

Internally Regulated Alternator Brace

One of the reliability upgrades for all Corvair models is the changeover to an internally regulated alternator from either of the two original charging systems. Generator systems need the mount replaced and some re-wiring while the 65-69 vehicles need only the wiring changed for a conversion. The internal regulator systems are rated at 63 amps (+) while the original alternators were 37 or 47(with AC). Generators had low charging rates at idle and various maximum charging rates, along with reliability issues in both generator and regulator units.

Once the conversion is made, one additional item to address is the modification of a late alternator brace to fit the internally regulated unit which has the mounting hole in a different location. Many alternators currently in service do not have a brace at all and do not experience problems like a generator would with a loose or missing rear mount; generators would break the aluminum housing regularly if that occurred. Modifying an original late model alternator brace to fit either early or late conversions is not difficult and only requires hand tools. The following is just my approach; others may have an equal or better solution.

Note: the two wire connector on the alternator must be on top (in the 12 o'clock position) – if it is not, remove the four bolts attaching the end frame to the body. Use a small screwdriver to pry the field winding away from the frame a small amount until you can rotate the frame around until the connector is on the top. Do this carefully and you will not disturb the lineup of the internal parts.

Parts needed for a brace:

- An original late alternator brace.
- A 1/2" spacer that fits over a 5/16" bolt – the original spacer on a generator mount is a perfect fit or you can get a spacer at Ace Hardware stores; cut to 1/2".
- A 1 1/4" x 5/16" coarse thread bolt and lock washer.

Procedure:

- Cut the alternator end of the brace off, just below the original 5/16" hole.
- Drill an 11/32" replacement hole in the flat area just below the cut-off.
- Clamp the head mounting end of the brace **tightly** in a vice at the bend line and using a heavy hammer or vice grips **add** additional angle to the bend. You may have to adjust the angle after you bolt it to the head to line up the brace hole with the alternator hole. You could also just bolt the brace firmly to the head and using a heavy hammer, gently bend the bracket toward the rear until the holes line up.
- For some installations you may have to cut out a small relief in the brace to clear the top shroud.



Comparison – Original and Modified



Parts Needed



New Brace Installed