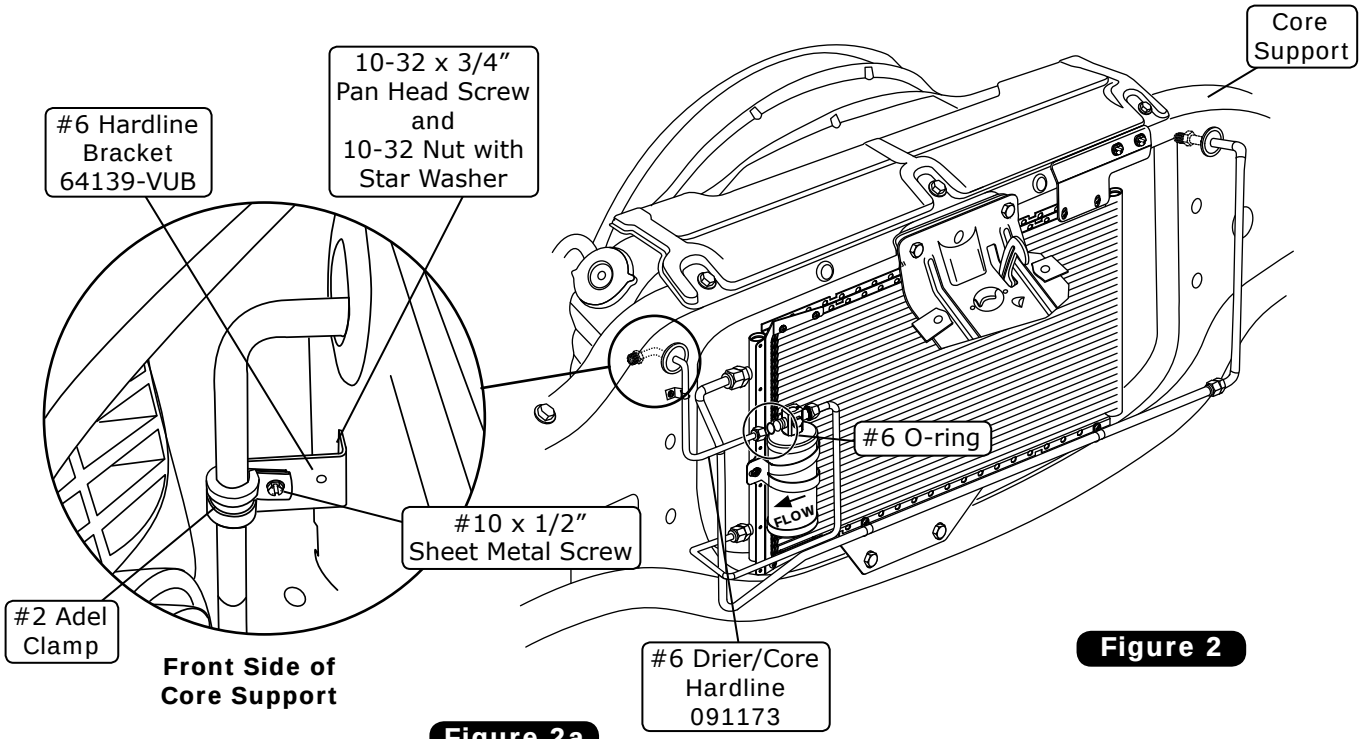


Figure 2

Figure 2a

Binary Switch Installation

1. Install the binary switch onto the drier as shown in Figure 1, below.

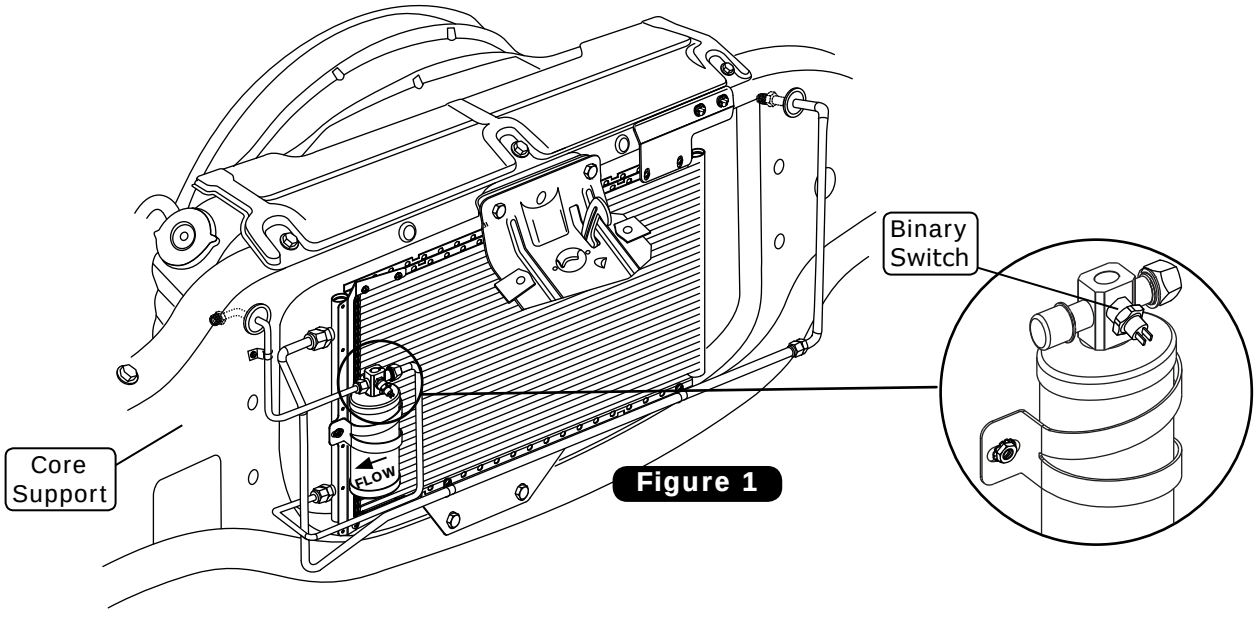
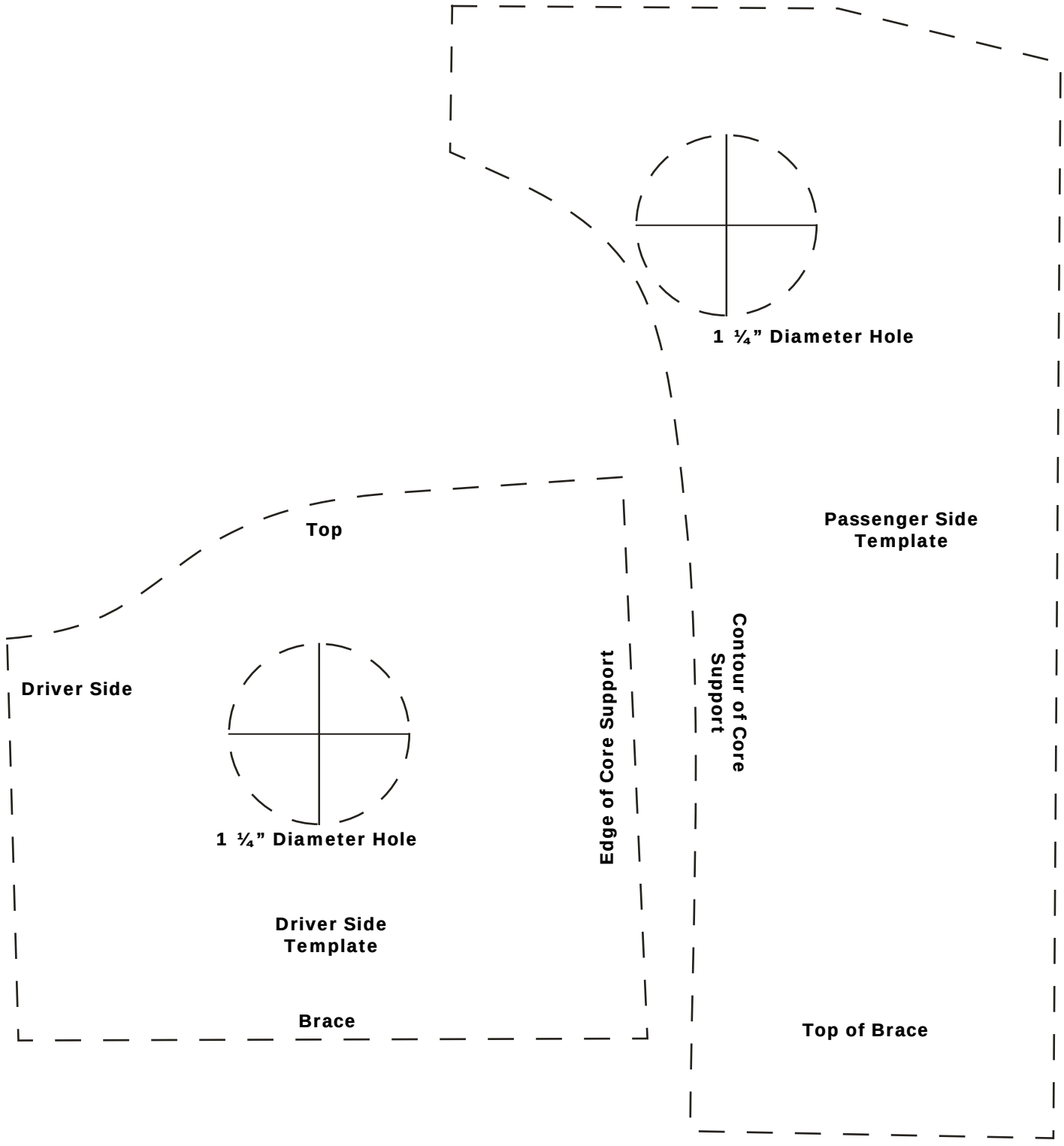


Figure 1

Core Support Modification Templates



NOTE: Due to printing variances, measure the line below before using this template. If template is scaled properly, the line should measure 6 inches.

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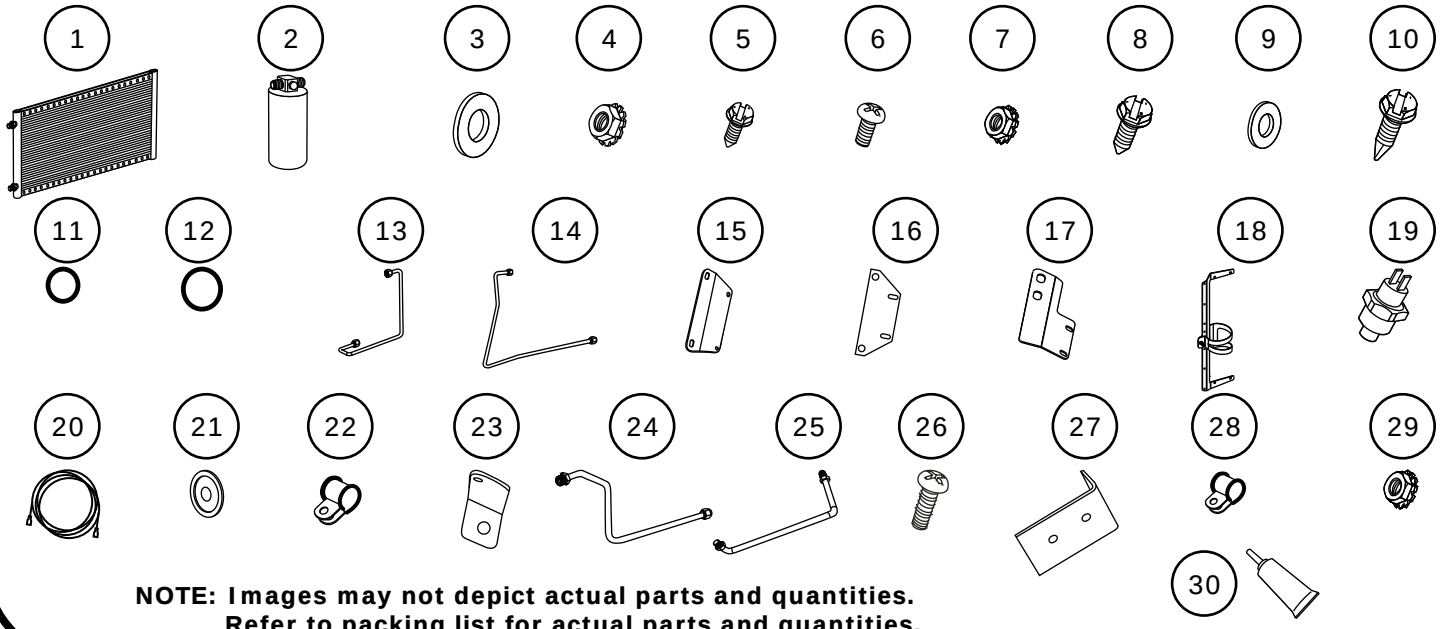
29.	1	18251-VUB	Nut with Star Washer, 10-32	
30.	1	41117-VUP	Refrigerant Oil	

Checked By: _____

Packed By: _____

Date: _____



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