SINCE VintageAir 1976

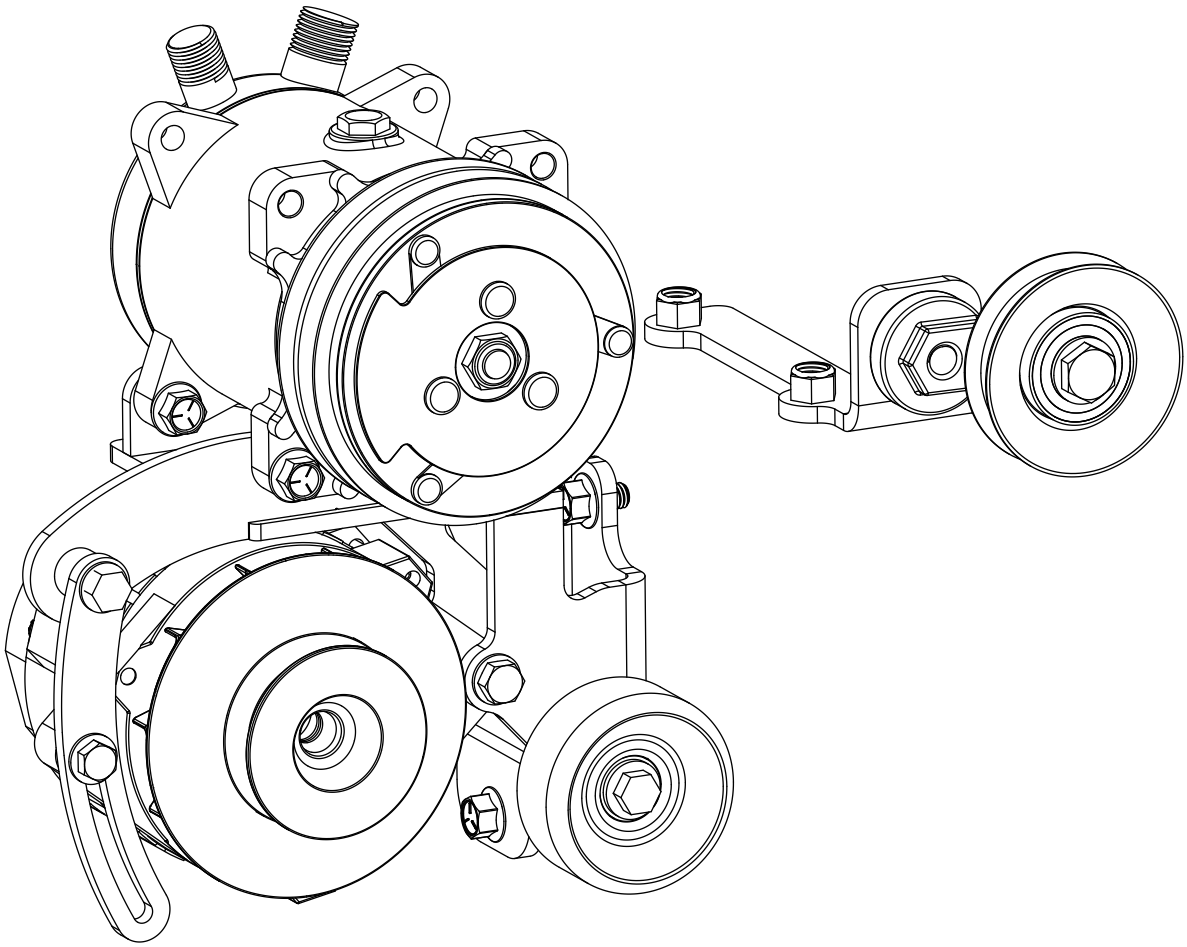
Steel-eez

Bracket Systems

™

1981-90 Jeep 4.2L & 2.5L (V-Belt Drive)

Compressor & Alternator Bracket Kit (158250)



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Additional Info: Please Read Before Beginning

- **The compressor and alternator ground through the bracket and into the engine, therefore it is important to have a good ground connection. A separate ground wire may also be ran to ensure ground continuity.**
- **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 SureFit system requires a minimum 60-amp alternator. While the OEM alternator may 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.**
- **Vintage Air recommends a 94-amp or larger alternator such as AC Delco 334-2195 which is a drop-in upgrade.**
- **This kit requires a 2-groove crank pulley and a single-groove water pump pulley.**
- **Vehicles equipped with factory or dealer-installed air-conditioning may come equipped with a 3-groove crank pulley.**
- **This kit requires head studs on the (2) front head bolt locations to mount the tensioner bracket.**
- **This kit is designed for the Jeep/AMC 4.2L 258 and 2.5L V-belt engine for CJ and YJ Jeeps.**
- **This kit may fit other Jeep/AMC engines or vehicles but is not confirmed.**
- **This kit requires Dayco 71013 (Factory A/C equipped) or equivalent upper radiator hose.**

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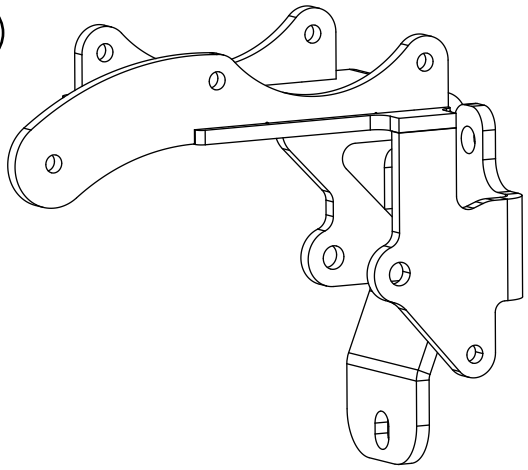
Packing List: Bracket Kit (158250)

No.	Qty.		Part No.	Description
1.	1	_____	158249	Bracket, Assembly
2.	1	_____	158244	Bracket, Alternator Arm
3.	1	_____	158243	Bracket, Tensioner
4.	1	_____	193201	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



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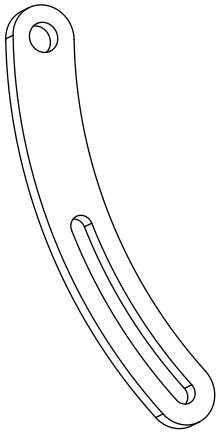

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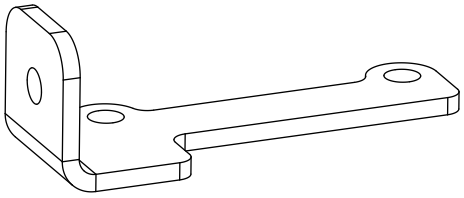

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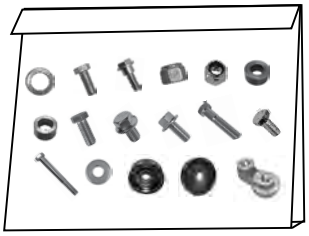

NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.

NOTE: Before tightening bolts, assemble all brackets loosely to engine. This will ensure proper alignment of all brackets.

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Disassembly Instructions

1. Disconnect the battery.
2. Disconnect the electrical connections from the alternator. **NOTE: Take pictures and notes of how all wires are attached to the alternator for future reference.**
3. Loosen the alternator and compressor (if equipped) belt tension and remove the belts.
4. Remove the alternator and compressor (if equipped).
5. Remove the existing brackets from the engine.

Assembly Instructions

1. Install the assembly bracket onto passenger side engine using (3) 3/8-16 x 5/8" flange bolts as shown in Figure 1, below.

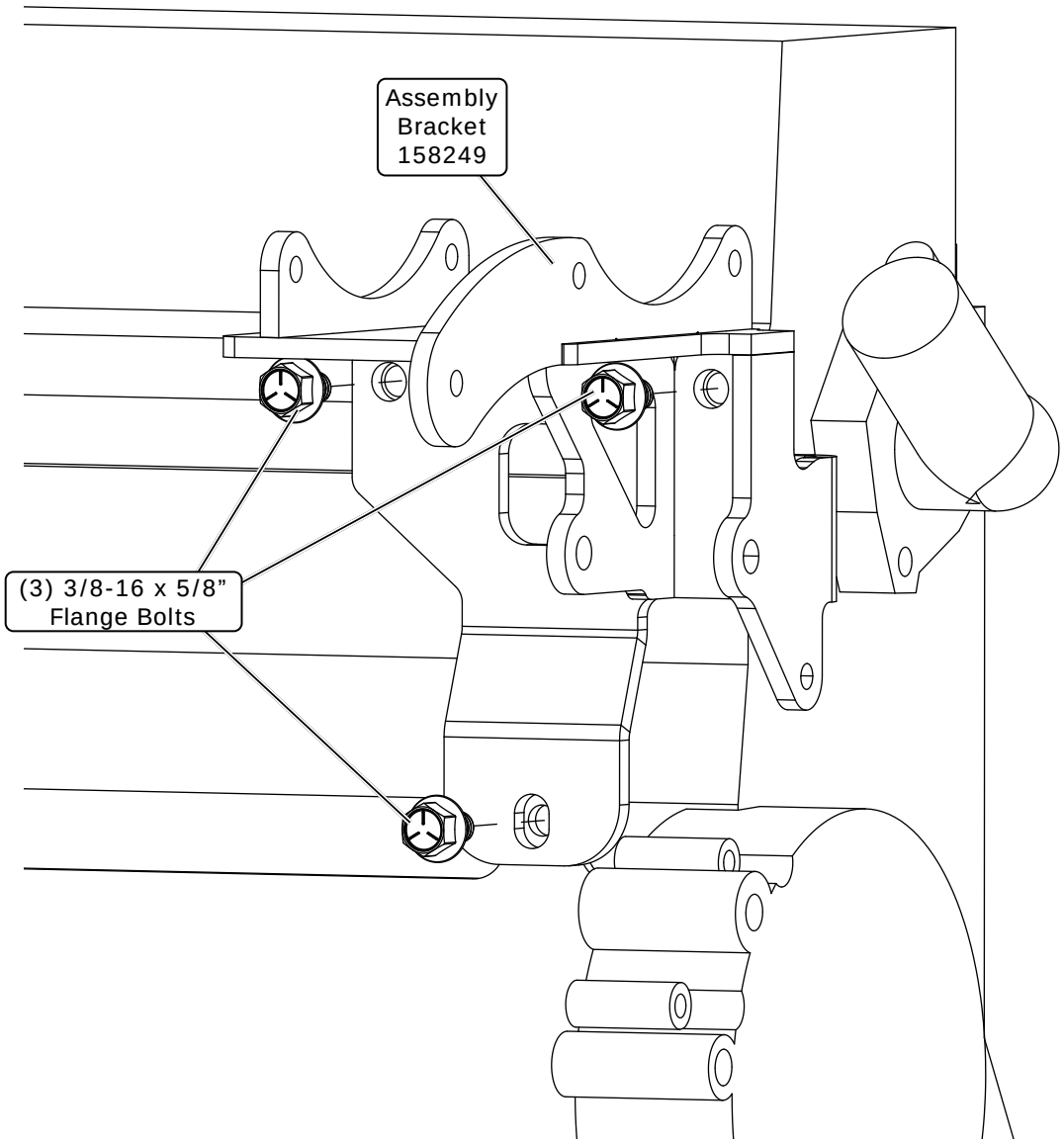


Figure 1

Assembly Instructions (Cont.)

2. Install the alternator onto the assembly using a 3/18-16 x 3 ¼" hex bolt, 5/16" flat washer and a 3/8-16 locknut (See Figure 2, below).

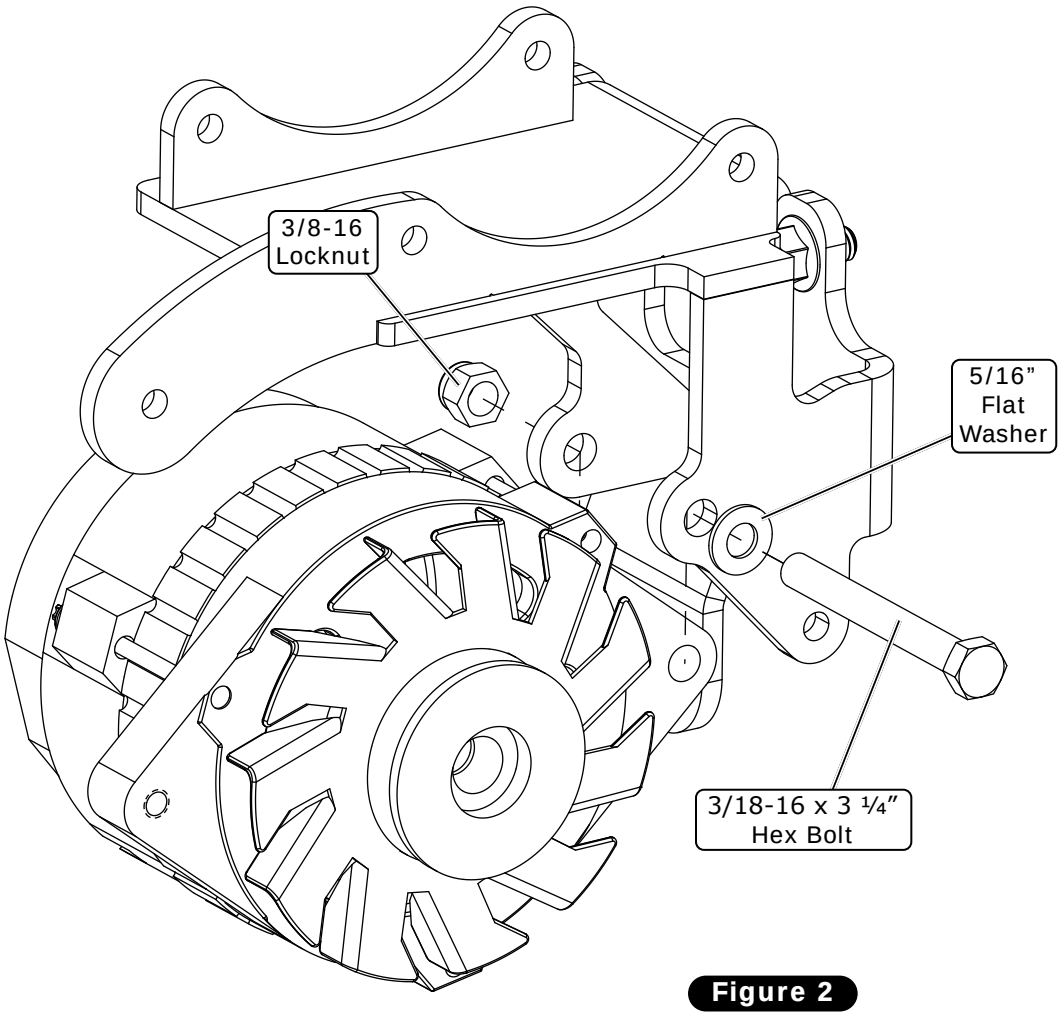


Figure 2

Assembly Instructions (Cont.)

3. Install the alternator arm bracket onto the assembly using a 3/8-16 x 1" hex bolt. Install a 5/16" flat washer and a .750" OD x .406" ID x .563" length spacer onto the threaded boss of the assembly (See Figure 3, below). Leave loose.
4. Install an M8 x 1.25 x 20mm hex bolt and a 5/16" flat washer into the alternator through the alternator arm bracket (See Figure 3, below). Leave loose.

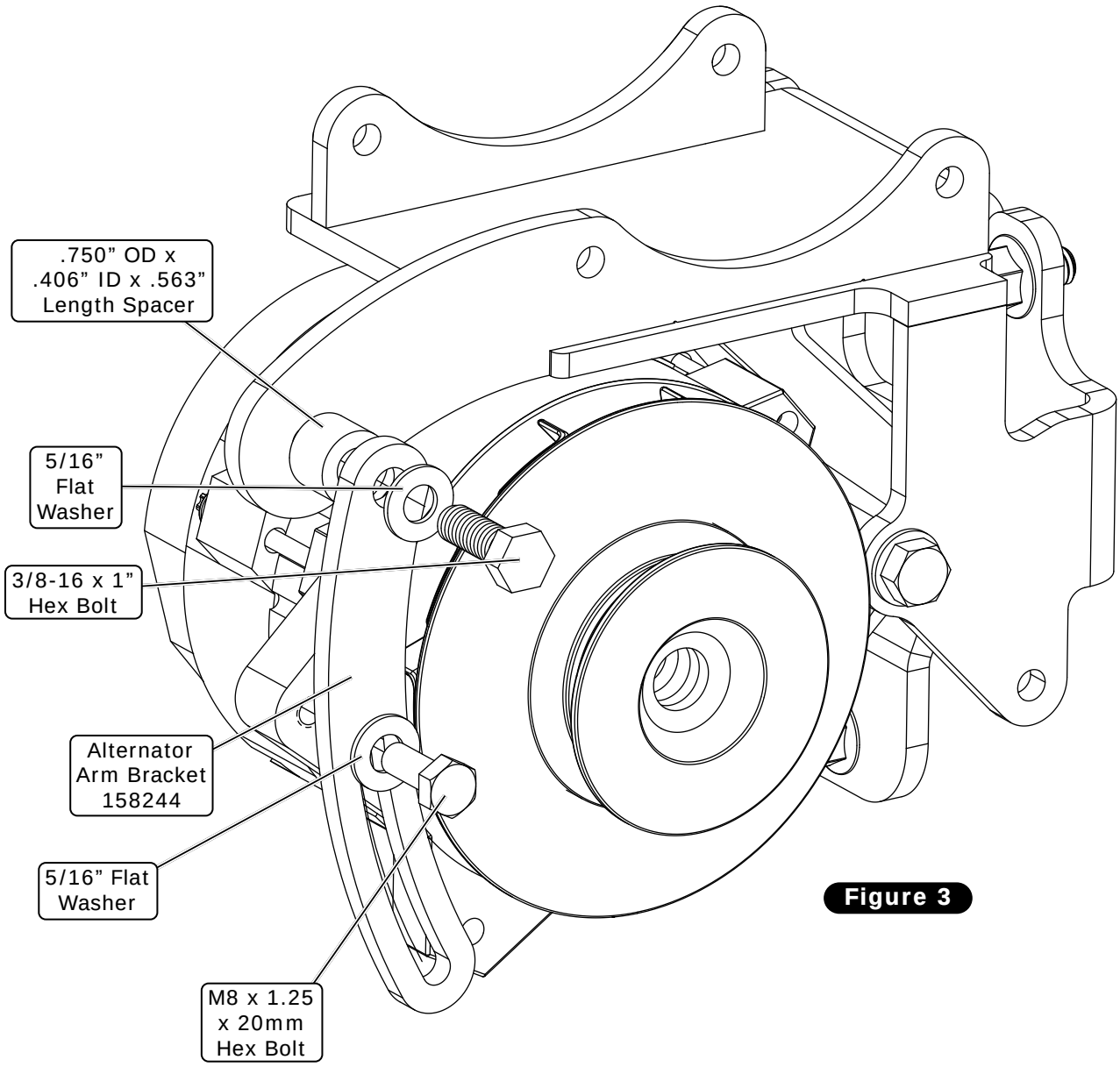


Figure 3

Assembly Instructions (Cont.)

5. Install the compressor onto the assembly and secure using (4) 3/18-16 x 7/8" flange bolts into the threaded ports on the assembly ears (See Figure 4, below).

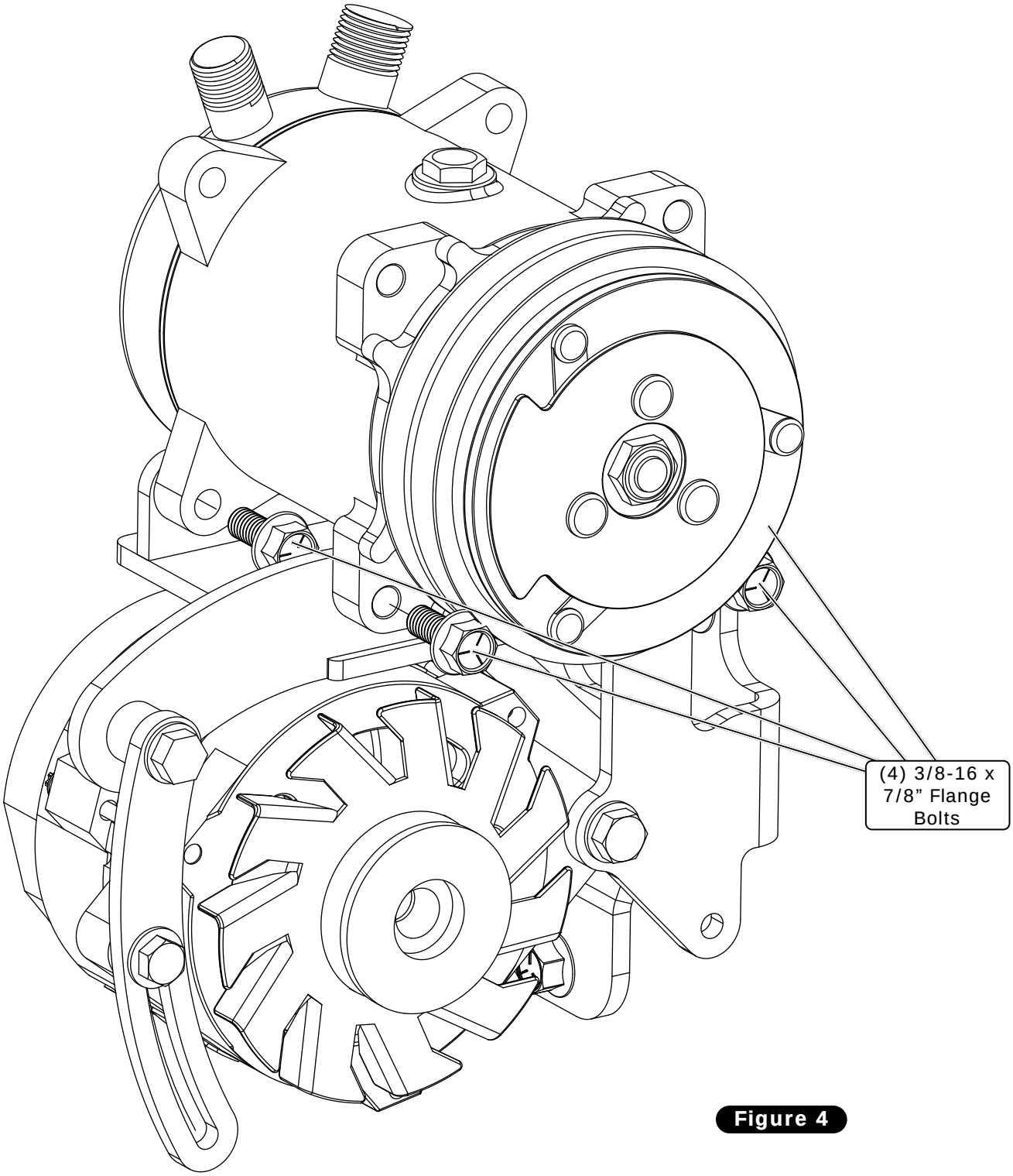


Figure 4

Assembly Instructions (Cont.)

6. Install the idler pulley onto the assembly using a 3/18-16 x 1 ¾" hex bolt, a 3/8" flat washer, and a .750" OD x .406" ID x 1.125" length spacer (See Figure 5, below). **NOTE: The reducer bushing included in the pulley box should be on the outside of the pulley as shown in Figure 5, below.**

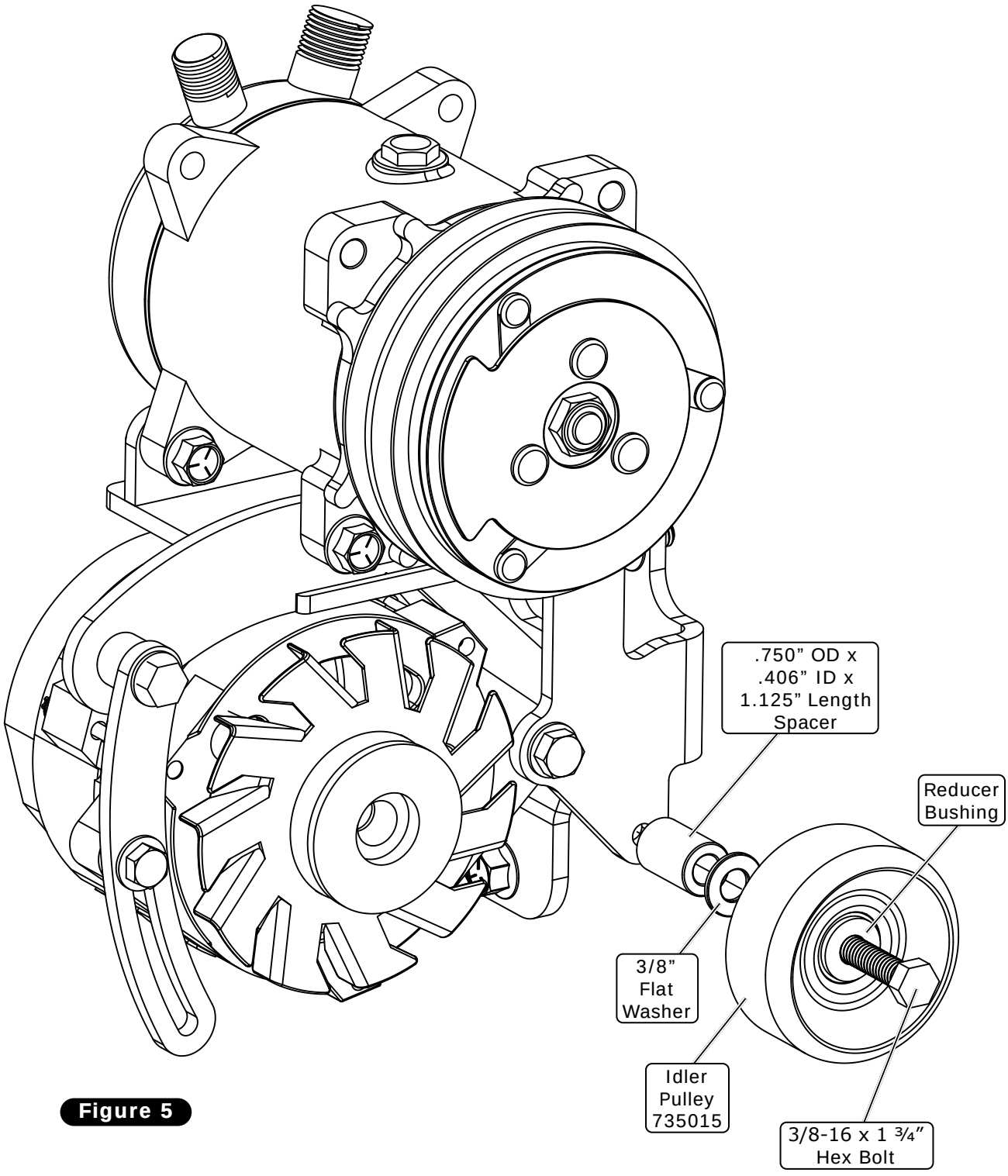


Figure 5

Assembly Instructions (Cont.)

7. Install the idler pulley shoulder bolt through the V-Belt idler pulley and into the 1 ¾" idler eccentric pulley as shown in Figure 6, below.

8. Install a 1/2-20 x 1 ¼" hex screw through a 1/2" lock split washer and the tensioner bracket and into the 1 ¾" idler eccentric pulley as shown in Figure 6, below. Leave loose.

9. Install the tensioner assembly onto the engine using the front two head studs as shown in Figure 7, below. Secure with (2) provided 7/16-14 hex locknuts as shown in Figure 7, below.

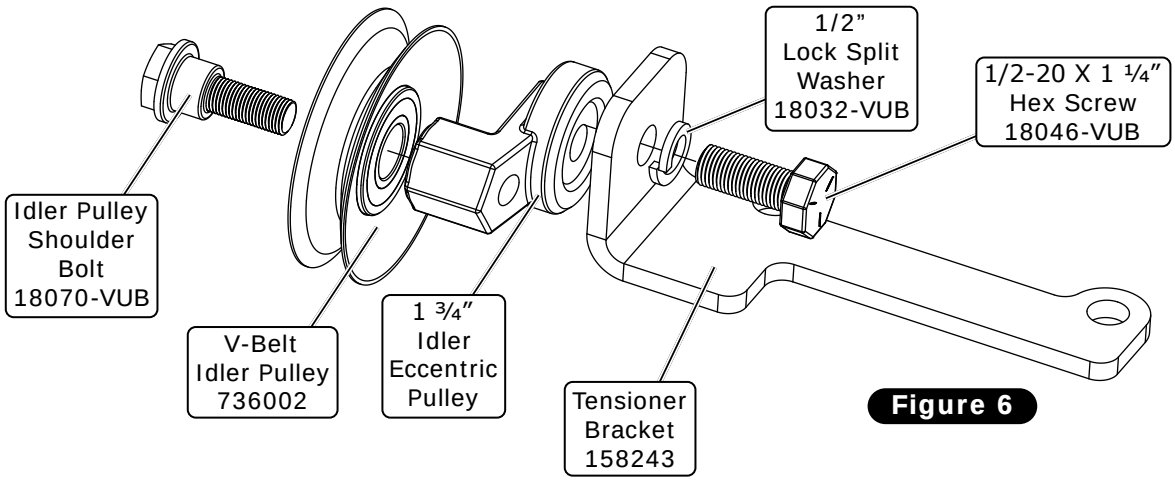


Figure 6

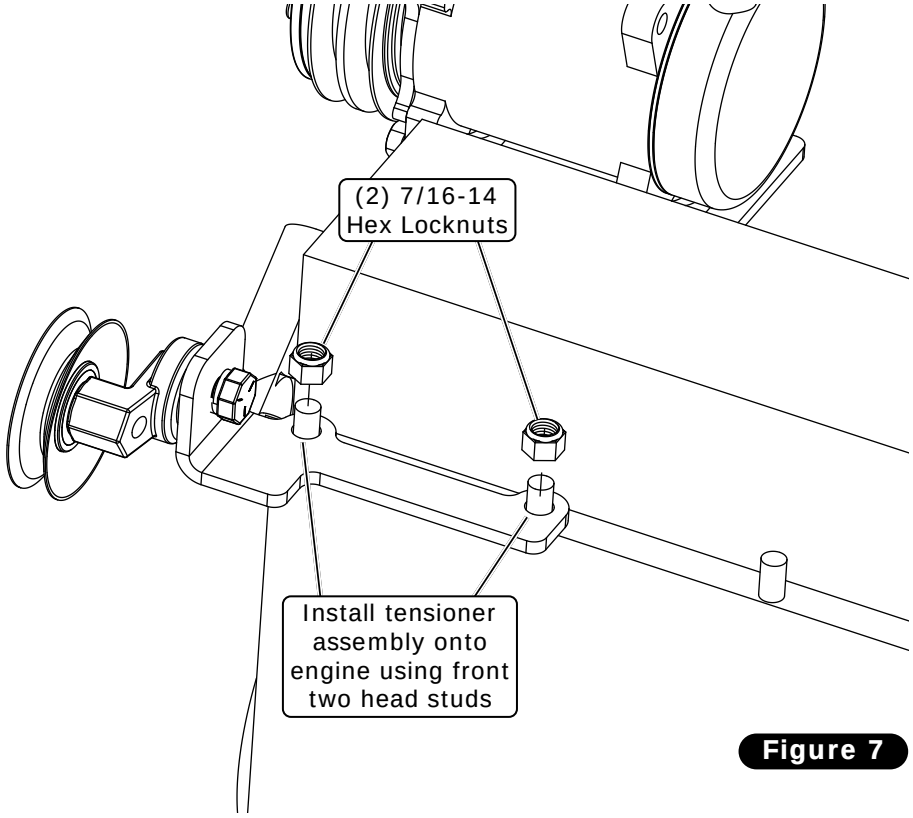


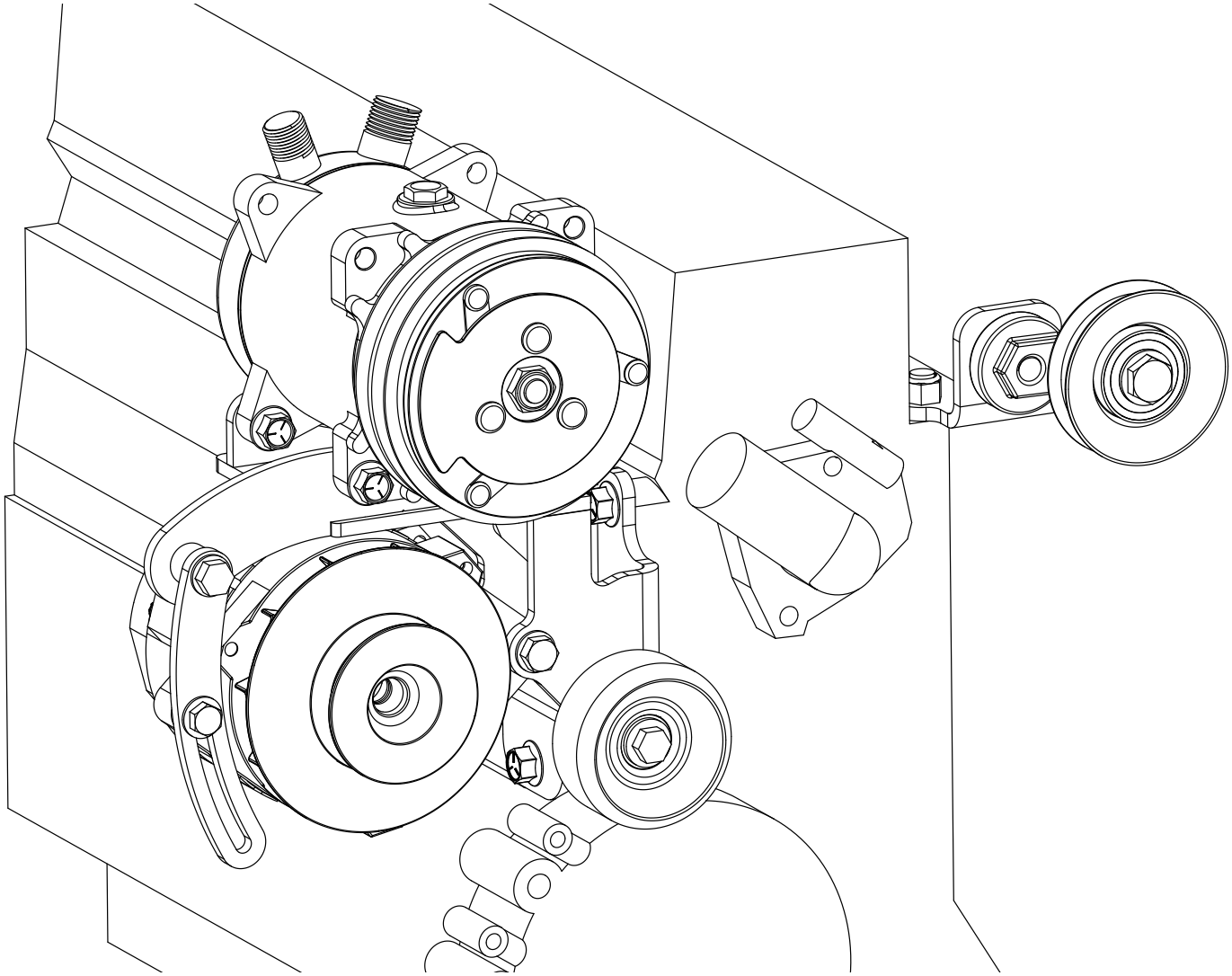
Figure 7

Assembly Instructions (Final)

10. All components installed (See Figure 8, below).

11. Install belt onto the rear groove of the compressor and alternator. Tension and tighten the tensioning arm, then alternator pivot. **NOTE: Vintage Air used a Gates XL 7250 belt. Belt length may vary based on alternator pulley diameter.**

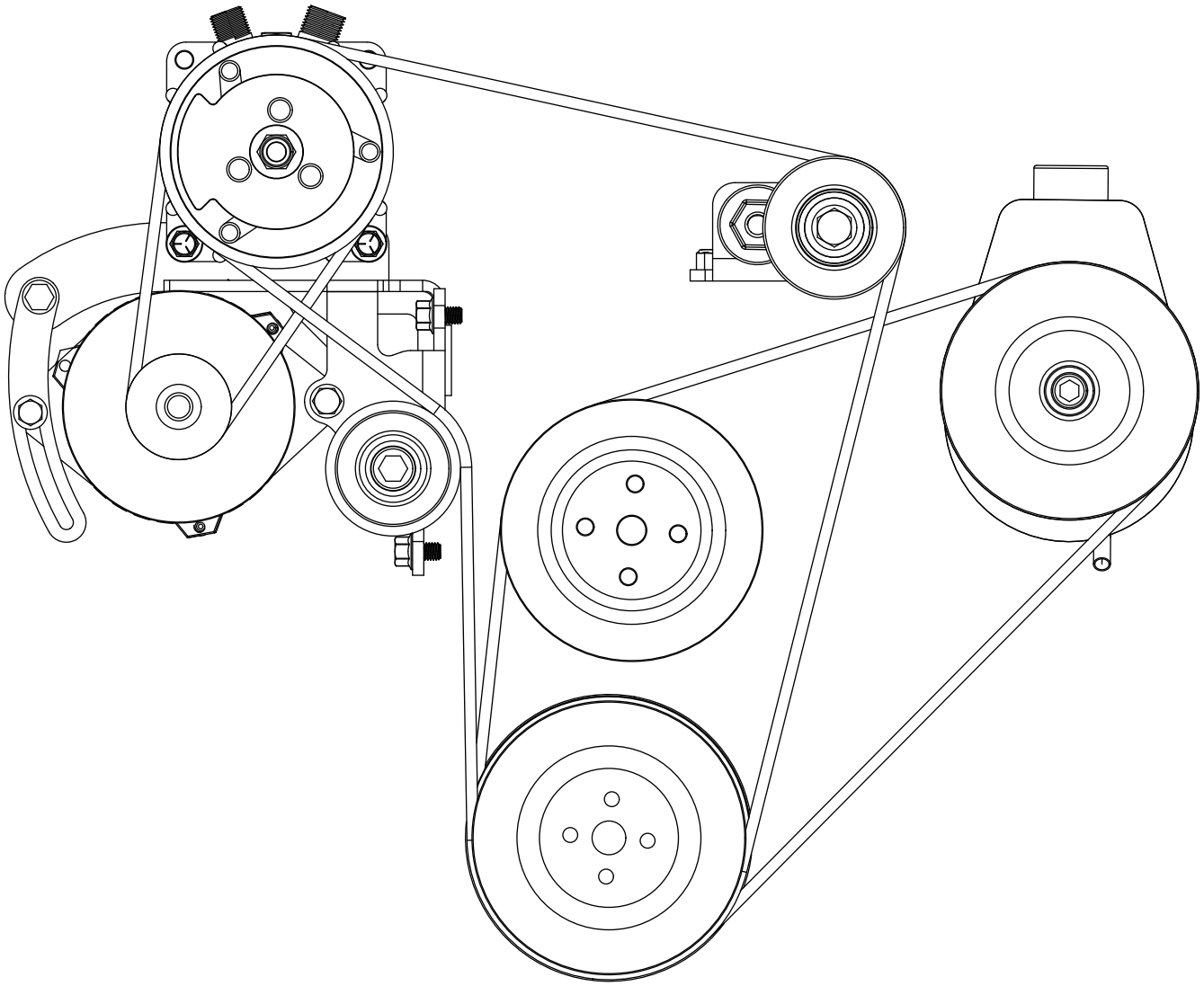
12. Install belt onto the compressor and follow the routing diagram. Tension with the eccentric arm and tighten 1/2-20 x 1 ¼" hex screw. **NOTE: Vintage Air used a Gates XL 9600 belt. Belt length may vary based on drive pulley diameters**



Complete Installation

Figure 8

Belt Routing Diagram



Toward Engine ←

Crankshaft Pulley Grooves:
1. Crankshaft, Water Pump & Power Steering
2. Crankshaft, Idler, Compressor & Tensioner

Toward Engine ←

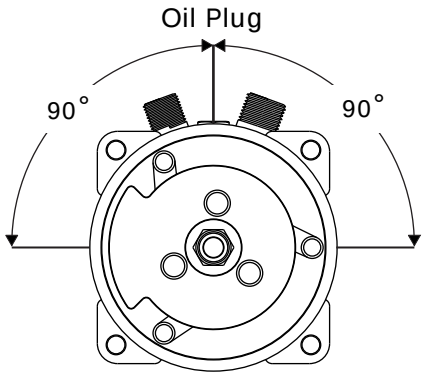
Compressor Pulley Grooves:
1. Compressor & Alternator
2. Compressor, Tensioner Crankshaft & Idler

Important Compressor Information

Sanden & TCCA 5H14 “508” Compressors

NOTE: Failure to follow these procedures may void all warranties.

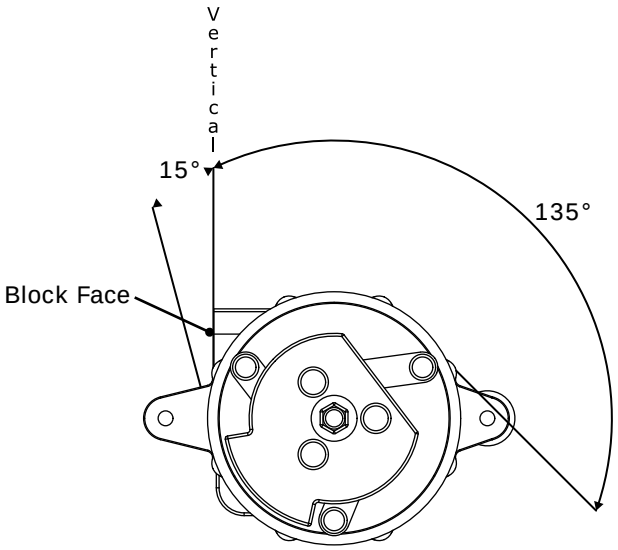
- **Do not connect compressor clutch wire until system is being charged with refrigerant. Since an A/C system relies on refrigerant to circulate lubricant, running the compressor without refrigerant may destroy the compressor and void the warranty.**
- **Proper compressor orientation is important. Sanden compressors may be rotated from vertical (oil fill plug at top) up to 90˚ in either direction (See illustration, below).**



Sanden & TCCI 7B10 Compressors

NOTE: Failure to follow these procedures may void all warranties.

- **Do not connect compressor clutch wire until system is being charged with refrigerant. Since an A/C system relies on refrigerant to circulate lubricant, running the compressor without refrigerant may destroy the compressor and void the warranty.**
- **These compressors do not have an oil fill plug. Please reference the block fitting mount face for clocking range (See illustration, below).**



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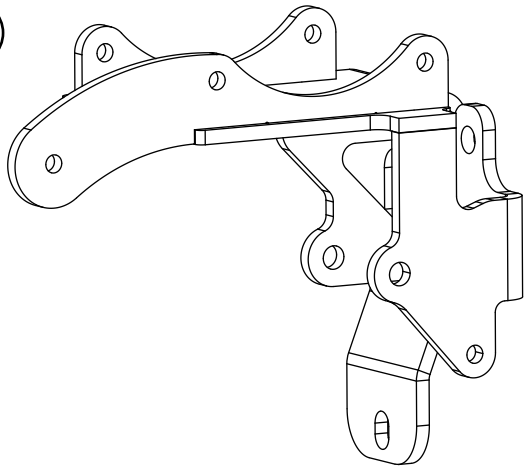
Checked By: _____
Packed By: _____
Date: _____

1



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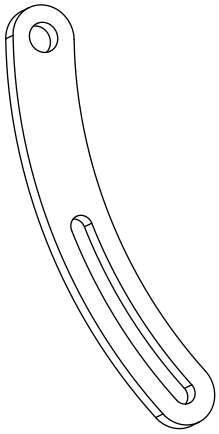

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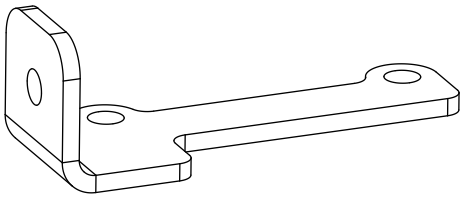

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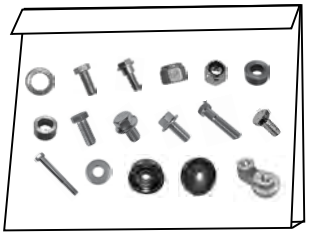

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Refer to packing list for actual parts and quantities.

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Packing List: 1981-90 Jeep 4.2L & 2.5L (V-Belt Drive) Compressor & Alternator Bracket Hardware Kit (193201)

No.	Qty.		Part No.	Description
1.	1	_____	18022-VUB	Spacer, .750" OD x .406" ID x 1.125" Length
2.	1	_____	18029-VUB	Washer, 3/8", Flat
3.	1	_____	18032-VUB	Washer, 1/2", Lock Split
4.	1	_____	18046-VUB	Screw, 1/2-20 x 1 ¼", Hex
5.	1	_____	18070-VUB	Bolt, Idler Pulley, Shoulder
6.	1	_____	18155-VUB	Locknut, 3/8-16
7.	2	_____	181561	Locknut, 7/16-14, Hex
8.	1	_____	182023	Spacer, .750" OD x .406" ID x .400" Length
9.	1	_____	18359-VUB	Bolt, 3/8-16 x 1", Hex
10.	3	_____	183601	Bolt, 3/8-16 x 5/8", Flange
11.	4	_____	183602	Bolt, 3/18-16 x 7/8", Flange
12.	1	_____	18362-VUB	Bolt, 3/18-16 x 1 ¾", Hex
13.	1	_____	185005	Bolt, M8 x 1.25 x 20mm, Hex
14.	1	_____	18599-VUB	Bolt, 3/18-16 x 3 ¼", Hex
15.	3	_____	18611-VUB	Washer, 5/16", Flat
16.	1	_____	735015	Pulley, Idler
17.	1	_____	736002	Pulley, V-Belt Idler
18.	1	_____	738001-IUR	Pulley, 1 ¾", Idler Eccentric

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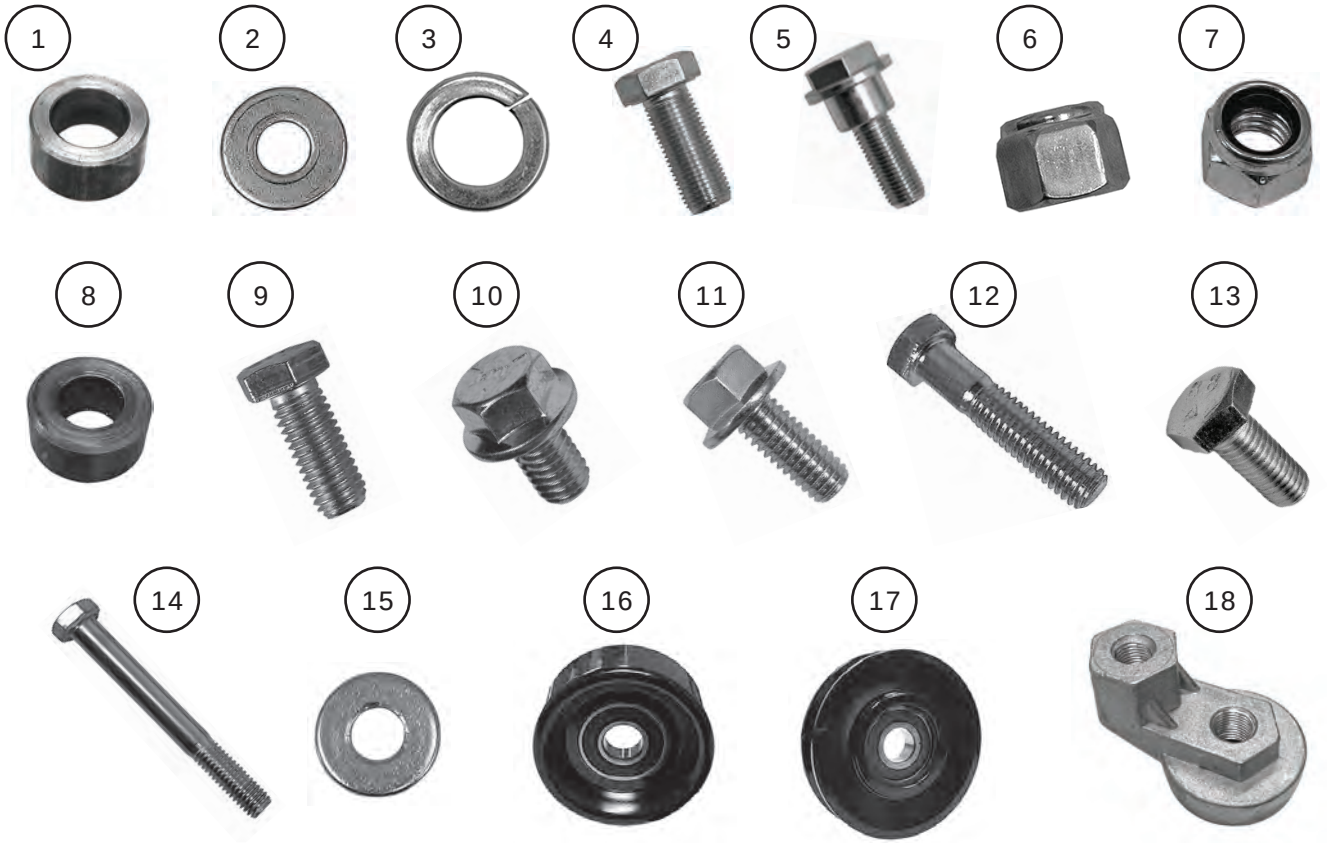

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