
The bi-monthly Newsletter of CORVANATICS

The Forward Control Corvair People

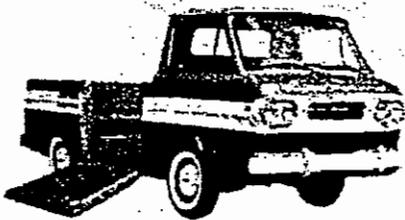
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Corvan Antics

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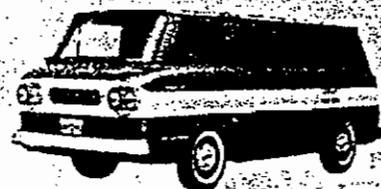
MAR - JUNE 1995



Pickups
Rampside - Loadside



Sportswagon
Greenbriar



Van
Corvan

FROM THE PRESIDENT by Ward Bourgondien

The first subject I want to address is the newsletter editor. I am pleased to announce that David A. Hartmann has stepped forward to take over as the newsletter editor. I will let him introduce himself in the next newsletter, and share some of his ideas for future issues. I have forwarded to him any articles that were not used in this newsletter. The hardest part of putting together a newsletter is getting people to send in articles. This is our newsletter and we all need to contribute on a regular bases. You will notice David Hartmann's address listed on the mailer page for sending items to be included in the newsletter. Please continue to support the newsletter with your contributions. I know David will appreciate it.

At the CORSA convention in Dallas, Bob Marlow and Clay Wispell have come up with a new idea for a program that I'm sure everyone will enjoy. That's all I'm going to tell you about it,so

you'll have to come to the annual meeting to see for your self. Also keep in mind that we elect new officers at the meeting in Dallas. So start thinking now about who you want fill the officers and Directors positions for the coming year.

Corvanatics drive-ins are planned for August 19 & 20 at the First State show in Newark, DE. September 7-9 at the Western Regional in Portland, OR and at the CORSA N.C. show in Clemmons, N.C. on October 27-29. That gives us two in the east, one on the west coast and of course the CORSA convention in the central part of the country. I hope we can have a good turnout of Forward Control Corvairs at each of these events. The locations should give us a chance to attend one without having to drive across country, unless you want to of course. For information on any of these shows check to calendar of events in the CORSA Communique.

The drawing of the channeled Carvan, that was on the cover of the last newsletter, I thought would be a interesting project is not going to happen because a fellow Corvan fan needed a van and there went the project. It is better to keep them

intact and on the road than to cut them up and maybe never put back together.

Thank you for the support this past year and I wish you a safe fun filled summer and hope to see you in Dallas! and Oregon! and Delaware! and North Carolina!

SAFETY FIRST

by Wally Hutson, Friends of Corvair

I don't know how other Forward Controllers feel about it, but I used to worry about my dark green (#55) Rampside being seen from the side at night time. I was concerned enough that I decided to modify my stock (1st. place 1991 National) Rampside.

Here's what I did. I installed 1968 passenger side marker lights. The rear ones between the rear wheel opening and rear bumper tip. 3" forward of the bumper tip, and the front installation was centered between the bumper tip and the leading edge of the cab doors.

Now comes the fun part, wiring. The rear was simple. One wire grounded and other connected to the tail light wires. In the front the job became a little more difficult. The ground wire on each lamp was connected to the same side turn signal positive wire. The positive wire of each lamp was connected to the front parking light positive wire. This kind of hook up makes the front marker lights flash with or alternately to the front turn signal, depending on whether the lights are on or off. No, the job wasn't finished. There was more to be done.

Next, the front parking lights wire was disconnected from the dash light switch and reconnected to the tail light wire, so that the front parking lights are on with the head lights.

All of the preceding helped to make the Rampside very visible at night, including the drivers turning intentions. But I wasn't totally satisfied, so I removed the tail light and parking light lens and cleaned and touched up the reflectors with bright chrome paint. Before reinstalling the lens, bright bulbs were installed. Next a slimline third brake light was installed at the rear edge of the cab roof, using two sided adhesive backed foam tape. One small hole was drilled in the gutter for wire entry. One wire was grounded behind the cab light and other attached to the brake light switch.

This project turned out to be a lot of work, but the results were just what was needed to make the Rampside very visible at night time.

NEW REPRO NEWS

by Bob Slusher

A news up-date on an item submitted to Mr. McIntosh last June regarding our reproduction of the FC turnsignal cam. We reproduced the units but found no outlet for them without the CORVANANTICS pipeline to the membership. Finally, Lon Wall stepped forward and bought the entire production run for re-sale through Corvair Underground. Since the recent publication, I have received one order for the cams and have forwarded it to Lon. Bless his heart, he understands the position this puts me in and has agreed to honor our original commitment to the membership and fill any orders I might forward to him at cost. Nice guy! The cams will not be available thru Bob Slusher or Duane Luckow. They will be sold by Lon at cost plus his usual markup.

REPRO NEWS II

by Bob Slusher

I have received several calls from CORVANATICS members regarding our article on GM mirrors. As a follow-up to our CORVAN ANTICS article of August, 1993, the following changes have been made by GM to the mirrors assemblies.

Part #996219 Painted white. Now supplied as a pair of flat glass mirrors; no convex. Dealer list cost of \$38.25 set.

Part #996225 Stainless steel. Superseded by #996220 stainless steel. Also now supplied as a pair of flat glass mirrors; no convex. Dealers cost of \$61.20 set.

A local chain of automotive glass shops charges \$18.50 to replace the flat passenger side mirror with a new convex mirror.

OK HERE'S THE DEAL

We'll put a Top Fuel dragster engine into a four by four pickup, jack it up to nosebleed altitude, add earth mover tires and then charge people lots of money to watch it stomp on a bunch of derelict cars. Is this a great country or what?

CORSA OREGON MINI

CORSA OREGON will host their first regional convention since 1974. The event is scheduled for

Portland, Oregon from the 7th thru the 10th of September 1995. Traditionally, September weather in Oregon is simply fabulous and with the kids back in school we encourage you to take a few days and join us for a late summer bash not soon forgotten! There will be a CORVANANTICS drive-in at this Mini. For information on the Mini Convention contact Corsa Oregon, P.O. Box 1445, Portland, Or. 97201

CORVANANTICS BY-LAWS

These were handed out at the annual meeting in Williamsburg for comments, and printed in the last Newsletter. For the meeting in Dallas, Ken Hand, Corvanatics Vice President, said he would take the responses and prepare the final set of by-laws.

UNIVERSITY OF MARYLAND Political Science Class

The professor assigned the students to read a report on auto safety by Ralph Nader.

A young student raised her hand and asked who Ralph Nader is.

Before the professor could answer, a young man in the next row blurted out:

"Oh, you know, he's that guy on 'The Honeymooners'."

TECH TOPIC --Alignment Specs by Bob Kirkman

Alignment Specs come for front and for rear suspension. Let's look first at the front.

The front suspension was built at Detroit Gear & Axle (or perhaps at Chevrolet-Warren) and sent as a unit to the assembly plants. Caster and camber were set at the source to a "fixture." The suspension was not custom set for caster and camber to your vehicle. The assembly plant did set toe-in.

I do not have a drawing of the front suspension, so can not tell you what it said. Since it was related to a fixture, or gauge, the numbers might not mean anything anyway.

The Assembly Plant Manual is perhaps the best representation of front specs. I have the 1991 and 1994 issues only.

	1961	1964
Caster	2°10' Ref	*
Camber	0°24' Ref	*
Total Toe-in	.098"	.20"

*Not shown, as Assembly Plant had no control of the values. Engineering finally agreed to remove even a reference to caster and camber values.

Shop Manuals have a variety of values:

	1961
Caster	2-1/2 + 1/4
Camber	1/4 + 1/4
Total Toe-in	1/8 inch.

	1962 Supp.
Caster	1-1/2 + 1/4
Camber	1/4 + 1/4
Total Toe-in	1/16 to 3/16

	1992-3 Supp.
Caster	2-1/4 + 1/4
Camber	1/2 + 1/4
Total Toe-in	1/16 to 3/16

So, what's the spec? Sort of choose what suits you. Maybe caster 2 to 2-1/2, but same on both left and right. Camber 0 to +1/2, but same on left and right. Toe-in 3/16 inch. Zero toe-in can give best tire wear, but 3/16 inch. "in" is not enough to accentuate wear, and gives more directional sense than zero, or toe-out.

The rear suspension was put together at the Assembly Plant, but only toe-in was adjustable. The Assembly Plant Manual says:

	1961	1964
Total Toe-in	.10"	.17"

Shop Manuals again have a variety of values:

	1961
Total Toe-in	1/4" to 1/2"

	1962 Supp.
Total Toe-in	0 to 1/4"

	1962-3 Supp.
Total Toe-in	1/16" to 3/16"

My opinion is that the 1991 Shop Manual value is too much. I have been well satisfied with 3/16 inch.

If your alignment is set up OK, but the vehicle wants to pull to one side or the other, try rotating your tires. A radial tire sometimes has a built-in

pull that might work OK in another position. If you have to correct a pull, the vehicle will pull toward the side with the least caster. So if it pulls to the right, add some caster to the right, or remove some from the left. With old bias tires you played with camber to affect pull. Radial tires don't respond to camber changes like the old bias tires did.

CHANGING TO OTHER WHEELS by Spence Shepard

While driving at about 70 miles per hour on an Interstate I thought I noticed more than "normal" movement in the rear end of my Greenbrier when I was passing a trailer truck. I was going around a corner descending a hill in a mountainous area and thought that this would be a particularly bad time to have a problem since there was a sharp drop-off on my left and there wasn't much of a barrier. When I got within about a half mile of home, I was making a left turn onto a city street at about 20 MPH when the right rear suddenly dropped and I skidded to a halt. The wheel fell off! All 5 studs that bolt the wheel to the axle had sheared. I walked home, removed 3 studs from a spare axle and used them to get a wheel on the Greenbrier to get me home. I then analyzed the situation and came to the conclusion that it was my own fault and I was lucky that I didn't really hurt the van and/or myself.

As you know, we are lucky that our vehicles have the standard Chevy 5 lug bolt pattern. This allows us to have an almost unlimited choice of wheels that "fit". I had owned a '79 Pontiac LeMans station wagon and had some extra wheels that I kept when I traded the car. These had good all-season radial tires and they just fit inside the wheel well. There was a little more positive offset than the stock wheels and they were a little wider. I thought that this should give me a little more stability and they did seem to work very well. The other difference was that they had a larger radius at the center hole. This caused a lack of contact where the hub on the axle should support the wheel because the protruding center hub on the Corvair was shorter than on the Pontiac. I believe that is what caused my problem.

Wheels are designed with a center hole that is supposed to fit tightly on the axle or hub to which the wheel is bolted. The purpose of this hole is to center the wheel as well as to support the weight of the car. The bolts are designed to hold the wheel to the axle or hub, but they are not designed to

support the weight of the car. The bolts are designed to take a load in tension which is in the direction of the axis of the bolt or in the direction of holding the wheel onto the axle. They are not designed to take a load in bending which is the direction perpendicular to the axis of the bolt or the direction that the weight of the car is loading the wheel/axle/bolt assembly. By eliminating the tight fit at the center of the wheel, the bolts are forced to support the weight of the car which puts a bending force on the bolts. This force changes direction on the bolt as the wheel turns. This is an "alternating" force which subjects the bolts to a phenomenon known as "fatigue". Fatigue can cause a piece of metal to fail at a load significantly less than the maximum load it can support if the lesser load is alternated for enough cycles. There is a cycle every time the wheel turns. I believe that is what caused a bolt on my van to fail. When a bolt fails it increases the load on the other bolts and they eventually fail which increases the load on the remaining bolts etc., etc.

The above is an oversimplification, but it illustrates the point I am trying to make. The wheel center hole is designed to fit tight on the axle and it should. You are tempting fate if you use a wheel with an oversize center hole. In reality, there are many safety factors in the design of the wheel bolting assembly that allow us to "get away" with abusing the design intent by changing wheels to ones that don't really fit properly. Some after market manufacturers take advantage of this by making the center hole oversize so that the wheel will "fit" more cars. We have all seen applications where people use wheels that have center holes that are much larger than the mating fit on the car. Wheels with more than normal offset increase the problem and loading on the bolts. The drastic camber changes at the rear of swing axle Corvairs add to the problem. The fact that most of our cars are over 30 years old and have lots of miles is another step in the wrong direction.

There is a cure! The first step is to use a wheel with proper fit. The second is to change the studs. New studs are available at almost any auto parts store and are relatively cheap. I got some with nuts for about a dollar each. They should be less than that in quantity. I recommend that you change them all, especially the rear, even if you don't think you have abused them. It's cheap insurance.

They are easy to remove. Just beat them out with a hammer. You can save them by putting the nut on backwards until it is flush with the end of the stud and hitting straight on the end, but they are probably not worth saving. Fatigue damage is

hard to detect, accumulative and irreversible. Change the nuts at the same time. They are probably damaged from poor fitting wrenches. The hardest part may be removing the brake drums, especially the rear. Take an old stud to a parts store and match it with a new one. The parts store should have a listing on them to be sure that they are correct. They are probably the same as most Chevys through the 60's and 70's and even into the 80's. The replacement ones may be longer, but that doesn't matter. Be careful not to get newer metric studs and nuts. They look the same, but aren't interchangeable. Studs can be installed by pulling them up tight when the wheel is installed and the nuts are tightened. They should "bottom" with normal tightening. I install them and then take the wheel off to check to see that they bottomed. You can install the wheel without the brake drum to make this easier. The nut tightness should be checked after some driving when new studs are first installed to be sure they are seated properly.

There is no excuse for having a wheel fall off due to broken studs. It could be embarrassing or even worse. New studs are cheap, readily available and easy to install. I believe that we should all replace them, especially the rears and any that have been used with improper wheels. It's cheap insurance.

I realize that there are some statements that could be challenged as well as some points that are not made. I hope there is some reaction to it. That would mean that someone read it!

CLASSIFIED ADDS

FOR SALE: 1962 8-Door Greenbrier, Turquoise & White, second owner, Tex/Az car, no rust, 77,000 miles, chrome bumpers, automatic, A/C, new tires, complete records of service from day one, all service manuals, owners & show room brochures, also extra parts, \$2,500. Edward Baum (602) 759-8988 evenings or (602) 852-8550 voice mail 24 hours.

FOR SALE: 1964 Greenbrier Van, Red & White, some primer, with late '64 or early '65 164 cu.in. engine, 110 hp. overhauled in 1992, runs good, all gauges in dash, (vacuum, oil pressure, voltmeter, and tach.) transaxle is 3.89 with automatic, with or without Mag wheels \$800.

PARTS WANTED: '65 140hp Heads #3856728 or #3865727. Also good pistons.

PARTS FOR SALE: hubcaps '64 & '65 Monza, front suspensions for '65 car, '63 & '64 FC, 2 '65

transaxles 3.27:1 with 4 speed, 4 engines needing overhauls 1 80hp 2 102hp for FC, also '64 95hp engine all manual, '63 FC transaxle (4 speed with 3.89:1), '64 transaxle 355:1 manual and '64 car transaxle 355:1 automatic, '65 & '66 heads 110hp & 95hp, 2 '65 Blue Corsa doors with Blue glass, '65 & '66-'69 window glass, door handles, all glass for 2 or 4 door '65-'66 FC and car. Craig Wilson Cedar Falls, Ia. (319) 266-6343, voice+TT RELAY IOWA 1-800-735-2943 voice.

FOR SALE: 1964 Greenbrier Deluxe, White & Red, powerglide, nice original, no rust, 70,000 miles, \$2,500. OBO Wally Brenneman, Kalona, Ia. (319) 683-2440 days. (319) 683-2449 evenings.

FOR SALE: 1961 8-Door panel, super straight body, no major rust, has 4 speed & transaxle, no engine, \$750.

1962 Rampside, minimum rust in tailgate, 95hp with PG, engine needs minor work, was driven daily, NOS and repro parts go with it, \$3,500.

OBO,

1960 Monza Coupe, ready to restore, Roman Red, \$1,000. Getting out of Corvairs, all must go. Ed Bittman, (813) 327-3115 evenings.

FOR SALE: 1961 Rampside Camper, 4 speed, very little mileage on new motor, camper is fiberglass, built specially for the Corvair Rampside Pick-up in Nacomis, Fl., cab is original with Red & White upholstery, camper has been completely restored, has gas stove, sink, electric refrigerator & toilet with holding tank, have awning for door side, selling because don't go camping anymore. It's just sitting, was asking \$5,000. but will take \$3,000., needs good home with TLC. Will sell camper top separate for \$500. and the Rampside for \$2,500. either way. Charles Arendes, Lutz, Fl. (813) 949-4681 after 7pm.

PLEASE NOTE NEW ADDRESS:

Send any articles, for sale or want adds to be included in the next newsletter to:

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TO ANY OTHER ADDRESS WILL SLOW YOUR
RENEWAL AND POSSIBLY CAUSE YOU TO
MISS AN ISSUE.**

CORVAN ANTICS is the bi-monthly newsletter of Corvanatics, a Chartered Chapter of the Corvaire Society of America. Established September, 1972, and dedicated to preserving and enjoying America's original and most innovative small vans and light trucks, the Chevrolet Corvaire 95 series.

Stories, Articles, photos or anything of interest to Corvanatics members should be sent to the Editor, **David A. Hartmann, 111 E. Riverbend Drive, Plymouth, Wi. 53073-2219.** Technical material should be sent to the Tech Editor, **Bob Kirkman, at 1820 Moffat, Leonard, MI 48038.** Classified-style advertising is free to Corvanatics members, and should be sent to the Editor. Commercial advertising is also available, please inquire. **Deadline for publication is the 15th of February, April, June, August, October, and December.**

Membership in Corvanatics is open to any CORSA member with an interest in Forward Control Corvaire. Membership applications are available from the Secretary/Treasurer, **Caroline Silvey, at Box 68, McCordsville, IN 46055**

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FIRST CLASS

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DUPLICATE



CORVANATICS

THE FORWARD CONTROL CORVAIRE PEOPLE