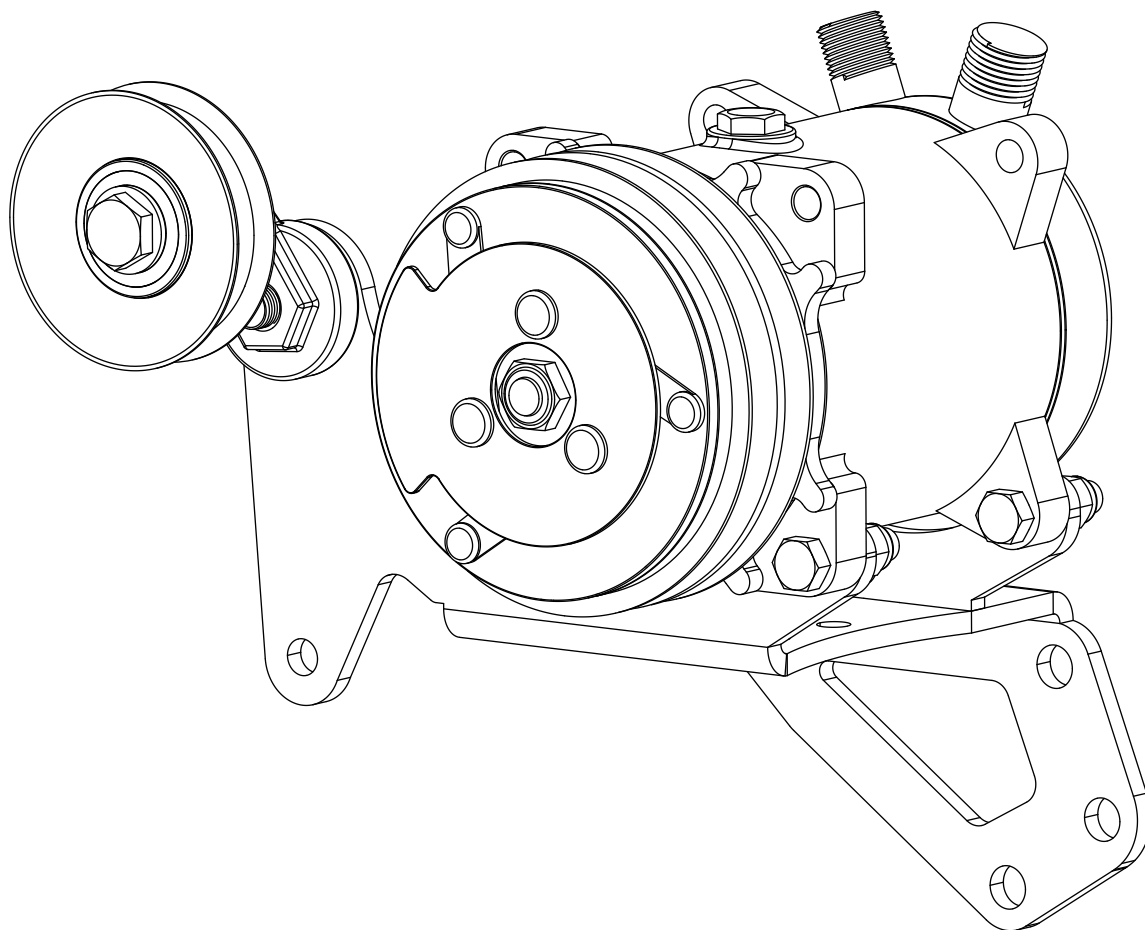




429 / 460

Compressor Bracket Kit

(137020)



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Phone: 800-862-6658
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Tech Support: tech@vintageair.com
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Additional Info: Please Read Before Beginning

- The compressor and alternator ground through the bracket and into the engine, therefore it's important to have a good ground connection. A separate ground wire may also be run to ensure ground continuity.
- This kit is designed to work with or without the OEM power steering bracket.
- All vehicles used in the development of this kit were equipped with power steering. If your vehicle does not have power steering, your pulleys and routing may differ from our belt routing diagrams.
- This kit requires a 3-groove crank pulley.
- Some engines equipped with a dealer-installed A/C or T/E (smog pumps) may have a 4-groove pulley and additional idlers, routing may vary.
- Due to the wide range of accessory options and pulley diameters, you will need to measure your pulleys to get the proper length V-belts.
- Vintage Air's Ford Bronco and Ford F-Series Surefit system requires a minimum 60-amp alternator. While the OEM 60-amp alternator will work with the Surefit system, additional accessories may require a larger alternator. The Surefit system draws approximately 15 amps, and without the sufficient amperage, the A/C system or other accessories may not function properly.
- Some year OEM or aftermarket heads (non-smog) may have an unused mounting hole on the head side of the compressor bracket.
- If you are running Lincoln or aftermarket pulleys, this bracket kit may need to be spaced differently. Contact Vintage Air after measuring offset to order spacers.
- 1975-77 and 1978 non-California, non-AC trucks are equipped with a 1-groove water pump pulley, factory PN: D00Z 8509-A. These vehicles will require a 2-groove pulley. OEM pulleys, factory PN: D00R-A and D00AR-B are viable options if available.



A detailed tech video outlining the installation process is available on Vintage Air's YouTube channel at <https://bit.ly/3ha1QQh>. Viewing the tech video along with the written instructions will provide the installer the most detailed installation procedure.



Packing List:

Compressor Bracket Kit (137020)

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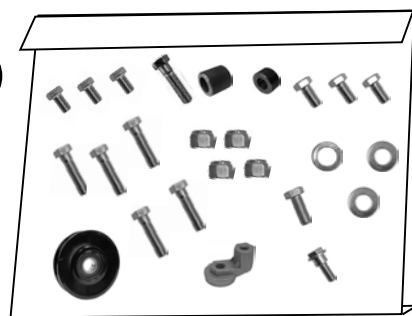
No.	Qty.	Part No.	Description
1.	1	137019	Bracket, Compressor
2.	1	191105	Hardware Kit

**** 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.**

1



2



**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.

Compressor and Bracket Disassembly

NOTE: Vehicles without factory air will only follow Steps 2 and 8, below.

1. Evacuate the A/C system.
2. Disconnect the battery.
3. Remove the hoses from the A/C compressor (See Photo 1, below).
4. Loosen the A/C belt tensioner and remove the belt (See Photo 1, below).
5. Loosen the (4) bolts on the power steering and release the tension on the belt (See Photo 1, below).
6. Remove the tensioner bracket by removing (5) bolts.
7. Remove the OEM compressor from the main bracket by removing the (4) bolts (See Photo 1, below).
8. Remove the upper left and right bolts from the power steering bracket, then swing the bracket and pump down (See Photos 2 & 3, below). **NOTE: This allows full access to the main bracket bolts.**
9. Remove the compressor bracket by removing the (4) mounting bolts (See Photos 3 & 4, below).

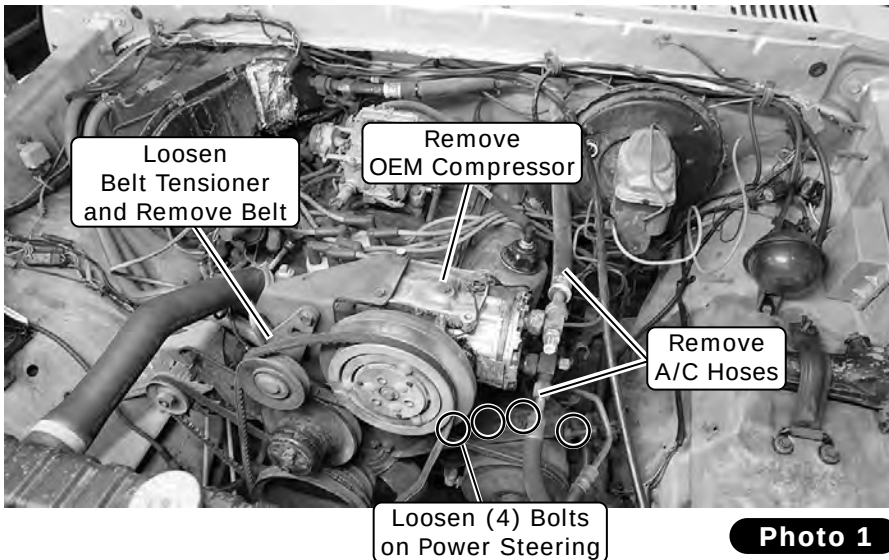


Photo 1

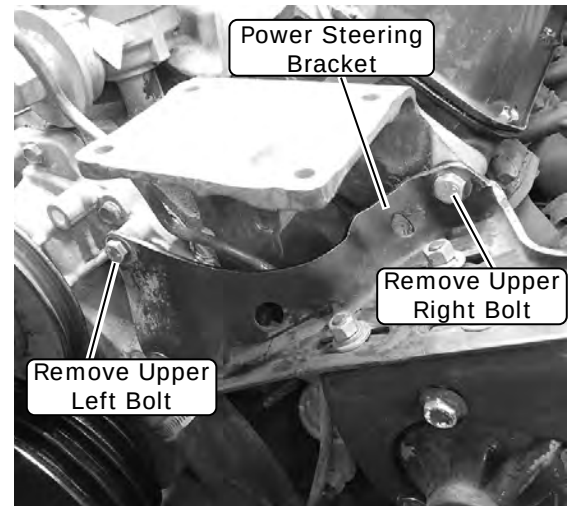


Photo 2

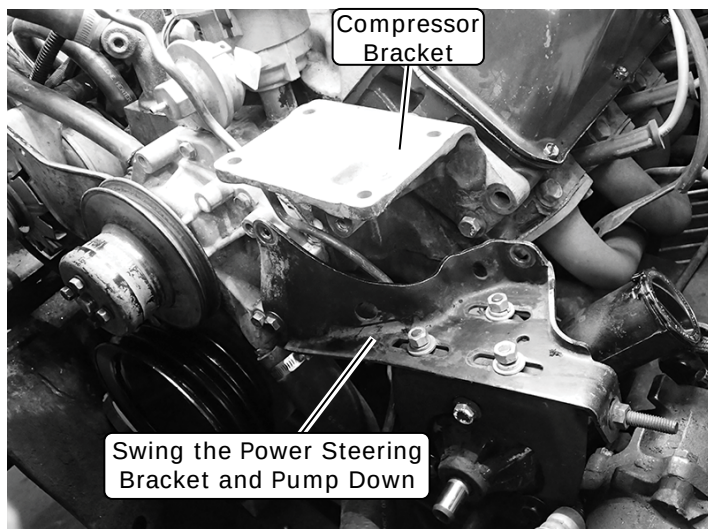


Photo 3

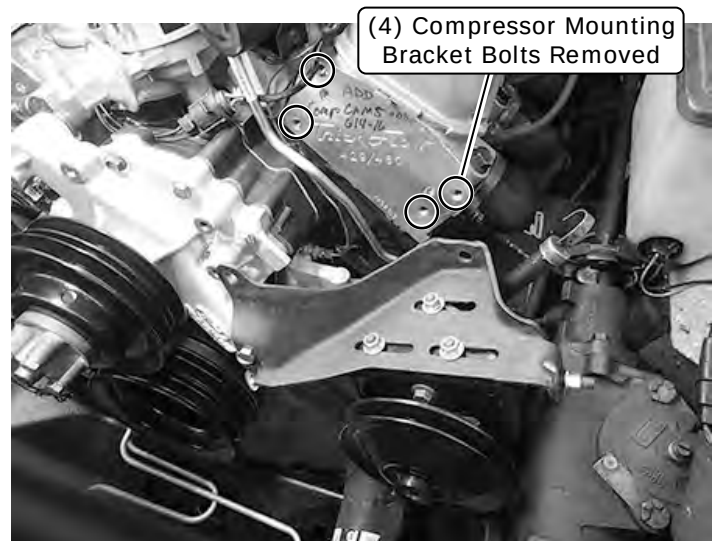


Photo 4

Idler Arm Assembly

1. Assemble the idler pulley onto the idler arm using the idler pulley shoulder bolt, idler pulley, (2) 7/16" flat washers and the 1 3/4" idler arm (See Figure 1, below).
2. Attach the assembled idler pulley onto the compressor bracket using a 1/2-20 x 1 1/4" hex bolt and 1/2" lock washer (See Figure 2, below).

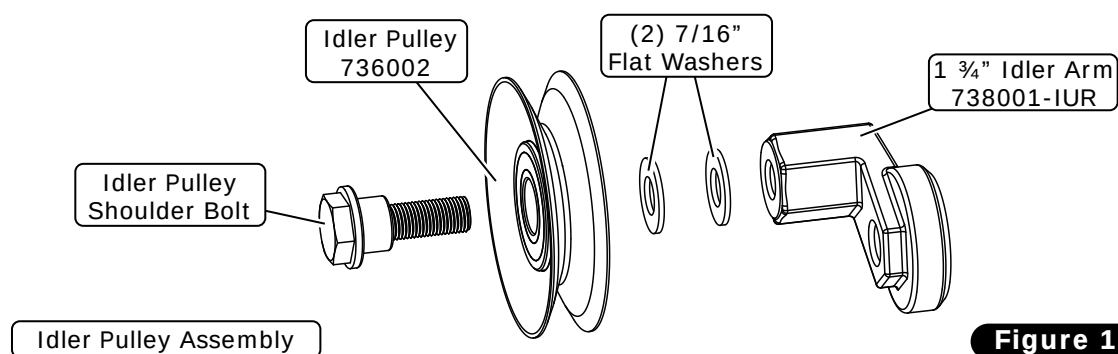


Figure 1

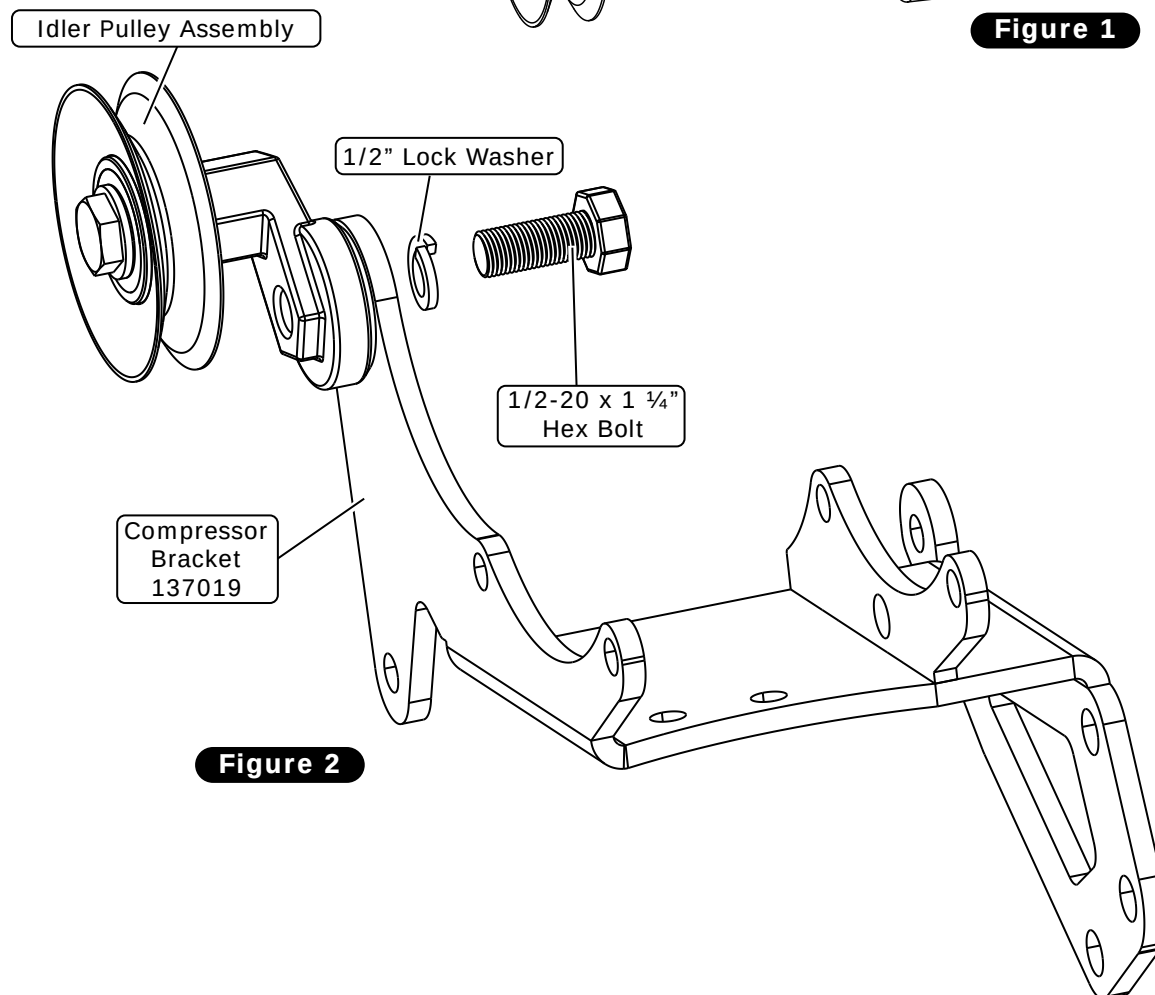


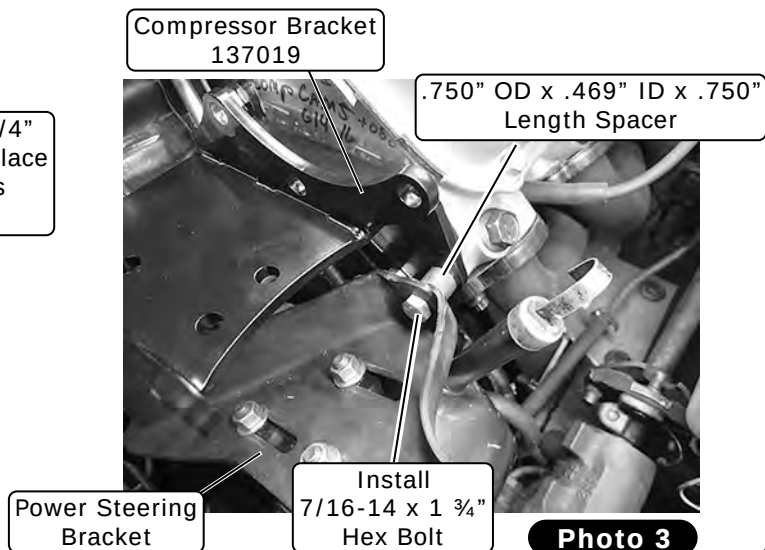
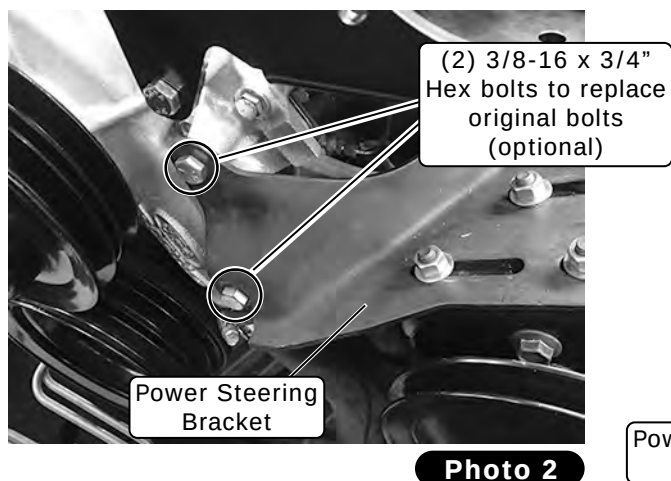
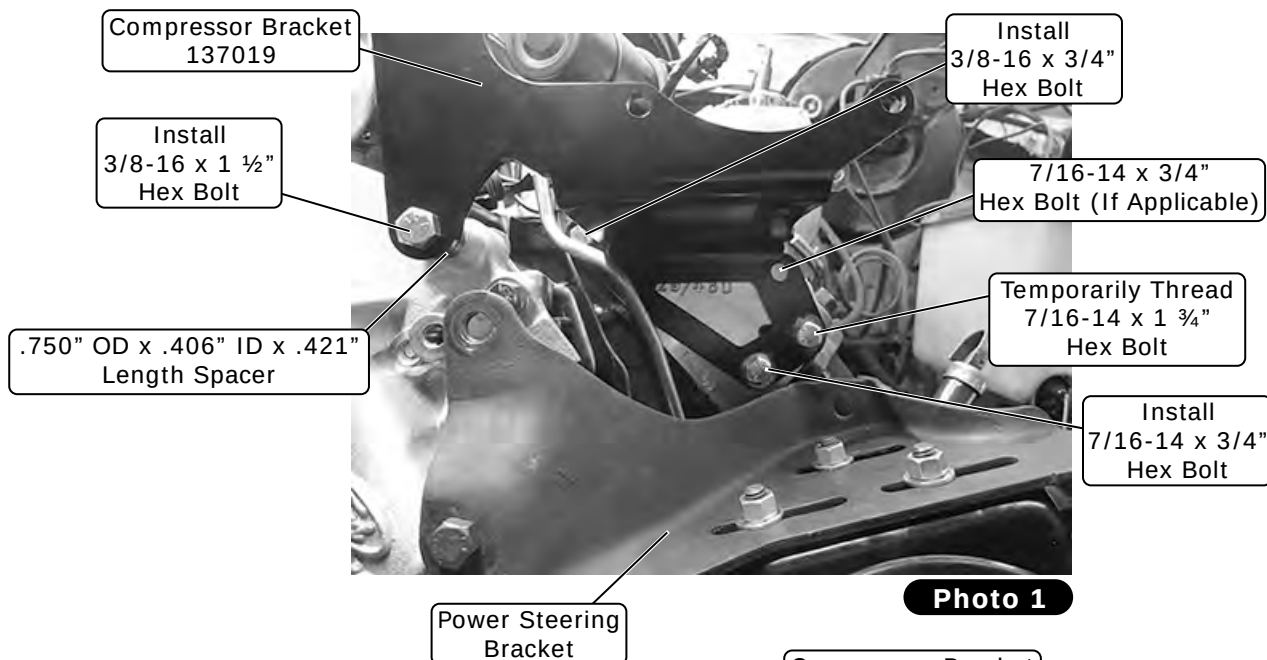
Figure 2



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Compressor Bracket Installation (with OEM Power Steering)

1. Install the compressor bracket flat against the engine head (See Photo 1, below)
2. Use a 7/16-14 x 3/4" hex bolt on the bottom head mounting location (See Photo 1, below). **NOTE: Some vehicles may have an upper head mounting location. If vehicle has this hole, use a 7/16-14 x 3/4" hex bolt (See Photo 1, below).**
3. Install a 3/8-16 x 3/4" hex bolt into top left of the head (See Photo 1, below).
4. Secure the far left of the bracket by installing a 3/8-16 x 1 1/2" hex bolt through the bracket and a .750" OD x .406" ID x .421" length spacer into the water pump (See Photo 1, below).
5. Temporarily thread the 7/16-14 x 1 3/4" hex bolt into the far right boss to ensure the bracket alignment and tighten the lower head bolt (See Photo 1, below).
6. Remove the 7/16-14 x 1 3/4" hex bolt from the far right boss.
7. Swing the power steering bracket back into place, using a 3/8-16 x 3/4" hex bolt to hold it in place (See Photo 2, below). **NOTE: This kit includes an optional (2) 3/8-16 x 3/4" hex bolts to replace the original bolts for the power steering bracket.**
8. Install a 7/16-14 x 1 3/4" hex bolt into the far right head bolt with a .750" OD x .469" ID x .750" length spacer between the power steering bracket and the compressor bracket (See Photo 3, below).
9. Tighten all the bolts once they are threaded and the bracket is in place.



Compressor Bracket Installation (without Power Steering)

1. Install the compressor bracket flat against the engine head (See Photo 1, below).
2. Use (3) 7/16-14 x 3/4" hex bolts on the lower head mounting locations (See Photo 1, below). **NOTE: Upper bolt may not be used on some engines.**
3. Install a 3/8-16 x 3/4" hex bolt into the top left of the head (See Photo 1, below).
4. Thread a 3/8-16 x 1 1/2" bolt through the bracket and a .750" OD x .406" ID x .421" length spacer into the water pump (See Photo 2, below).
5. Tighten all bolts once they are threaded and the bracket is in place.



Photo 1

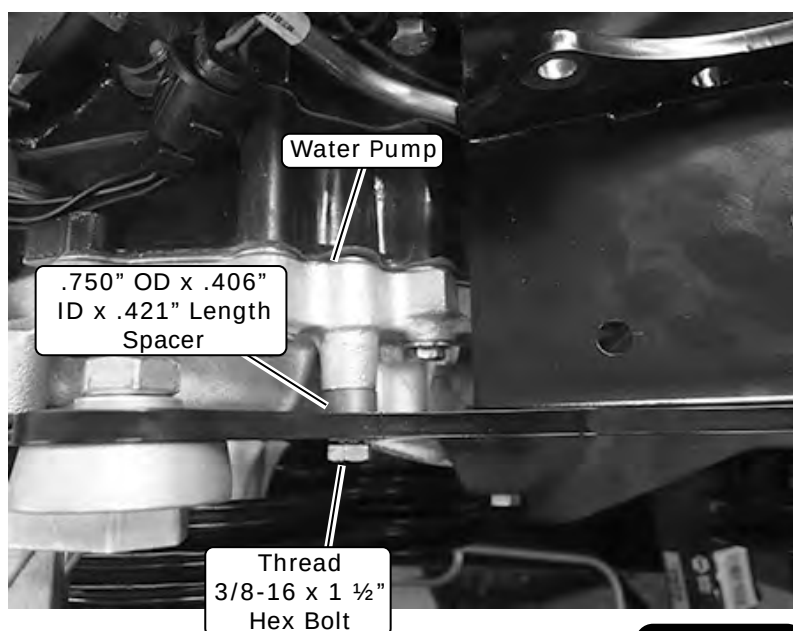


Photo 2

Compressor Installation

1. Place the compressor onto the bracket with tabs "B," "C," "F" and "G" aligning to the front of the bracket as shown in Photos 1 and 2, below. Secure the compressor using (4) 3/8-16 x 1 1/2" hex bolts and (4) 3/8-16 locknuts through all (4) lower compressor tabs. **NOTE: Vintage Air recommends using only Dayco, Gates or Goodyear brand reinforced V-belts with this compressor bracket kit. A compressor belt length of 54 7/8" was used. However, belt lengths may vary depending on the accessories present and the diameter of the water pump, crankshaft, alternator and power steering pulleys.**
2. Tension the idler arm using a 1" wrench, and tighten the rear bolt with a 3/4" wrench (See Figure 1 and Photo 3, below).

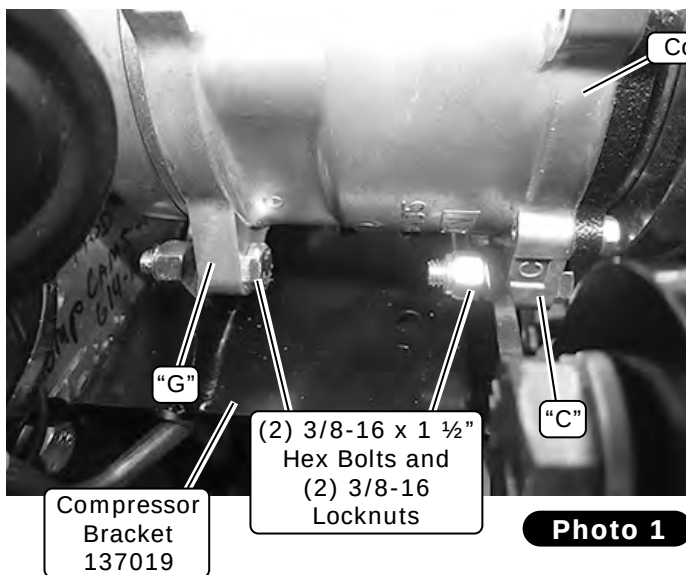


Photo 1

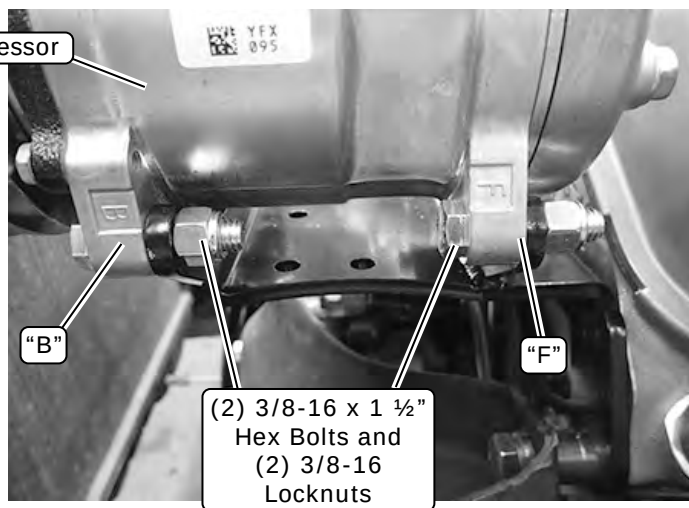


Photo 2

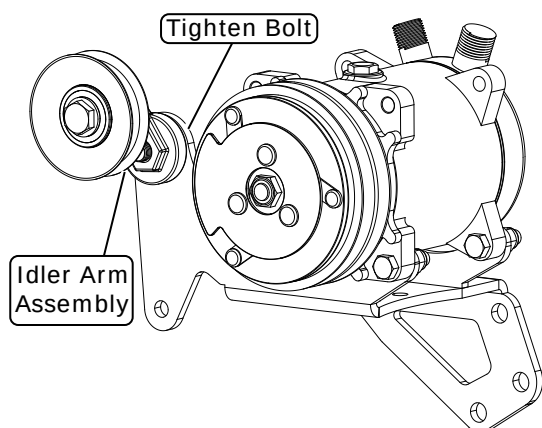


Figure 1

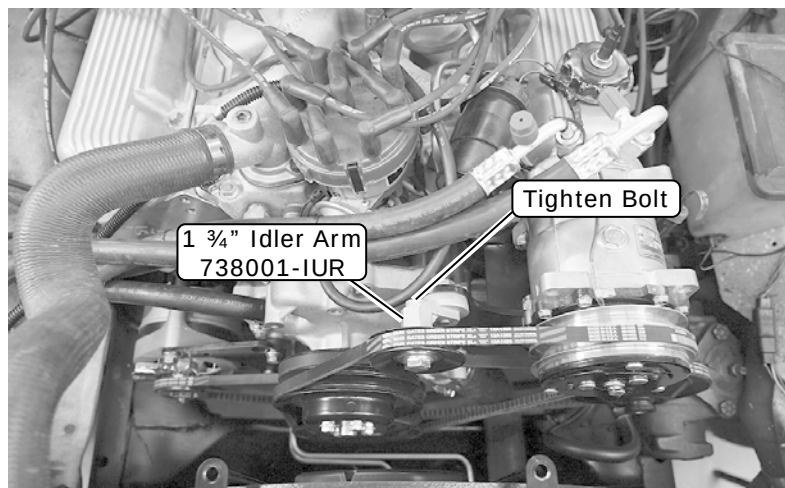
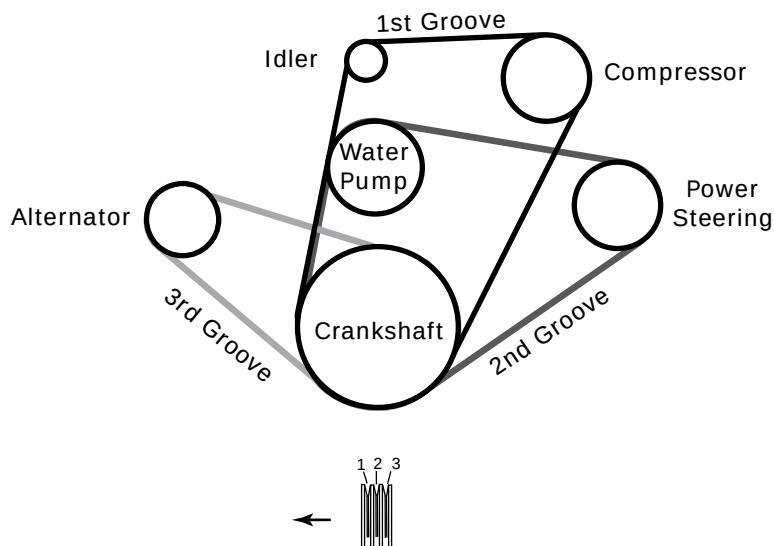


Photo 3

Belt Routing Diagram

NOTE: Smog pump application not shown on belt routing diagrams.

with Power Steering

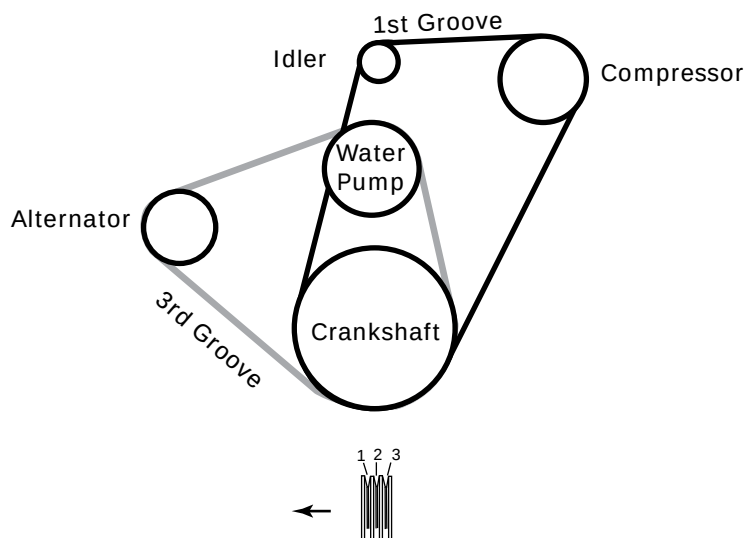


Crankshaft Pulley Grooves:

1. Crankshaft, Water Pump, Idler & Compressor
2. Crankshaft, Water Pump & Power Steering
3. Crankshaft, Alternator

without Power Steering

*** See Notes, Page 2 ***



Crankshaft Pulley Grooves:

1. Crankshaft, Water Pump, Idler & Compressor
2. Unused
3. Crankshaft, Alternator & Water Pump



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Packing List: Compressor Bracket Kit (137020)

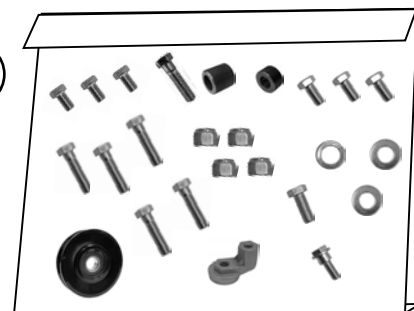
No.	Qty.	Part No.	Description
1.	1	137019	Bracket, Compressor
2.	1	191105	Hardware Kit

Checked By: _____
Packed By: _____
Date: _____

1



2



NOTE: Images may not depict actual parts and quantities.
Refer to packing list for actual parts and quantities.

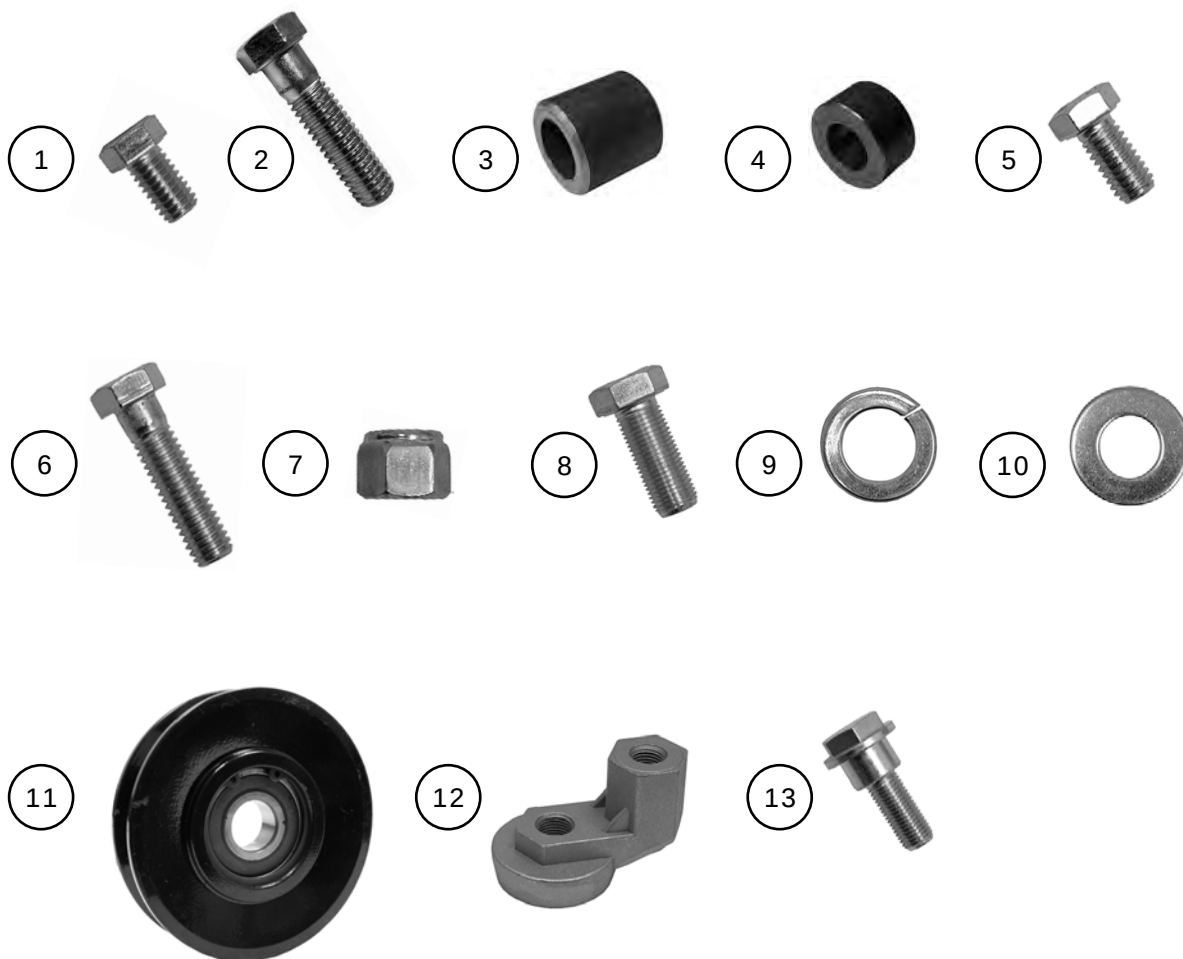


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Packing List: 429/460 Compressor Bracket Hardware Kit (191105)

No.	Qty.	Part No.	Description
1.	3	181558	Bolt, 7/16-14 x 3/4", Hex
2.	1	181559	Bolt, 7/16-14 x 1 3/4", Hex
3.	1	180533-SSR	Spacer, .750" OD x .482" ID x .750" Length
4.	1	182024	Spacer, .750" OD x .406" ID x .421" Length
5.	3	18358-VUB	Bolt, 3/8-16 x 3/4", Hex
6.	5	18361-VUB	Bolt, 3/8-16 x 1 1/2", Hex
7.	4	18155-VUB	Locknut, 3/8-16
8.	1	18046-VUB	Bolt, 1/2-20 x 1 1/4"
9.	1	18032-VUB	Washer, 1/2", Lock
10.	2	18425-VUB	Washer, 7/16", Flat
11.	1	736002	Pulley, Idler
12.	1	738001-IUR	Idler Arm, 1 3/4"
13.	1	18070-VUB	Bolt, Idler Pulley Shoulder

Checked By: _____
Packed By: _____
Date: _____



**NOTE: Images may not depict actual parts and quantities.
Refer to packing list for actual parts and quantities.**