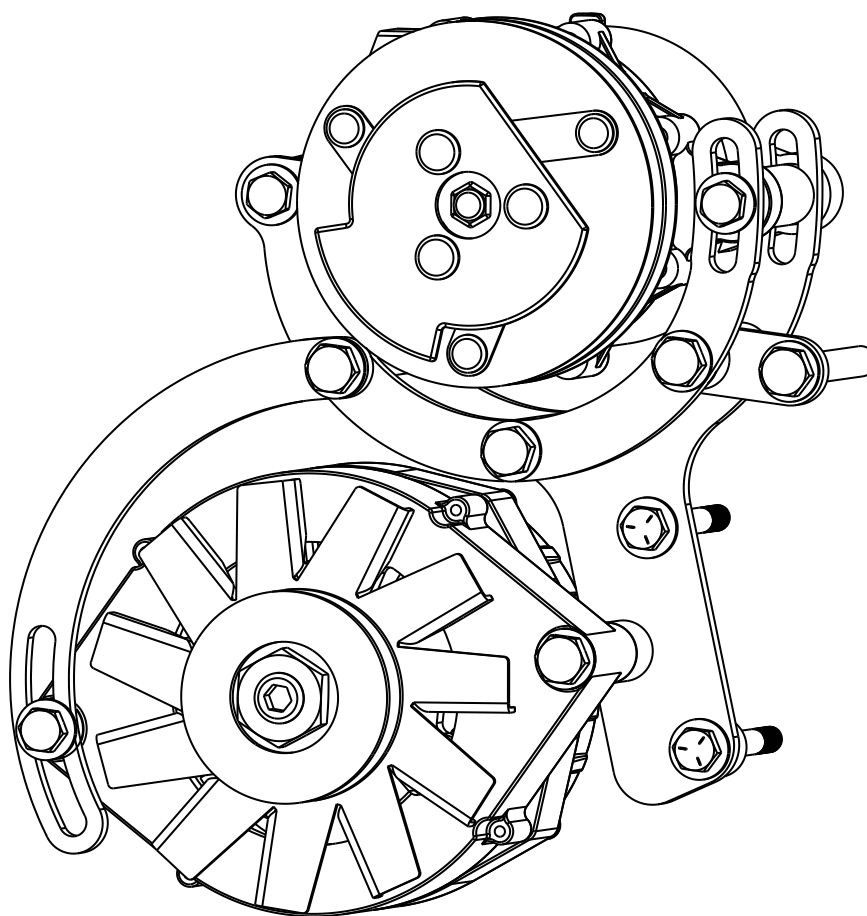




1955-57 Ford Thunderbird

Y-Block Compressor / Alternator Bracket Kit (137100)



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Additional Info: Please Read Before Beginning

- Gates XL 9245 and 9451 belts were used for this install. Different belts may be needed depending on your pulley diameters.
- The heater hose fitting on the water pump will need to be clocked to 12:00 as shown to clear the compressor.
- Due to differences in years and castings, some spacing may need to be adjusted with a washer.
- The bolts going into the timing cover, water pump and engine block, will require thread sealer. Vintage Air recommends using Permatex 59214 High-Temp Thread Sealant.
- When painting brackets, a ground path must be maintained either by masking/removing paint on the brackets, or by adding ground wires to contact the compressor and alternator bodies.
- This bracket requires a pre-drilled 7B10 V-belt compressor (Vintage Air Part # 046712 Standard finish, 046713 Polished or 046714 Chrome) and the accompanying O-ring adapter fitting kit (Vintage Air Part # 045003 Machined Finish or 045004 Polished Finish).
- This kit is designed to be used with a 100 Amp GM alternator such as Vintage Air Part # 09100-VUA Standard Finish or 09100-VUQ Polished Finish.



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Packing List: Bracket Kit (137100)

No.	Qty.	Part No.	Description
1.	1	137101	Bracket, Rear
2.	1	137102	Bracket, Front
3.	2	137103	Bracket, Arm
4.	1	137104	Bracket, Tensioner
5.	1	191126	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



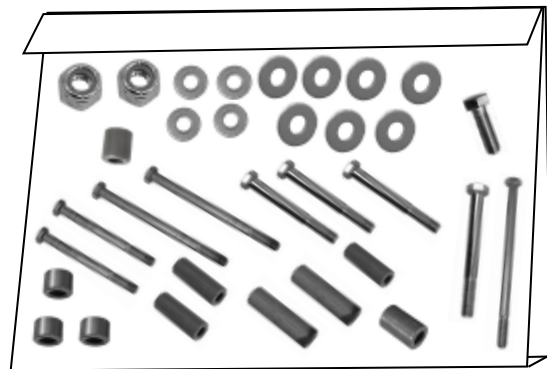
3



4



5



**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.

Generator and Bracket Disassembly

1. Disconnect the battery.
2. Drain the coolant, then remove the upper radiator and heater hose.
3. Loosen the power steering belt (if equipped), then remove the generator belt.
4. Remove the fan and water pump pulley.
5. Remove the "Z" bracket that ties the water pump to the generator bracket (See Photo 1, below).
6. Disconnect the wiring from the generator.
7. Remove the generator tensioning arm from the engine (See Photo 1, below).
8. Remove the (2) bolts that hold the OEM generator bracket to the engine (See Photo 1, below).
9. Remove the bracket and the generator assembly from the engine.

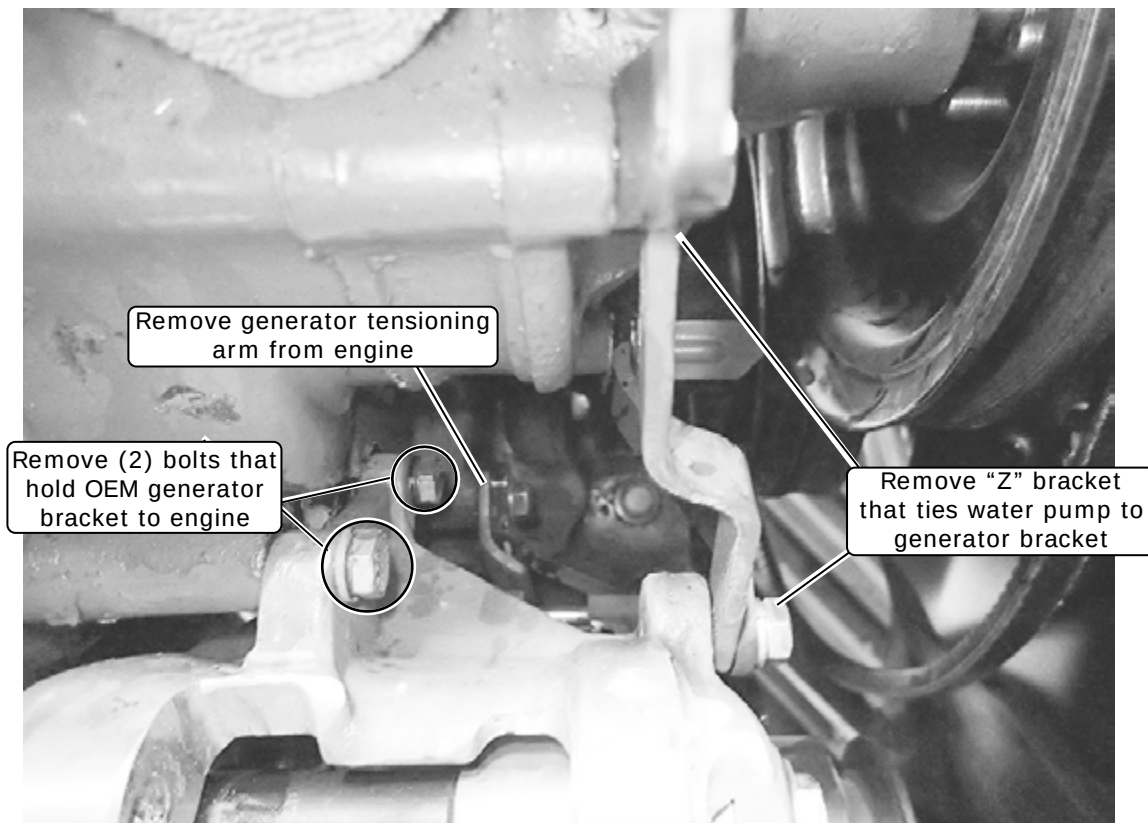


Photo 1

Compressor and Alternator Bracket Installation

1. Install (2) 5/16-18 x 3 1/2" hex bolts, (2) 1/4" USS flat washers and (2) .750" OD x .406" ID x .563" length spacers into the rear bracket (See Photo 1, below). Using the holes labeled in Photo 2, below, install the rear bracket assembly into the engine (See Photo 3, below). Leave the assembly finger tight. **NOTE: The bracket installs into "wet" jackets and a thread sealer must be used, see Additional Info, Page 2.**

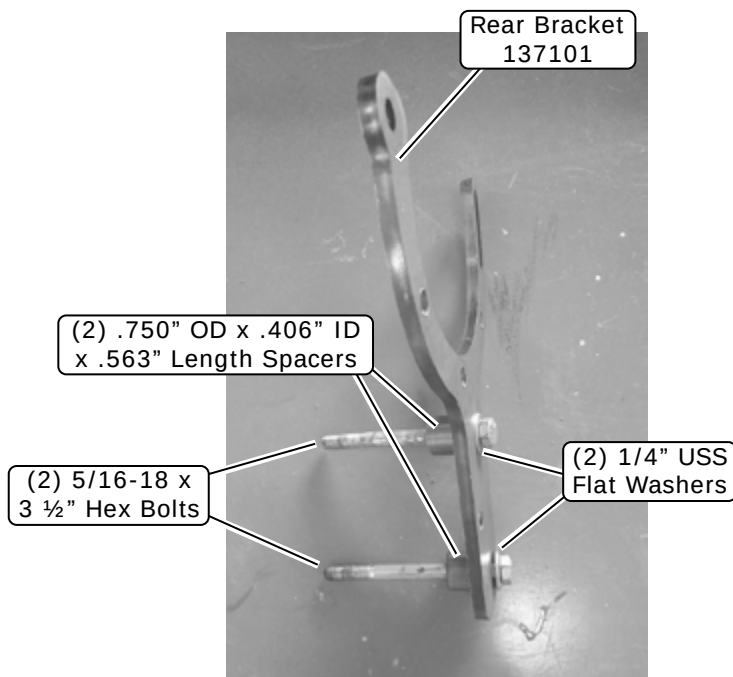


Photo 1

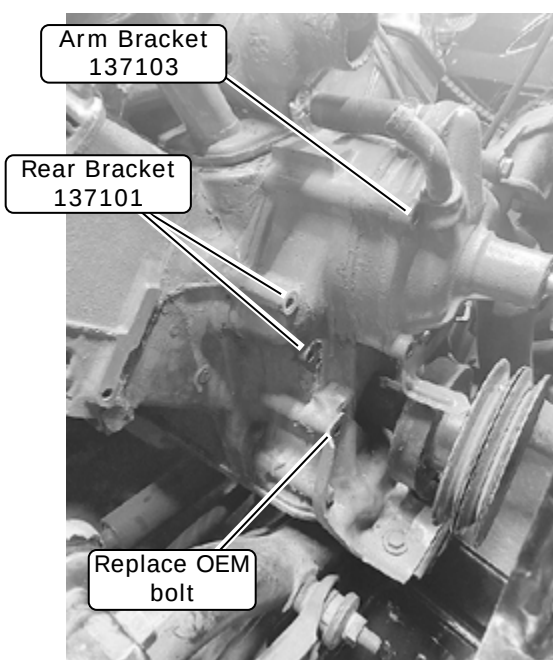


Photo 2

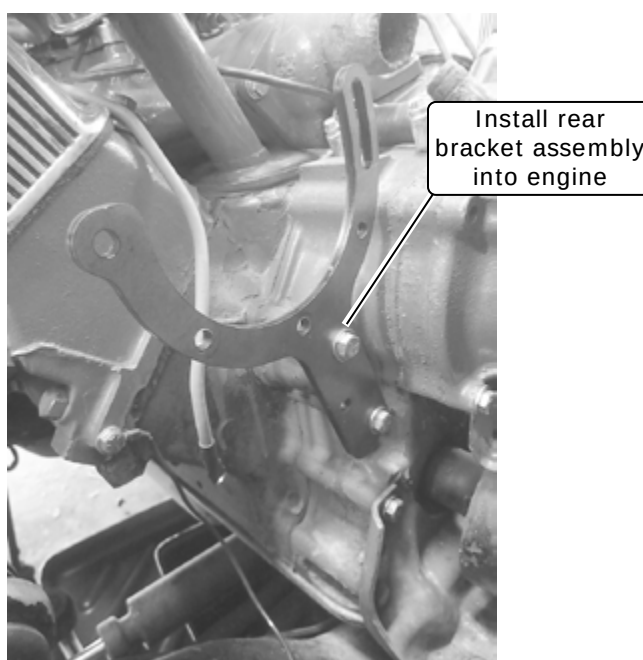


Photo 3

Compressor and Alternator Bracket Installation (Cont.)

2. Install a 5/16-18 x 5 1/2" hex bolt and a 1/4" USS flat washer into the arm bracket (See Photo 4, below). Install the assembly into the water pump (See Photo 2, Page 6, and Photo 5, below). Leave finger tight.
3. On the non-threaded boss of the alternator, install a 3/8-16 x 3 1/4" hex bolt, 5/16" flat washer and a .750" OD x .406" ID x .8125" length spacer (See Photo 6, below). Install the alternator into the lowest threaded boss on the rear bracket (See Photo 7, below). Leave finger tight.

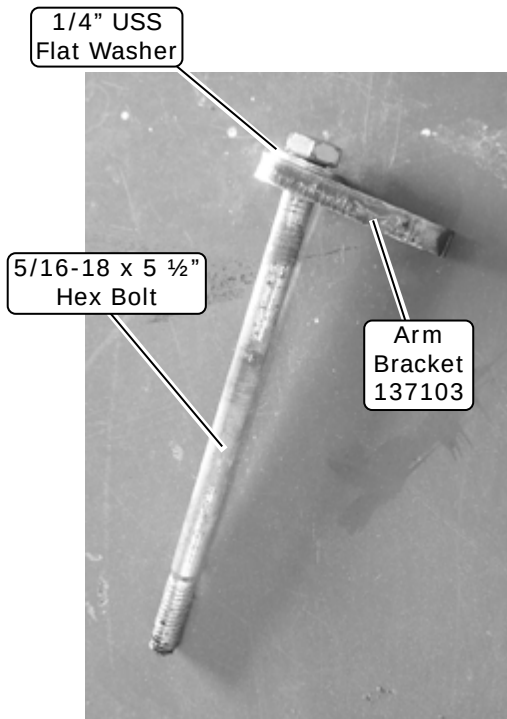


Photo 4

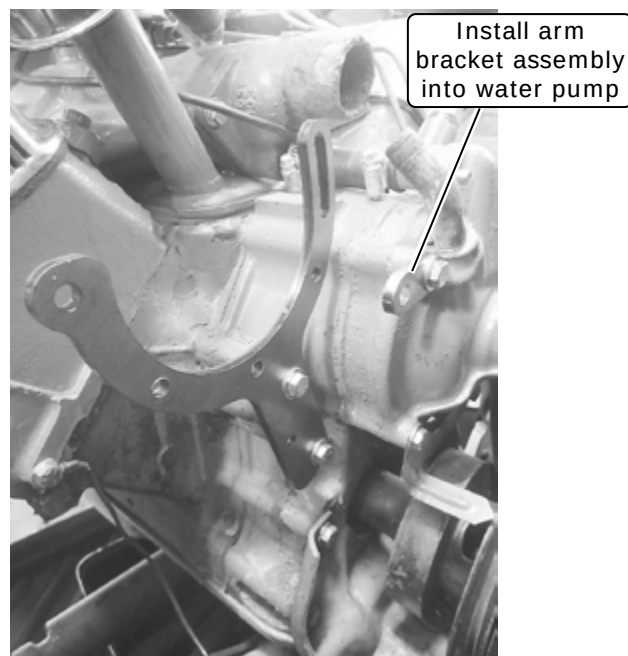


Photo 5

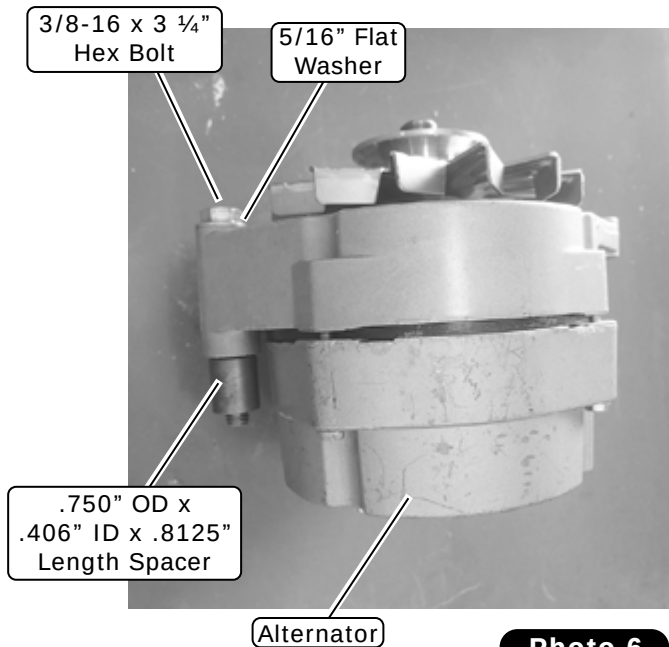


Photo 6

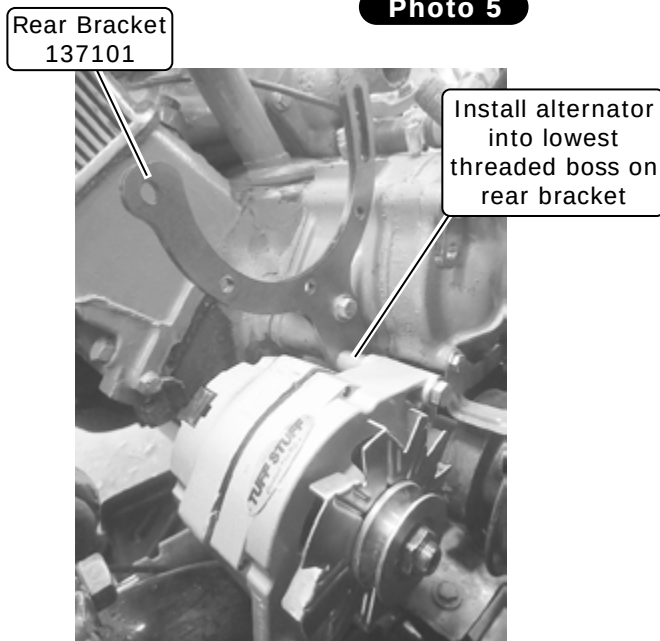


Photo 7

Compressor and Alternator Bracket Installation (Cont.)

4. Install a 3/8-16 x 3 1/4" hex bolt and a 5/16" flat washer through the front bracket, a .750" OD x .406" ID x .563" length spacer, the arm bracket, a .750" OD x .406" ID x 1.750" length spacer and finally into the thread boss of the rear bracket (See Photo 8, below).
5. Install a 3/8-16 x 3 1/4" hex bolt and a 5/16" flat washer into the front bracket, through a .750" OD x .406" ID x 2.625" length spacer and into the threaded center boss on the rear bracket (See Photo 9, below).
6. Install a 3/8-16 x 3 1/2" hex bolt and a 5/16" flat washer into the swing bracket, through the front bracket, a .750" OD x .406" ID x 2.625" length spacer and finally into the threaded left boss of the rear bracket (See Photo 10, below). Leave finger tight.

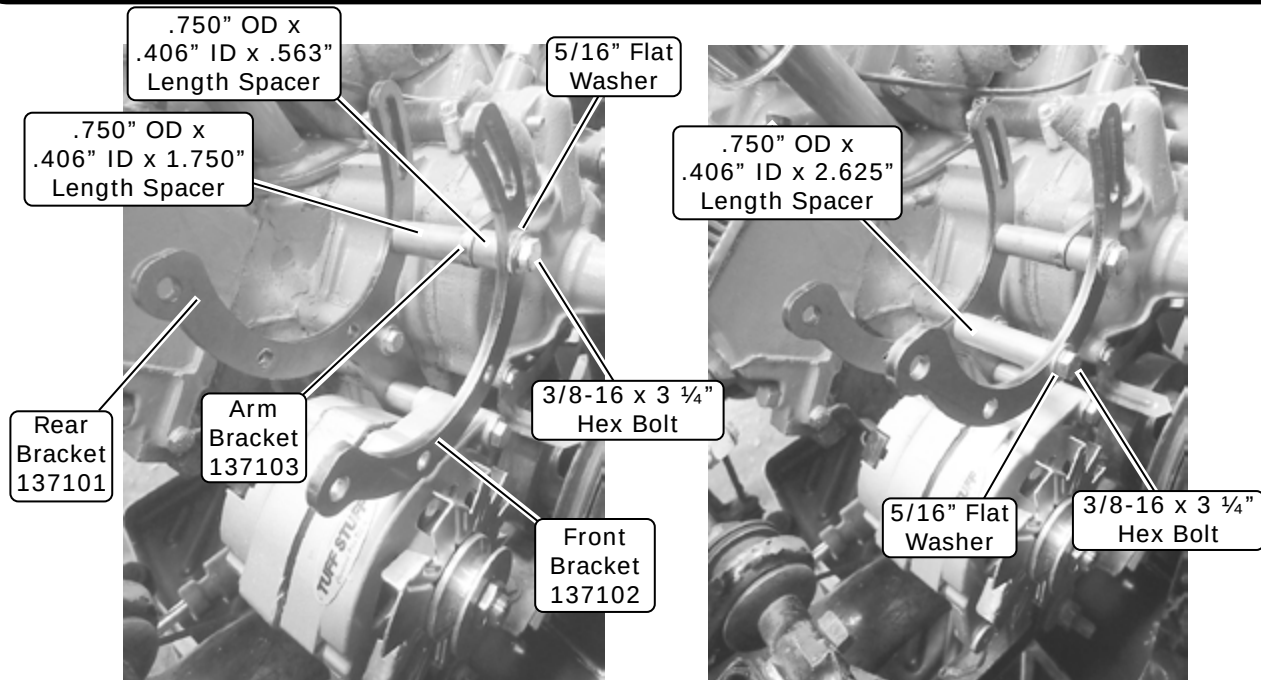


Photo 8

Photo 9

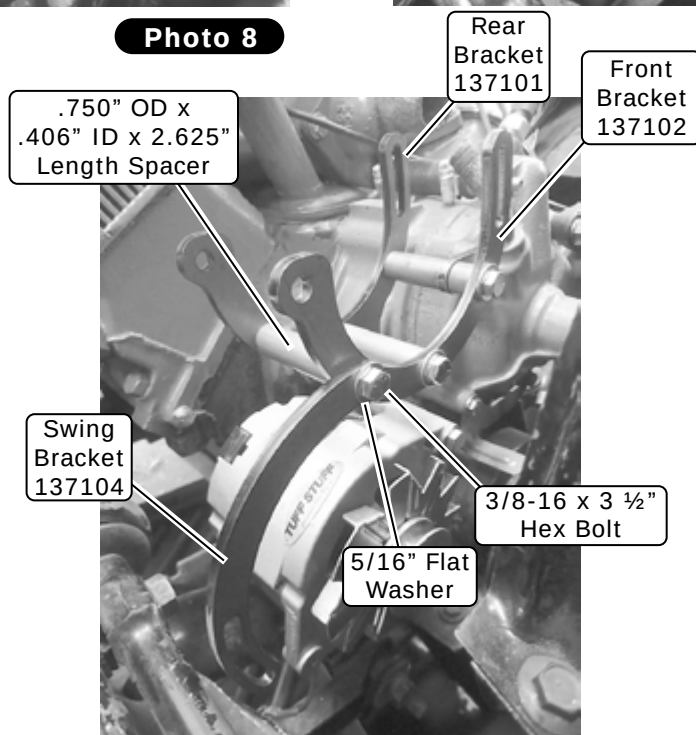


Photo 10

Compressor and Alternator Bracket Installation (Cont.)

7. Install a 5/16-18 x 1" hex bolt and a 1/4" USS flat washer through the bracket tensioner and into the threaded boss on the alternator (See Photo 11, below). Leave finger tight.
8. Tighten the 5/16-18 x 3 1/2" hex bolts from Step 1, the 5/16-18 x 5 1/2" hex bolt from Step 2, and the 3/8-16 x 3 1/4" hex bolts from Steps 4 and 5 at this time.
9. Place the compressor inside the cradle, with the front ears behind the front bracket (See Photo 12, below).

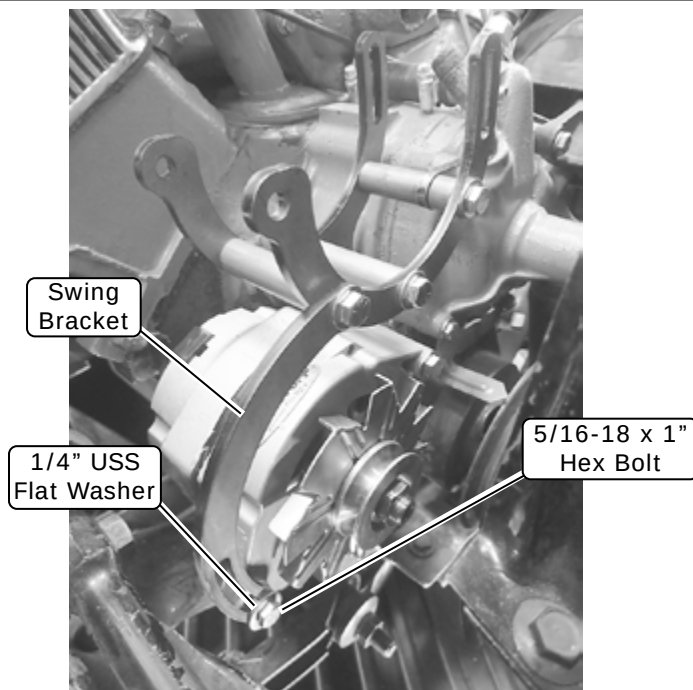


Photo 11

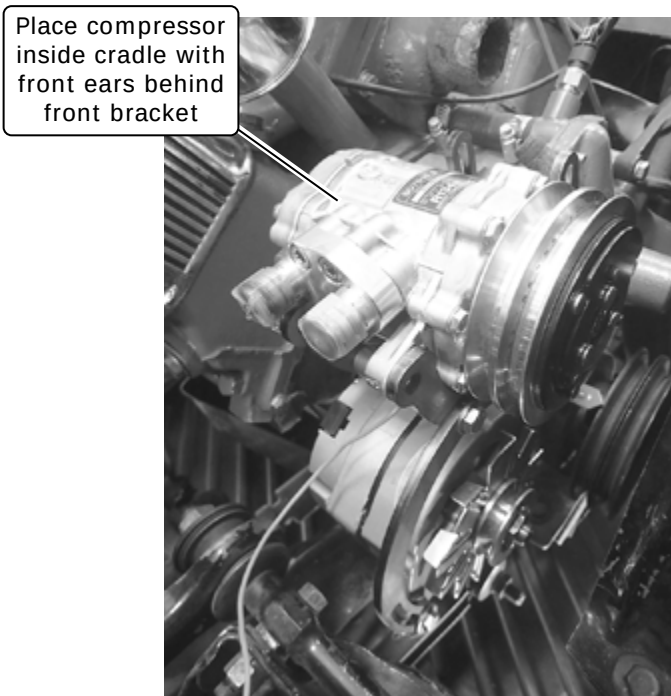


Photo 12

Compressor and Alternator Bracket Installation (Cont.)

10. On the passenger side of the compressor, install a 5/16-18 x 4 ½" hex bolt through a 1/4" USS flat washer, the front bracket, the compressor ear, a .750" OD x .406" ID x 2.000" length spacer, the rear bracket, a 1/4" USS flat washer and finally through the second compressor ear. Secure the bolt with a 5/16-18 locknut, and tighten it until the bushing makes light contact with the washer, then back off the nut slightly (See Photo 13, below).
11. Repeat Step 10 for the driver side of the compressor (See Photo 13, below).

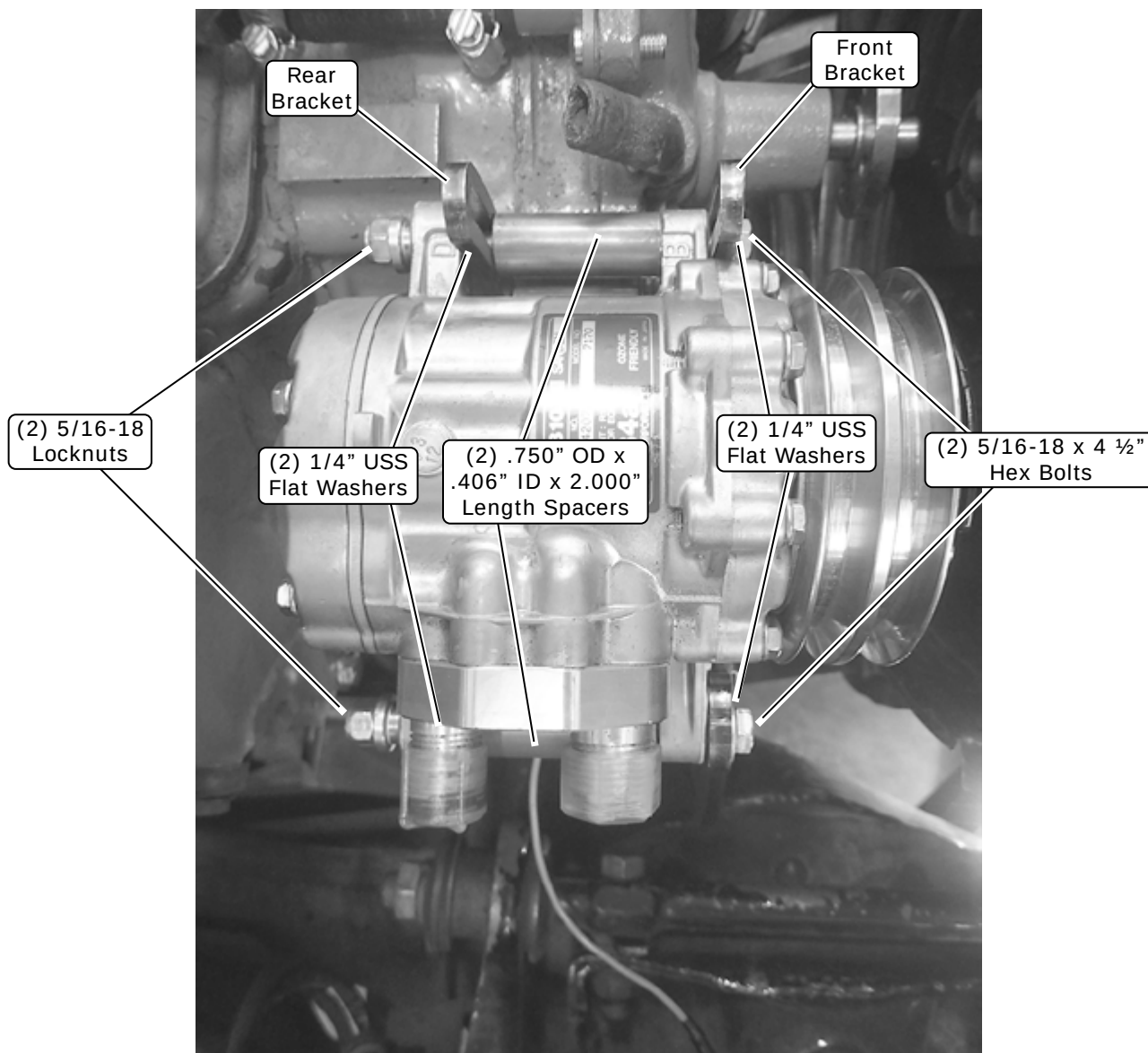


Photo 13

Compressor and Alternator Bracket Installation (Cont.)

12. At this time, install the alternator belt (Gates XL 9245) on the engine using the back groove of the compressor (See Photo 14, below). Place the compressor belt (Gates XL 9451) and power steering belt on the engine to make the install easier (See Photo 14, below). **NOTE: See the Belt Routing Diagram, Page 13, for reference.**
13. Reinstall the water pump pulley and fan.
14. Install the compressor belt over the water pump pulley.
15. Install and tension the power steering belt.

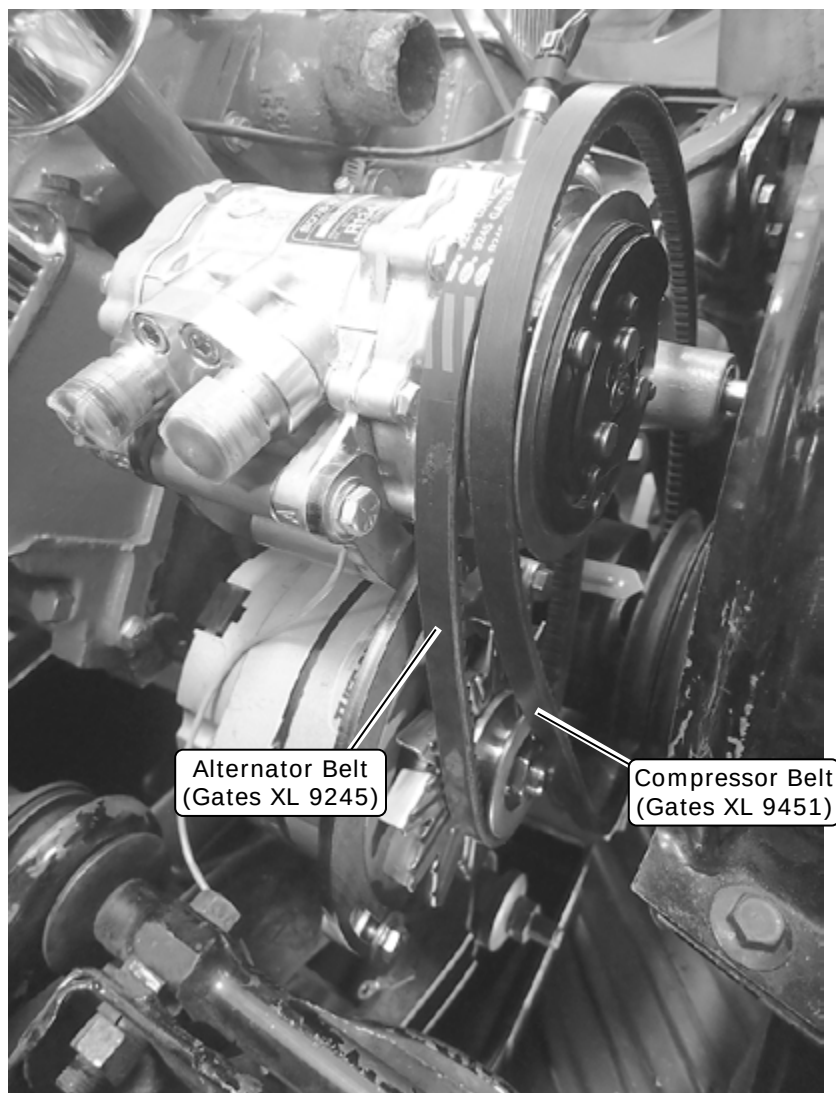


Photo 14

Compressor and Alternator Bracket Installation (Final)

16. Tension the compressor and tighten both 5/16-18 x 4 ½" hex bolts (See Photo 15, below).
17. Tension the alternator and tighten the 5/16-18 x 1" hex bolt from Step 7, then tighten the 3/8-16 x 3 ¼" hex bolt and the 3/8-16 x 3 ½" hex bolt from Steps 3 and 6 (See Photo 15, below).
18. Install the electrical connection to the alternator (See Photo 16, below).
19. Install the radiator and heater hoses, reconnect the battery and refill the coolant.

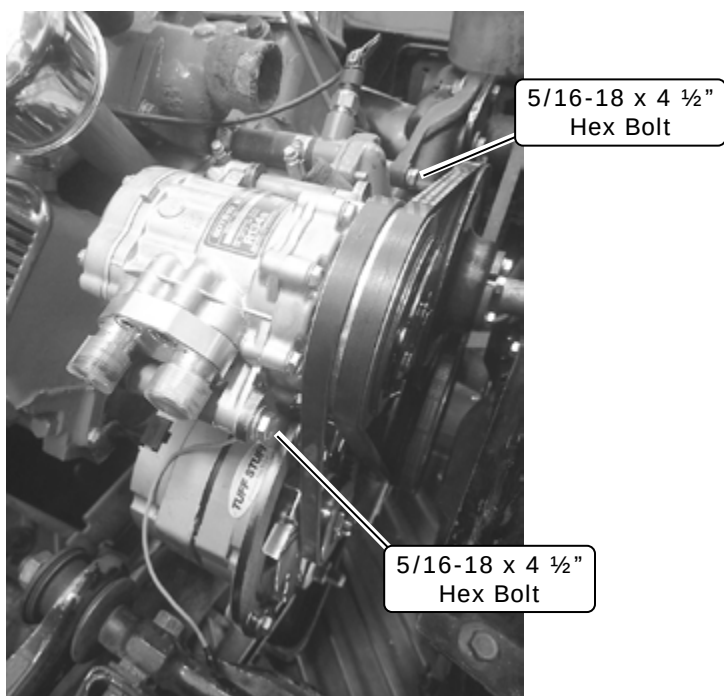


Photo 15

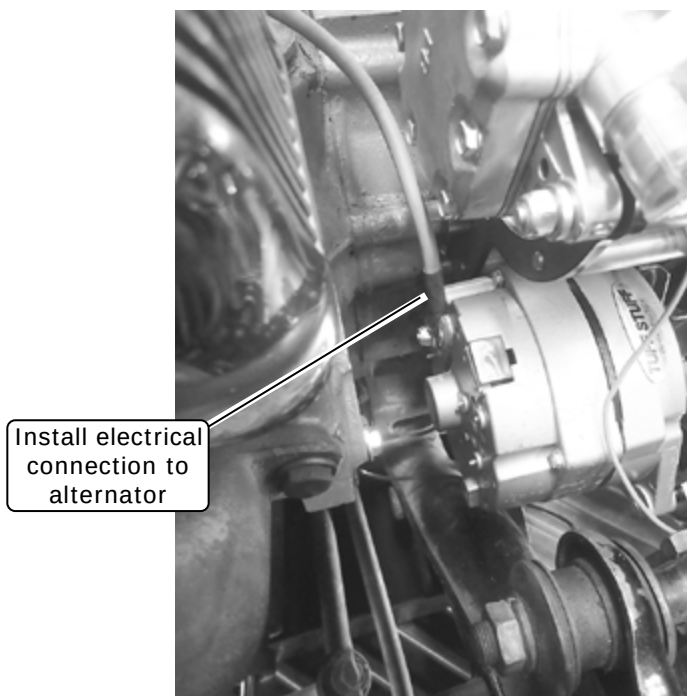
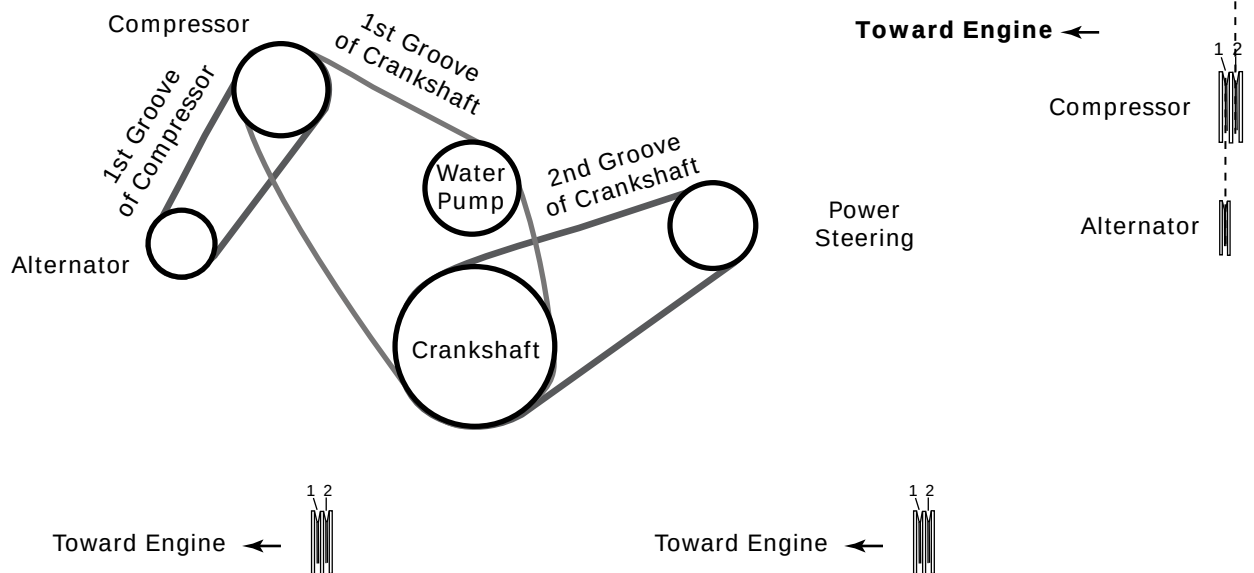


Photo 16

Belt Routing Diagram

with Power Steering



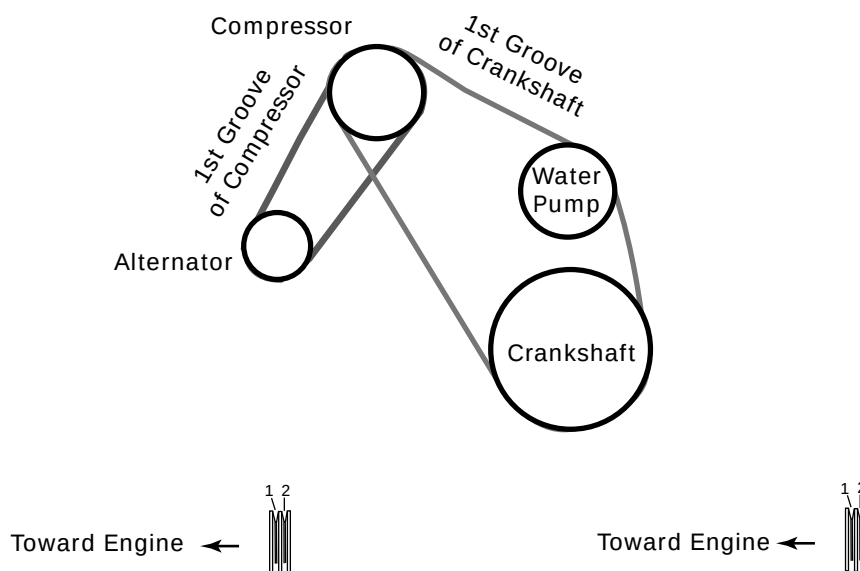
Compressor Pulley Grooves:

1. Compressor & Alternator
2. Crankshaft, Water Pump & Compressor

Crankshaft Pulley Grooves:

1. Crankshaft, Water Pump & Compressor
2. Crankshaft & Power Steering

without Power Steering



Compressor Pulley Grooves:

1. Compressor & Alternator
2. Crankshaft, Water Pump & Compressor

Crankshaft Pulley Grooves:

1. Crankshaft, Water Pump & Compressor
2. Unused

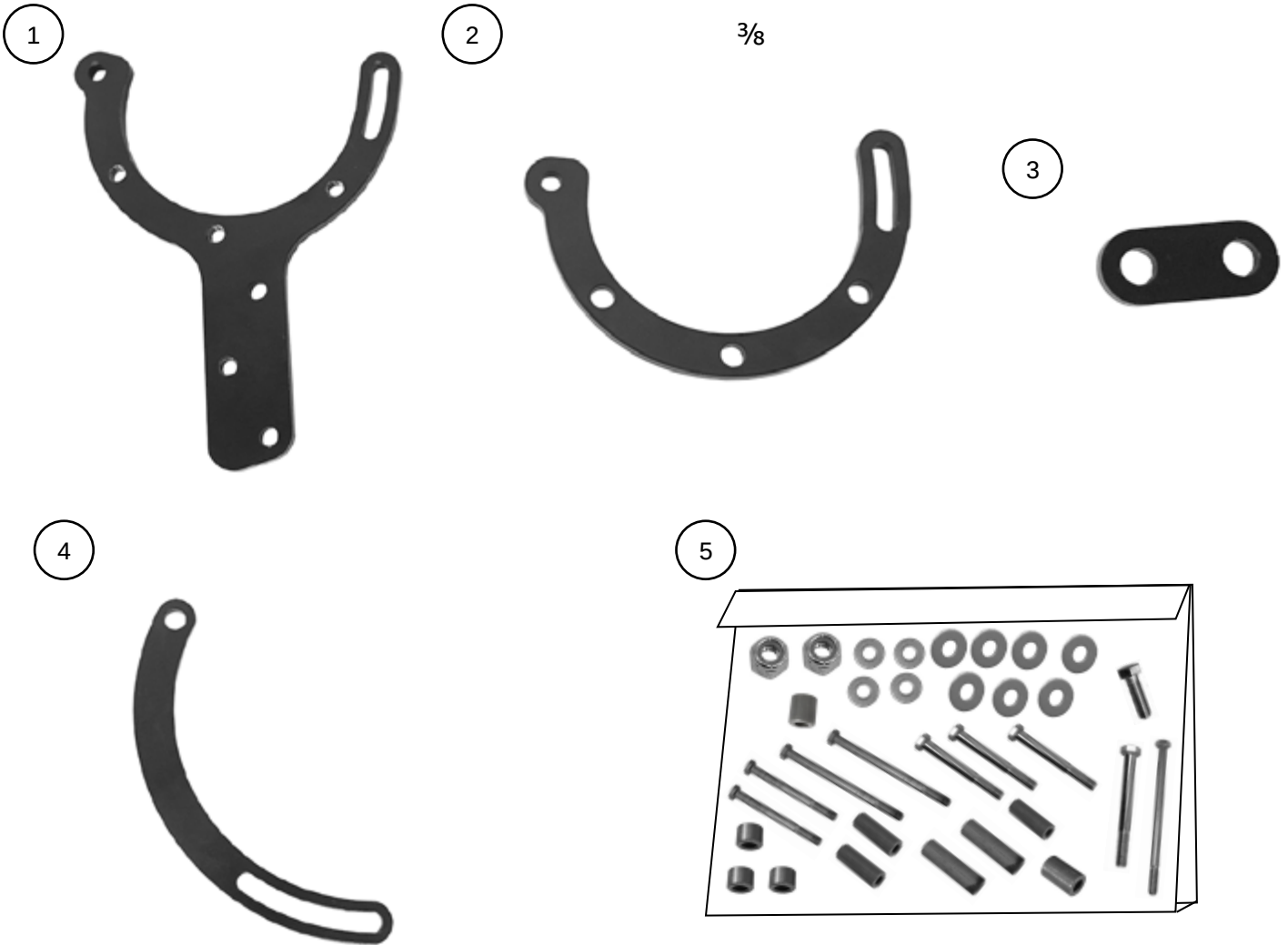


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Packing List: Bracket Kit (137100)

No.	Qty.	Part No.	Description	
1.	1	137101	Bracket, Rear	_____
2.	1	137102	Bracket, Front	_____
3.	2	137103	Bracket, Arm	_____
4.	1	137104	Bracket, Tensioner	_____
5.	1	191126	Hardware Kit	_____

Checked By: _____
Packed By: _____
Date: _____



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