

Six Cylinder A/C Bracket Installation

Text and Photos by Joe Whitaker

Six cylinder owners have long been unable to enjoy add-on or in-dash air due to the unavailability of bracket kits for their engines.

This article shows the installation of the 6 cyl. bracket kit on an original 1955 Chevrolet 6 cyl. Though this car has an original generator, the bracket kit comes with instructions for vehicles using an updated alternator.

This kit is compatible with the Sanden SD-508 compressor that is used with many A/C kits today. (See Photo #1.)

An aftermarket type air cleaner must be used in place of the original due to the lack of generator clearance.

1. Remove the original air cleaner from the car. Remove the wiring from the generator and remove it from the car.
2. Support the engine with a hydraulic jack and a few blocks of wood from underneath. Remove the top bolt from the driver's side engine angle mount. Also remove the two bolts securing the original generator bracket. Remove the generator bracket from the engine. (See Photo #2.)
3. Locate the new compressor bracket provided in the kit. (See Photo #3.) Install the bracket on the engine in the same location as the original generator bracket using the original bolts and lock washers. (See Photo #4.) Do not tighten the bolts.
4. Install the compressor on the new bracket with the mounting ears on the compressor in front of the ears on the bracket. Attach the compressor to the bracket using the two 3/8 x 1-1/2-inch course thread bolts, nuts and lock washers provided. (See Photo #5.)

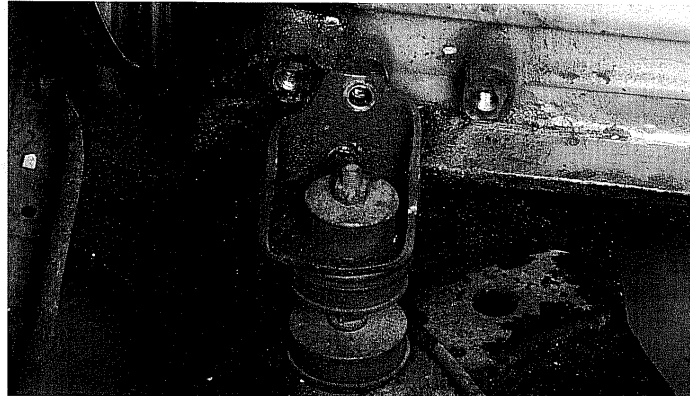


Photo #

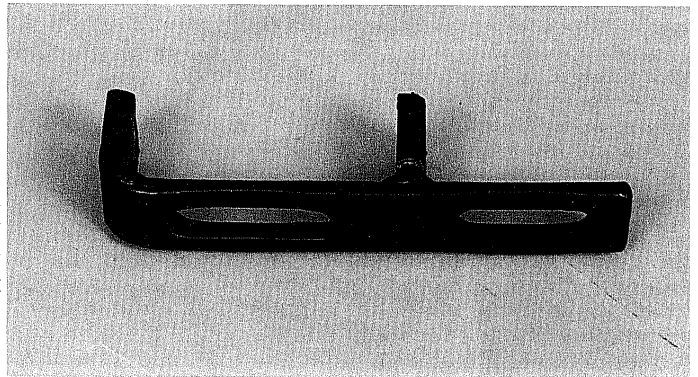


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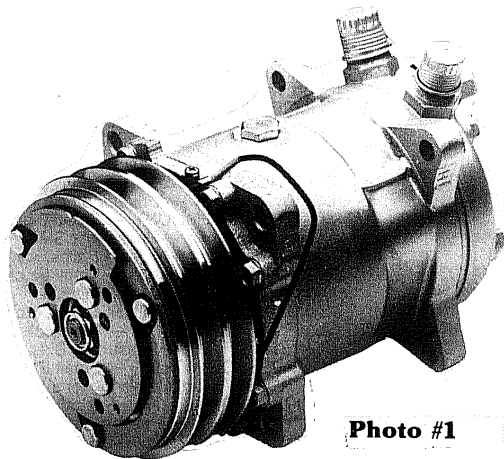


Photo #1

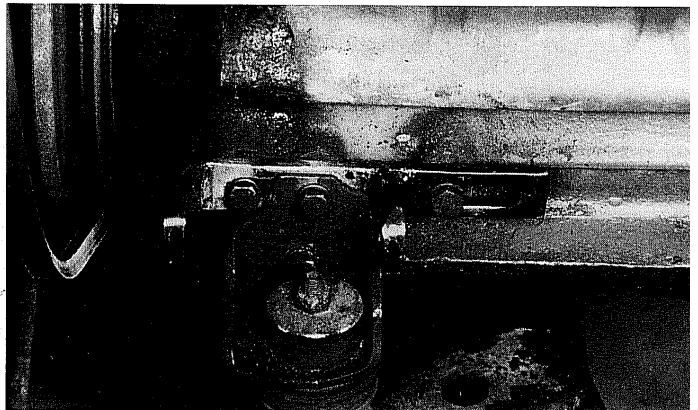
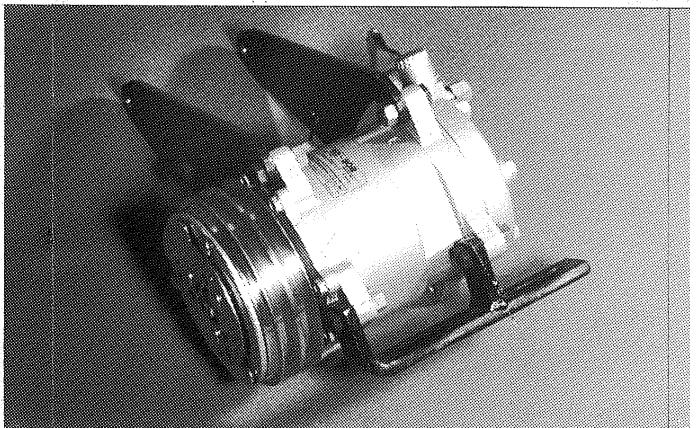


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the compressor lines up with the original harmonic balancer and water pump pulleys. Install the drive belt to be sure of proper alignment. Belt length should be between 44 and 45 inches for proper adjustment. (See Photo #6.)

6. Once the compressor is properly aligned, remove it and tighten the three compressor bracket mounting bolts.

7. Locate and install the two compressor to generator brackets using the 3-8 x 1-1/2-inch course thread bolts, nuts and lock washers provided. (See Photo #7A.) Be sure the brackets are bolted on to the compressor so the hose outlets are positioned as shown. (See Photo #7B.)

8. Install the compressor and bracket assembly back on the compressor bracket bolted to the engine. Locate the short thin compressor brace. (See Photo #8.) Bolt the brace to the engine using the driver's side lower water pump bolt. Position the brace behind the front compressor/generator bracket and align the slot in the brace with the hole in the bracket. Install the 5/16-inch bolt, nut and lock washer provided. (See Photo #9.) Adjust the entire assembly so that the belt is tight and tighten all fasteners.

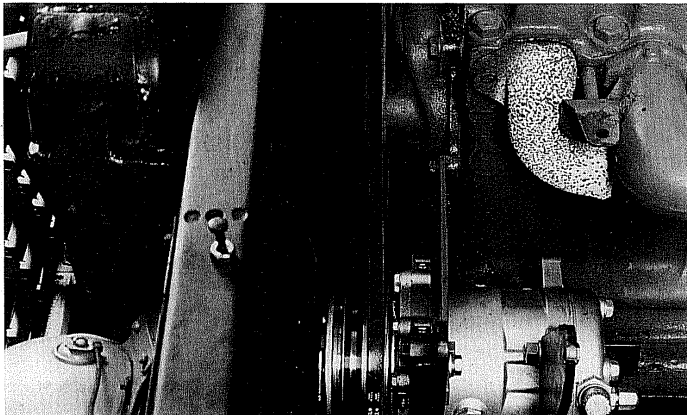


Photo #6

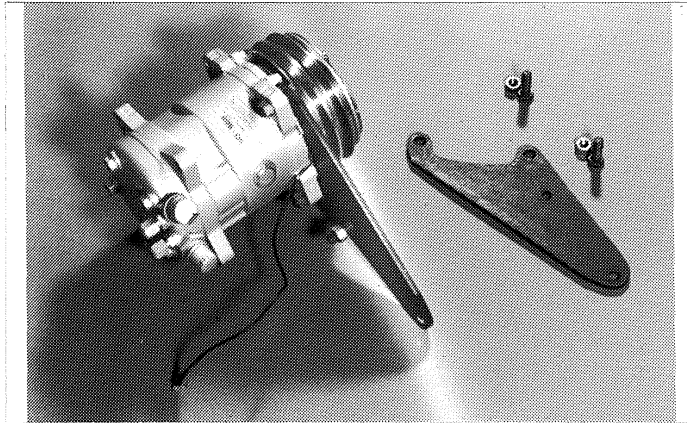


Photo #7A

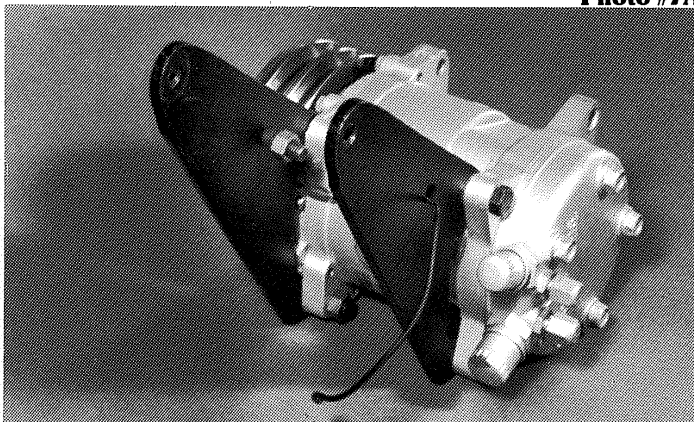


Photo #7B

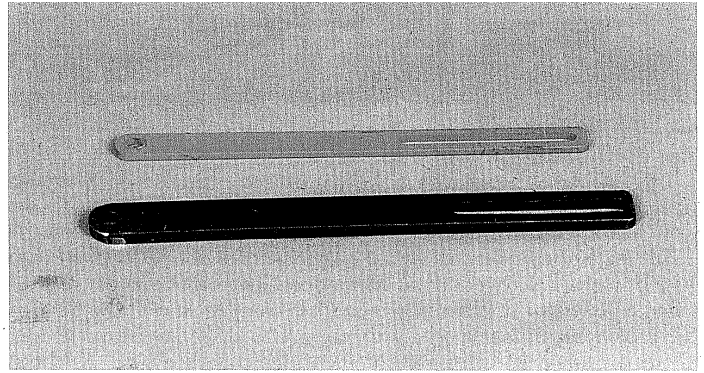


Photo #8

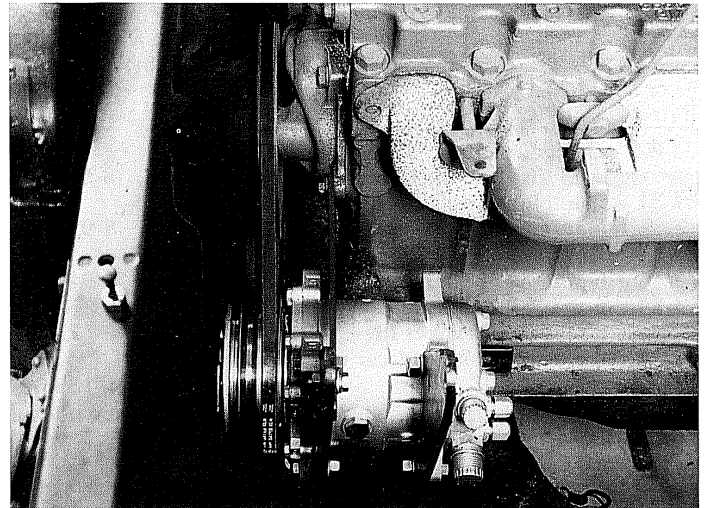


Photo #9



Photo #10

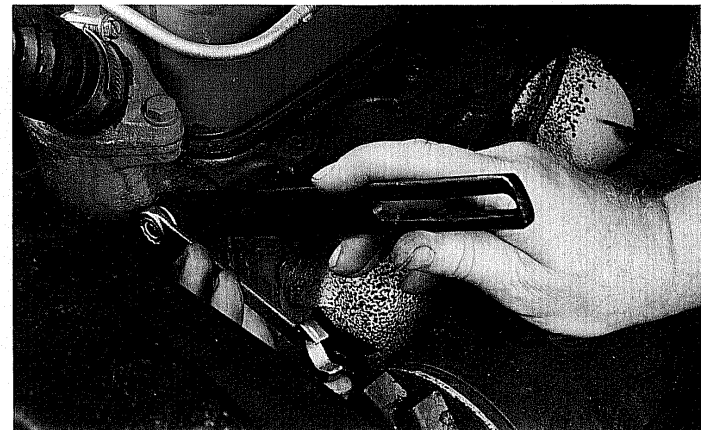


Photo #11

9. Remove the driver's side thermostat housing bolt and install the $\frac{3}{8}$ -inch coarse thread stud provided in the kit. Once the stud is installed, a $\frac{3}{8}$ -inch lock washer and nut should be installed and tightened against the thermostat housing. (See photo 10.)

10. Install the long thick generator bracket (see photo 8) provided in the kit on the stud just installed using another $\frac{3}{8}$ -inch nut and lock washer. (See photo 11.)

11. Install the generator with the $\frac{5}{16} \times 8$ -inch long bolt provided in the kit. Also install the proper spacers so the generator pulley is aligned with the front compressor pulley. (See photo 12.) With all of the spacers installed and the bolt pushed all the way in from the rear, install the $\frac{5}{16}$ -inch nut and lock washer provided. (See photo 13.)

12. Attach the upper generator brace to the generator using the original bolt. Install a 34 or 35-inch drive belt and tighten all fasteners. (See photos 14 and 15.)

13. Attach the generator wiring to the generator and make sure all adjustments are correct. Install a new air cleaner.

14. Once the system is completed, re-install any remaining components and have the system charged. Six-cylinder owners can now enjoy the air-conditioned comfort that V-8 owners have enjoyed for so long!

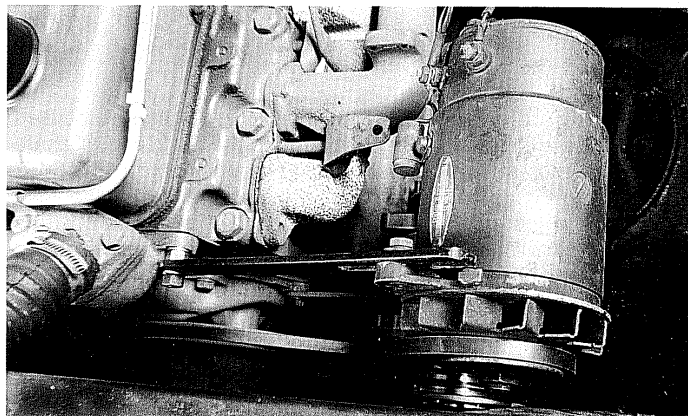


Photo 14

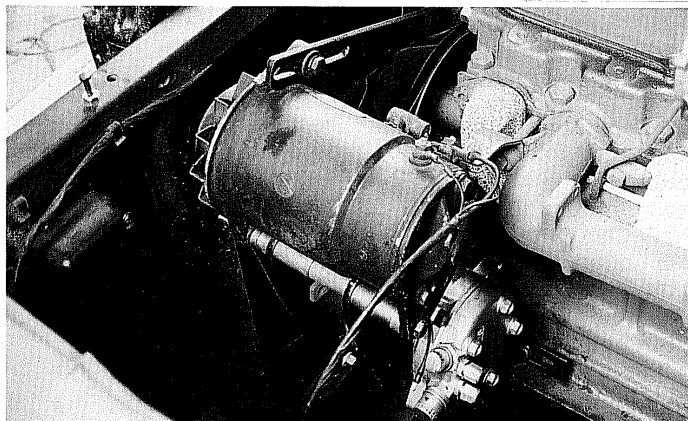


Photo #15

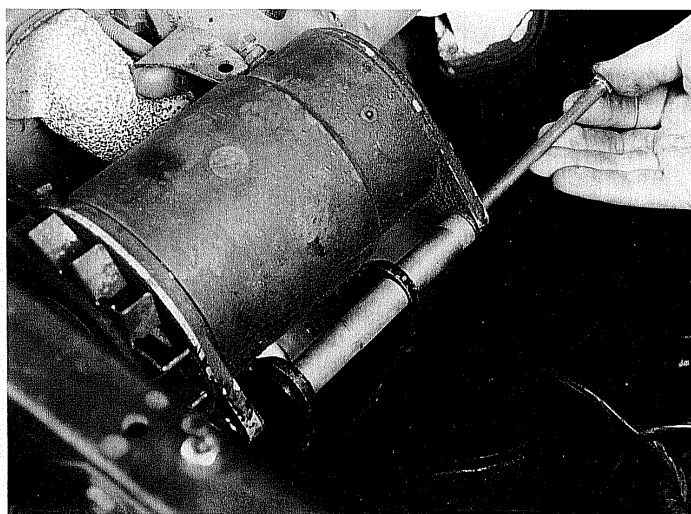


Photo 12

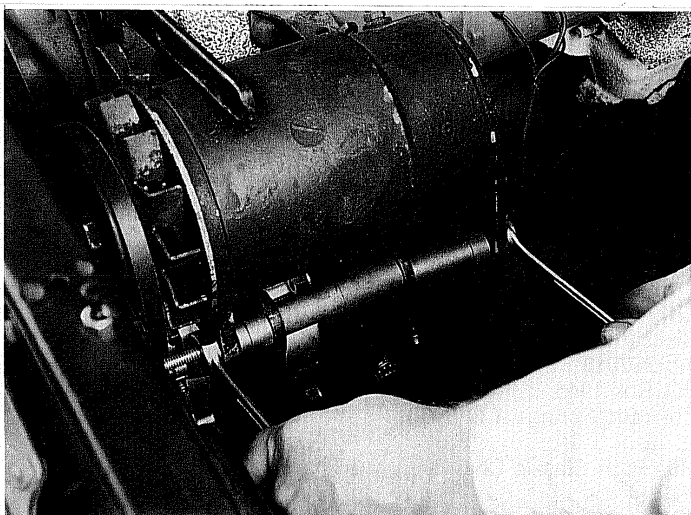


Photo 13

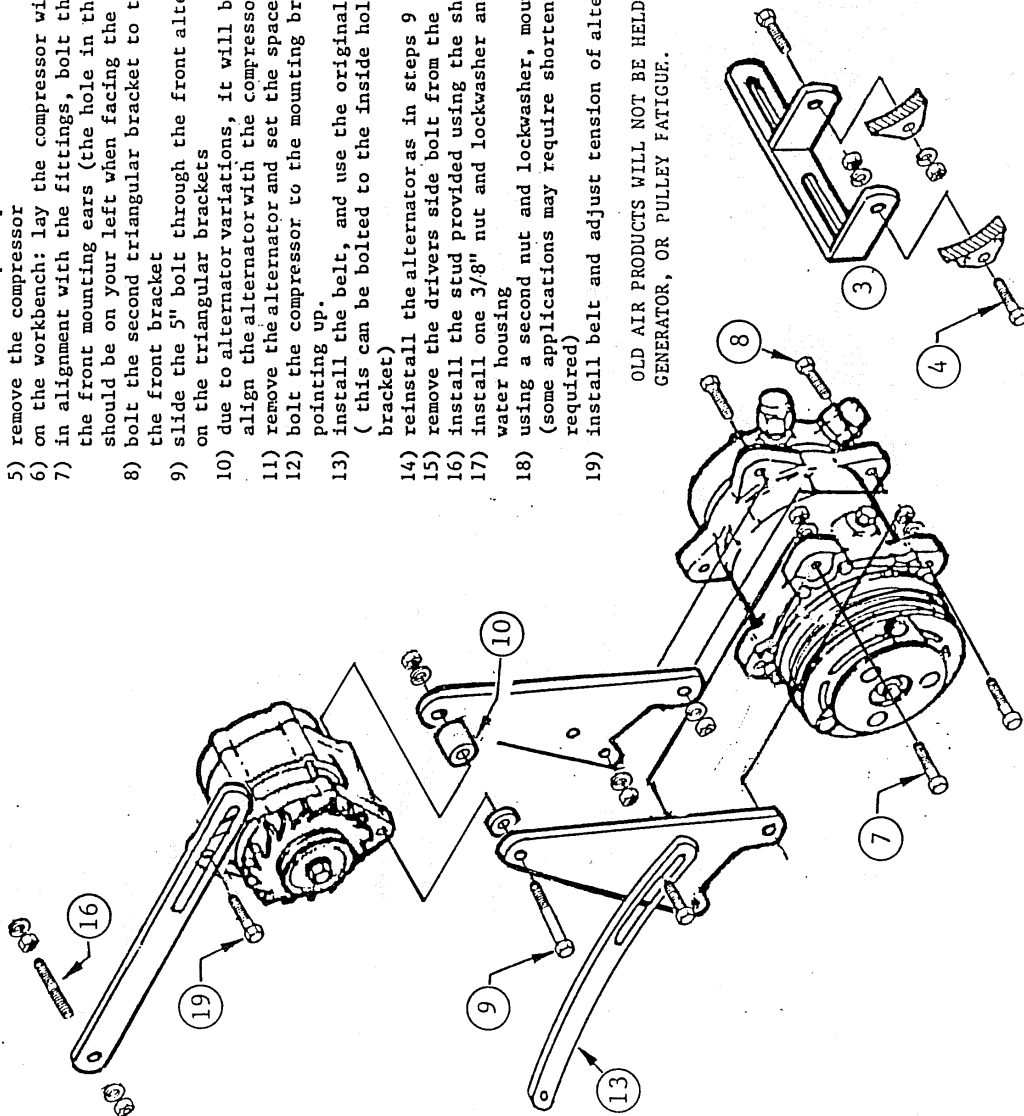
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INSTALLING THE STRAIGHT 6 CYLINDER CHEVY COMPRESSOR BRACKET WITH ALTERNATOR

This is a universal set-up which can be used on most GM straight 6 engines. It can be used with either a double groove or single groove crank pulley. For single groove crank; run the compressor on the crank pulley, and run the alternator on the other groove on the compressor. Earlier vehicles with air breather beside engine may require a newer style air breather

- 1) disconnect the battery.
- 2) remove the alternator OEM factory bracket
- 3) using the OEM bolts and lockwashers, bolt the new "U" bracket in place of factory "U" bracket.
- 4) Bolt the compressor to the new bracket temporarily to adjust proper alignment with the crank pulley
- 5) remove the compressor
- 6) on the workbench: lay the compressor with the fittings on the right side in alignment with the fittings, bolt the first triangular behind the front mounting ears (the hole in the center portion of the bracket should be on your left when facing the compressor)
- 8) bolt the second triangular bracket to the rear compressor ears in alignment with the front bracket
- 9) slide the 5" bolt through the front alternator ear and then through the top holes on the triangular brackets
- 10) due to alternator variations, it will be necessary to choose the proper spacers to align the alternator with the compressor.
- 11) remove the alternator and set the spacers aside
- 12) bolt the compressor to the mounting bracket on the engine with the triangles pointing up.
- 13) install the belt, and use the original OEM alternator bracket to adjust belt tension (this can be bolted to the inside hole above the compressor ears on the front bracket)
- 14) reinstall the alternator as in steps 9 and 10, using the 8" bolts and selected spacers
- 15) remove the drivers side bolt from the thermostat housing at the front of the head.
- 16) install the stud provided using the shortest section of thread
- 17) install one 3/8" nut and lockwasher and tighten, being careful not to crack the water housing
- 18) using a second nut and lockwasher, mount the swing arm bracket supplied to this stud (some applications may require shortening of this bracket and redrilling hole as required)
- 19) install belt and adjust tension of alternator using original adjustment bolt

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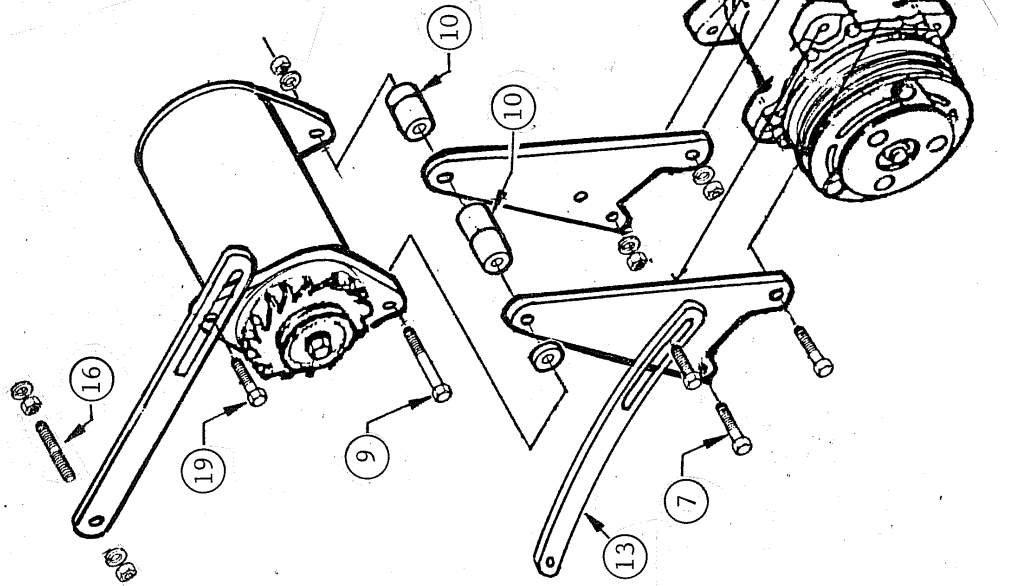
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