

# CORVAN ANTES

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NUMBER 4

**WINTER 1976** 







GREENBRIER SPORTSWAGON



CORVAN



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## THE CORVAIR 95 CHEVROLET'S SPACE AGE PANEL TRUCK BY ALEX C. MAIR

CHEVROLET MOTOR DIVISION CHEVROLET ENGINEERING CENTER WARREN, MICHIGAN

For presentation of the 1961 SAE INTERNATIONAL CONGRESS AND EXCEPTION OF AUTOMOTIVE ENGINEERING Cobb Holf, Derroit, Michigan January 5-13, 1961

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SOCIETY of AUTOMOTIVE ENGINEERS, Inc., 485 Lexington Avenue, New York 17, N. Y.

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IN

CORVAN ANTICS!

SEE

PAGE 28

AND ON

FOR PART II .

(Constant) Charactet Heten Finis

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#### OFFICERS, STAFF AND STATISTICS...

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Checks & Money Orders: Payable to CORVANATICS; for memo pads, to The Drawing Board, Inc.

PRESIDENT'S CORNER by Ken Wilhite... I hope all of you managed to survive the rather long "siege" the weather has provided the past few months.

One of the problems confronting me lately has been continual encroachment upon the time I have to conduct myself as president of CORVANATICS. It is getting to the point where I have very little free time to "goof off" and it is going to worsen. So I may have to step down and let someone else take the job. I have felt pretty guilty being president at times as I no longer own a Corvair, and the only contact I have with Corvairs is assisting my father in the restoration of his.

I hope you will understand my position.

KEN

1976

SECRETARY-TREASURER'S REPORT by Cecil Miller... Since the bitter, wintry weather has been keeping most of you folks inside and away from working on that favorite van or truck, some of you have been putting pen to paper in the form of letters and sending some much-needed ideas our way regarding the club's operation. Keep'em coming, gang!

New members joining our ranks are: Jerome Becker, Chula Vista, Charles Peck. Mississauga. Ont. Canada Michael Dawson, Kansas City, Wayne Reynolds, Kearney, NΒ GΑ Atlanta. Will Elliott, Signal Mountain, TN William Spates, CA Tokar, San Diego, William Garmon, Cary, James IΑ Ken Young Granada Hills, CA Jim E. Hall, Davenport, Jerry Hyde, Marietta, GΑ

Thanks also to those "faithfuls" who renewed their dues and showed their continued interest and enthusiasm in our club. Many didn't, as you can see from the drop in membership over the previous quarter - despite the fact that we always show everybody's expiration date or reminder on the mailing labels of every newsletter.

We are making our plans for the National Convention in Minneapolis this summer and hope each one of you plans to attend with your "95". We would like to have a big CORVANATICS get-together at that time.

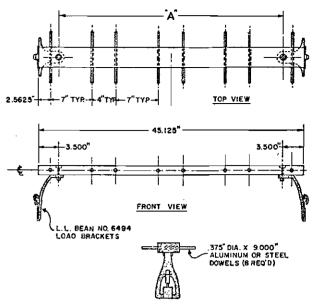
Attractive memo pads with CORVANATICS imprint and CORSA-blue "frame" may now be ordered direct from the supplier. Please note sample memo and order form on insert. The 1 March 1977 treasury balance, after Fall C.A. expenses, was \$185.01. CECIL

#### TECH TOPICS by Ken Wilhite and Russ Long...

This is a drawing of the BICYCLE ROOF RACK which I recently fabricated for use on my 1967 NSU 1000 automobile, but it could be utilized on any other make by simply changing dimension "A" on the drawing to suit.

Parts required are: two 2x4's, 45 1/8" in length, 16 aluminum dowels, 3/8"dia. x 9" long, 4 load brackets (avail. from L.L.Bean, Inc., Freeport, MA 04032, part #6494, \$16.50/set of 4), four 3/8-16 x 2½" long bolts w/flat washers and Esna locknuts.

Assembly is quite easy. Just drill the holes for the dowels (11/32" dia.) through the width of the 2x4, then drill the holes for the load brackets (3/8", countersinking the holes); tap the holes through till there is an even amount protruding on both sides. Install load bracket



screws, using a flat washer under the head of the bolts. If you wish you can sand finish the wood, as this will add quite a bit of weather protection. You can cover the top of the rack with indoor/outdoor carpeting, cut to size and glued in place. All that remains is bolting the load brackets to the wood, securing with flat washer and locknuts. The bike rests by the seat and handlebars on the rack, and can be retained by straps from inner tubes or by some of the exotic quick-releases on the market. KEN

Look in the next C.A. for some exciting news on air cond'g COMPRESSOR AVAILABILITY! RUSS

#### BACKFIRE from Readers...

"If you happen to be passing through these areas and need assistance, I recommend:
Harvey Hughes, Auto Beauty Shoppe | Sherwood Chevrolet |
929 W.10th Street, Anniston, AL | Maulding, SC |
Ph. 237-4261; nights - 238-8718 | Jerry B. Patterson |
Body shop, Corvair parts supplier | Expert Corvair mechanic" | KURT GAIDA, CLEARWATER, FL

"Hope the club can afford patches, decals, etc. in the near future and that membership grows by leaps and bounds. Amazing how each person has more than just one FC. Please forward me some extra applications; I need more to send out. The newsletters are so interesting - just too far apart. The technical info really comes in handy."

Editor's note: Ed found FIVE new members in Jan. and Feb.! ED GRIDLEY, FRANKLIN, IN

"I will support CORSA constitution amendments necessary to recognize specialty groups such as CORVANATICS. I feel that Ken Wilhite's suggestion to go 100% CORSA is wise. I really enjoyed your newsletter. Also, if you happen to see a nice "Brier or Corvan body in our area for a reasonable price, drop me a note. I'd like one, but everything in Minnesota is rusty." BOB JOHNSTON, MIDWEST DIV'N CORSA DIRECTOR, COON RAPIDS, MN

"Keep up the good work. I hope to contribute something for inclusion in CORVAN ANTICS sometime in the future. Would you please announce our Hoosier Auto Show on September 16,17,18? It is the biggest show in the Midwest. We've been a sponsoring club (Circle City Corvairs) for 2 years now and last September we had the largest number of any kind of car shown. 60 Corvairs and Forward Controls! We hope to have at least 100 for this coming September. We'd like to see more Forward Control models entered. About 50 kinds of autos are entered. There are acres of swap meet. The meet is sponsored by about 50 Midwest auto clubs. We always end the Concours with two laps of all cars around the famous 500-Mile Race Track. That's a thrill for any Corvair owner!"

TOM SILVEY. MCCORDSVILLE. IN

### **BODY**

One of the paramount aims in the Corvair 95 design program was to provide a compact, lightweight, vehicle capable of carrying economically a 1600-1900 pound payload. Another important aim was to maintain relatively equal and constant weight distribution for good vehicle ride and handling. To meet these goals, a body having an integral frame and provisions for forward controls and a rearmounted engine was selected. With this arrangement, the body could be proportioned to satisfy the requirements of compactness and large capacity, and with the driver

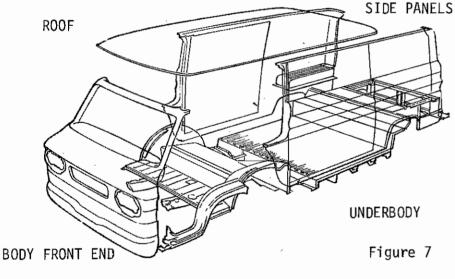
forward and the engine at the rear. the requirement of relatively equal and constant weight distribution could be met. Lightweight, another requirement, is obtained through the body-frame integral construction which eliminates a great part of the weight of a separate frame.

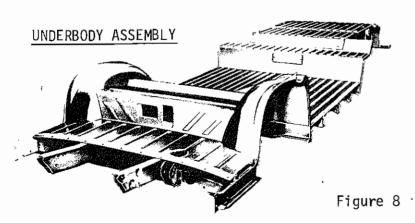
The selection of body-frame integral construction also affords other important advantages; the entire body shell is made stronger and more rigid since the structural material is more efficiently utilized, and interior capacity is increased since the load compartment floor can be positioned closer

to the ground.

Except for pickup models, the bodies are comprised (Fig. 7) of five basic sub-structures: the underbody, left and right hand side panels, front end, and roof panel. A rear cab structure is used on the pickups. These major assemblies are bolted and welded together with various other supporting members to form a complete body which has extremely high torsion and beaming strength. For example, the complete panel body has a torsional rigidity rate between the wheels of 7721 pound-feet per degree and a center beaming of .010 inch deflection per 1000 pounds. This compares with a torsional rate of 6976 pound-feet per degree and a center beaming rate of .016 inch deflection per 1000 pounds for a well-known import equipped with a similar body type.

#### MAJOR BODY SUB-ASSEMBLIES



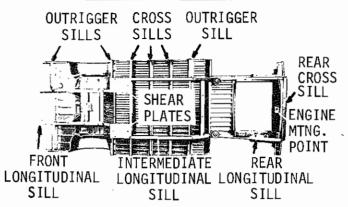


#### The Underbody Assembly

The underbody assembly is shown in perspective in Figure 8. The forward end of the underbody, or driver compartment, is comprised of a slightly crowned floor panel and a seat riser flanked with wheelhouses.

The center area consists of a large longitudinally corrugated drop center load floor. This configuration affords several features which are basic to the overall Corvair 95 concept. With the incorporation of doors or ramps in the body side structures, convenient side loading at low heights is provided, supplementing that at the rear. Also, since the largest load area is at the center of the vehicle, weight distribution between the front and rear wheels remains relatively unchanged when the vehicle is loaded, permitting the design of components which

## UNDERBODY STRUCTURE





BODY SIDE PANEL

Figure 9

provide the best ride and handling transaxle, and engine assemblies. characteristics.

The rear area is composed of Side Assemblies a vertical wall and portions of the rear load floor. Provisions for The right and left hand side panel mounting the power plant and rear suspension are also provided.

underbody structure (Fig. 9) with with integral rear quarter panels. cross sills and outriggers of various section. Shear plates, welded to the full length underbody sills, are used to strengthen the underbody longitudinally.

assemblies (Fig. 10) extend from the front door lock pillar to the Torsional support is given the rear of body. They are formed Included in the assemblies are rear wheelhouses and an engine air induction system.

Side panels are reinforced with full-length welded-in vertical For convenient vehicle jacking, strainers and pillars, and rigidity left and right hand pads are pro- is enhanced with the styling convided on the foremost and rearmost figurations of the outer lower outrigger sills. Provisions are panels (Fig. 11). The left hand also made on the sills for mounting upper body side panel is held chassis components. A total of rigid with a horizontal strainer seven mounting points are provided and rubber friction pad assembly. for the front and rear suspension, An identical, but shorter right

hand assembly is used between the left hand side door hinge pillar and rearmost vertical strainer.

In the station wagon application, embossed inner panels are added to the left hand side panel, providing not only a finished interior appearance, but also contributing to the rigidity of the side panel structure. In addition, three glass windows are incorporated in the station wagon left hand side panel, two of the windows being of the rolldown type while the third, or rearmost, window is stationary. This is repeated on the right hand side, the two roll-down windows being part of the double side door structure.

In the areas where no side doors exist, the rocker sill is formed from inner and outer panels. Figure 12 shows a section through

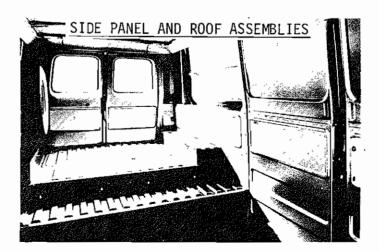


Figure 11

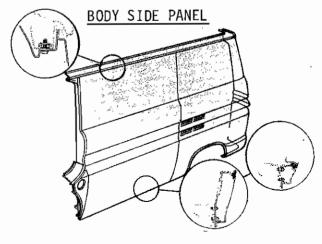


Figure 12

CORVAN ANTICS - 29 -1976 - 28 -CORVAN ANTICS

this sill and illustrates how the entire side assembly is bolted to the underbody. Note the placement of the expanding type sealer. Also shown is the configuration of the rocker panel and its attachment to the underbody in the area of the side doors.

the length of the side assembly to form a roof rail. The method for attaching this structure to the roof bled as part of the side assembly.

#### Front Assembly

Common to all models, the front end structure (Fig. 13) consists of an inner panel, toeboard, hinge pillars, and instrument panel at- Roof Assembly tached to an outer panel assembly surmounted by windshield pillars and a windshield header panel. All components are welded to- With the side assemblies and front gether to form a very sturdy assembly fastened to the understructure which contributes great- body, the roof assembly (Fig. 14) halo-type inner roof panel.

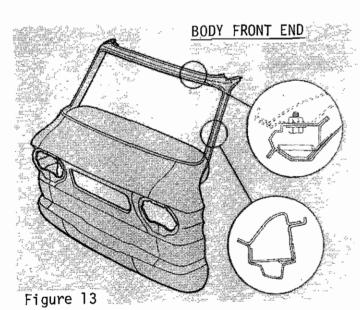
ly to overall body rigidity. The header and pillar construction is shown in the insets.

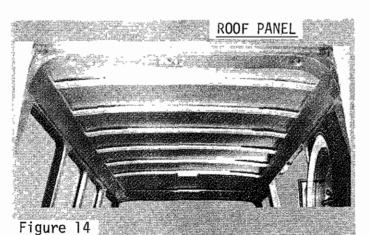
A plenum chamber for the intake of fresh air is incorporated in the front end structure. Air is admitted through an elongated, louvered inlet located at the center A section is also formed along of the outer panel. The forward location of the inlet permits air to enter the plenum with a ram effect which causes rapid disassembly is shown in the inset. charge of air through the outlets. Incidentally, the doors are assem- Left and right hand outlet doors are controlled in the conventional manner with pull-type knobs located on the instrument panel lower lip at the far left and right hand sides. The entire assembly is bolted and welded to the front underbody.

is added to complete the body structure. Because of its length and shallowness, extra-heavy gauge steel is used for the roof panel to prevent oil-canning. Added rigidity is afforded with six supporting roof bows which, before actual assembly of the roof panel, are slightly overcrowned so they butt tightly against the roof panel. Rubber friction pads are used between the roof bows and roof panel, and insulation from sound and temperature is afforded by cementing vinyl-coated trim pads to the roof panel.

A stamping shaped to form a roof rail and a drain gutter is welded to the outer panel, Weld and cage nuts inside the roof rail attach the roof to the rest of the body.

Integral with the roof panel in the areas over the front and rear doors are halo panels which when combined with similar panels integral with the body side panels and a bolt-on panel over the windshield give the effect of a continuous





(Next edition: PART III - LOADSIDE AND RAMPSIDE BODIES)

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CORVAN ANTICS

FROM THE EDITOR'S DESK... We're delighted to report that Dave Anderson of Mason, Ohio, has agreed to do a cartoon, entitled "Gene Brier and his buddy "F.C." for our newsletter on a regular basis (both "95" heroes are invisible this time). Dave is editor of the Corvair Club of Cincinnati's newsletter NEGATIVE CAMBER, besides being its vicepresident and an active Corvanatic. We're sure you agree that these creations can add a finishing touch to our publication; a little humor goes a long way.

Let's part this time on a note of caution: Only sending your dues when they're due Keeps getting you the news when it's new!

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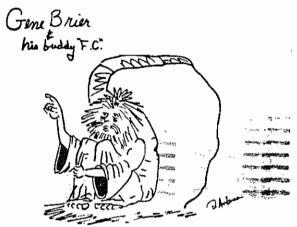
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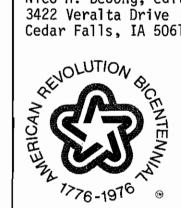
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Formed in 1972 by and for those who still appreciate the Corvair Automobile, particularly the Corvair "95" Series pickups, vans and wagons.

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