

## **Rattling Late-Model Dashboards**

Installing GM air conditioning in late-model Corvairs requires cutting a 2-inch section out of a "reinforcement" that runs the width of the car and positions the lower edge of the dashboard. Since the reinforcement is entirely behind the dash itself, the cut is not visible with the dash assembled. The new gap is directly above the cable controls to the right of the steering column. This was the case both at dealers and at the factory, from 1965 all the way at least through 1966 and perhaps to the end of production in 1969.

The designers of the option noted that this modification caused the dashboard to rattle or creak, so they designed a brace that attached the right side of the gap to the car's body at a point about six inches above it. The upper end of this brace was attached by a bolt that passed through the body into the air chamber beneath the cowl in front of the windshield, called the "plenum chamber."

I'm confident that all the bodies emerging from Fisher Body for cars for which air conditioning had been specified, had this brace installed, as installation of the brace does not appear in the Assembly Manual for the Air Conditioning option, and the brace does not appear to be in the Parts Catalog, either. Likewise, the brace was included with the kits provided to dealers and ambitious owners for adding "factory" air to their Corvairs that had been assembled without it. Instructions for installing this brace appear in the instructions provided with this kit for 1966, and the brace may have been provided in the kits for 1965 as well; they certainly would have been as needed.

The instructions for installing the brace are woefully inadequate, and seem designed for execution before the car was fully assembled. Installing the brace involves a fair amount of work (e.g., removing the instrument panel, which the instructions don't tell you to do) even after you have figured out what to do. Between this and the fact that the provision is not visible, nor functional in the narrow sense of the word, it seems possible to imagine that the occasional installer might have "overlooked" this step and thrown the brace away. Further evidence of this is the fact that the donor car from which I acquired the system I installed in my 1966 Corsa in 1996, did not have the brace, although the donor car was, in fact, the *second* car to use my system!

And my dash certainly did rattle, all the way from 1996 until, in 2005, I happened to read Greg Riley's excellent *The Ultimate Guide to 'Vairs with Air*, on Page 31, he notes, "If you don't install one, the weakened dash will surely vibrate." It seemed like someone was calling my name! My weakened dash! I knew full well that I had perforce omitted this provision from my installation those nine years ago.

I became fired with zeal to get a brace for my car, but as Greg warned, "It is rare to find this bracket with swap meet systems." Yes, I certainly did find one hard to locate, but eventually, I

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## Image: Construction of Air (Vair, the CORSA Chapter for Air Conditioned Corvairs Fall 2005

found two—one for eight dollars and another for \$27. I bought the one for \$27, since I received the offer of it about four hours ahead of the cheaper one. The experience of getting the brace and installing it led me to write this article, both to fully explain how to install it, and to enable the reader to fabricate his own brace in those cases where low cost, immediate availability, and full functionality trump the desire for invisible authenticity.

If your dash rattles, you might want to check for the brace by sitting in your driver's seat upside down, with your feet in the air and your head under the dash, just about my favorite position for working on any car. Look on the right side of your cable control unit, and you should find it going almost straight up for six inches to where it attaches to the plenum wall. Thanks to Terry Kalp for the photo of his *in situ*.

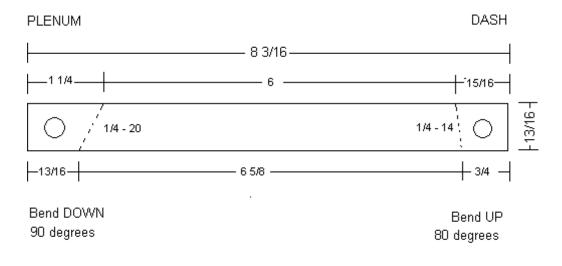
### The Part Itself

If you didn't find a brace (and your dash *really does* rattle, as it will without the brace), it's simple to make one. The original brace is a strip of steel 1/16 inch thick, 13/16 inch wide, and 8 3/16 inches long. I have heard that aluminum, perhaps in 1/8-inch thickness and perhaps <sup>3</sup>/<sub>4</sub> or one inch in width, works quite as well as steel. In fact, you may have found such a homemade brace in your car, in which case, drive on, you nitpicker—your dash didn't rattle in the first place, did it?

You've got to drill one hole in each end of the brace, and then bend it twice, as shown in the accompanying drawing. One hole, for the dash end, I recommend to be about 7/32 inch, or whatever would engage the threads of the  $\frac{1}{4}-14x5/8$ " screw shown in the



installation instructions for the dealer option. Of course, you can secure this end any way you want, but if you like the "sheet-metal-screw" approach, the threads of a <sup>1</sup>/<sub>4</sub>-inch lag screw should be close enough to the thread you need. The plenum end uses a <sup>1</sup>/<sub>4</sub>-20x20 machine screw, but



# Image: Weight of Air 'Vair, the CORSA Chapter for Air Conditioned Corvairs Fall 2005

again, you can do this any way you like. If you use the machine screw, I'd suggest drilling and tapping this hole so that the part itself will retain the screw, eliminating the need for a helper when it comes time to put the nut on the outside.

Both bends are compound angles—that is, they are not perpendicular to the length of the strip. Measure carefully according to the drawing, then bend the metal so as to produce overall angles of 90 degrees on the plenum end and 100 degrees (180 degrees minus the bending specified in the drawing) on the dash end. Be sure to take your measurements 13/16 inch apart, even if your material is wider or narrower, or your angles won't work out right.

### The Holes

To drill the two holes in the car, I recommend removing the instrument panel, which can interfere with (making) both holes. Like the holes in the piece you made, the holes you drill in the car will depend on what fasteners you chose to attach the brace.

For the "stock" option of a <sup>1</sup>/<sub>4</sub>-inch sheet-metal screw through the dash end, you'll want a 9/32inch hole in the end of the reinforcement. Make it about 3/8 inch from the cut end of the reinforcement.

The other hole is harder to make, if only because it's harder to find where to drill it. The right place to drill the hole was marked on my car by a dimple or, if you take off the cowl over the top of the plenum chamber in front of the windshield (simple enough—just five sheet-metal screws after you wrestle the windshield wipers off) as I did, you'll find a bump instead of a dimple. The photo shows (just below center) the nut where the bolt came through on my car. I drilled mine from the outside, after turning the bump into a dimple with a hammer and drift followed by use of a prick punch of the type intended for starting drill holes.



If your car doesn't have a dimple, I'd recommend you use your brace itself to locate where the hole in the plenum-chamber wall should be by attaching the dash end of your brace to the reinforcement, with the end of the brace aligned parallel to the car's centerline, and making your own dimple.

Be sure to use a lock washer, preferably of the star variety, under the nut, and sealing compound around the bolt and nut, because they're exposed to the weather. As cold as it gets in your car, you

wouldn't want water dripping down onto your feet. And as quiet as it's going to be, you wouldn't want the sound of water trickling in, either.

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