

# Corvair Engine Bay Ground Straps

By Bob Nichols  
Last Revision September 19, 2023

Over the years there has been numerous discussions among Corvair owners about why the ground straps were installed between the body and engine shrouds. This article will explain their purpose.

**Some background** - Basically, the battery (and generator or alternator) “positive” terminal supplies electric power to individual electrical items via separate wires and switches. The electrical energy must flow from each device back to the battery (and generator or alternator) “negative” terminal to do work (turn starter, illuminate the lights, etc.). The return path is called the “ground”? The Corvair has a “negative” ground system.

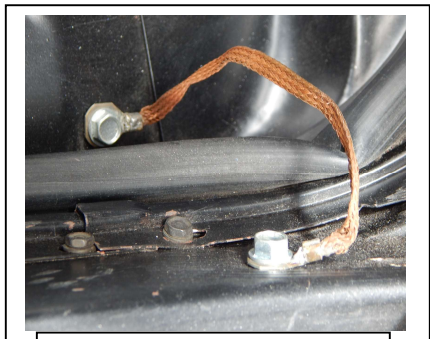
Because all the positive electrical power is controlled by separate wires and switches this allows all the electrical power to return to the negative polarity terminal of the battery (and alternator or generator) on a common conductor, the Corvair’s steel body or the aluminum engine. The battery negative terminal is connected to the engine by a large cable (the large cable is needed to ground the starter that uses a lot of electrical power). The battery negative ground terminal is also connected to the steel body, it is connected differently on the 1960-64 Corvairs versus the 1965-69 Corvairs).

A lot of effort over the decades has gone into engineering “ground planes” (in vehicles it is the large common conductive ground path). Variations in the metal mean this is not always a simple process. Engine compartment high voltage to spark plugs and alternator or generator operation can interact with and low power radio signals.

This discussion is about preventing the electrical energy in an engine compartment from interacting with radio signals that can make unwanted “noise” come out of your cars radio speaker, especially when listening on the AM radio frequency band. The engine bay ground straps are part of the solution.

**NOTE:** Recently Congress threatened to pass regulation requiring ALL new vehicles to have radios that could receive the AM radio band signals after some vehicle manufactures said their vehicles would NOT have radios that received AM because it would require greater expense to engineer/build the vehicles electrical power train (primarily hybrids and EV’s) to prevent AM radio “noise”!

**The Corvair engine compartment ground straps are required for the radio.** - The additional ground straps (usually a braided conductor with screw eyelets on each end) were ONLY installed on the Corvair at the factory when the optional radio was installed at the factory as stated in the Corvair Factory Assembly Manual.



1966 Corvair ground strap

Reference: The 1966 factory assembly instructions U63 for installing a radio at the factory. It indicates how to install the ground straps, part number 2976656 “STRAP ASM. - GROUND”. There are also other items depicted to install, such as capacitors at the coil and voltage regulator and a flexible spring conductor at the engine lid hinge (often broken now).

**If ground straps were only installed with factory radio installations, what about dealer radio installations?** - Because the ground straps were only installed per factory instructions when a radio was installed at the factory, this begs the question - did dealers who ordered Corvairs without radios from the factory, then installed aftermarket radios at the dealership (aftermarket radios were less expensive) install the ground straps?

If your Corvair has an AM or AM/FM radio, then it is recommended the ground straps be in place.