

2022 Special All Tech, Vol. 50, Issue 1A

The Bi-monthly Newsletter of Corvanatics The Forward Control Corvair People



https://www.corvair.org/chapters/corvanatics













# 

# INSIDE:

"Website Technical Article Search", "Tire Size Conversion", "Tires"

"Towing Your Corvair"

"Stock Was... -Dash", "Moving an FC without a Powertrain"

"Headlight Switch"

"Signal Light Switch" "Powerglide Leaks"

"Oil Pressure Sending Unit", "A Welcome Addition", "Temp Sensor'

"Age Old Question Answered", "Glove Box LED"

"Officers", "About"

Pages 2-3

Pages 4

Pages 5-7

Pages 8-9

Pages 10-11

Page 12-13

Pages 14-15

Page 16

Corvan Antics is published for the benefit of the members of Corvanatics. We're the largest chapter of the Corvair Society of America and are supported solely by membership dues. If you are not a Corvanatics member, please consider joining us. Membership information can be found at <a href="https://www.corvair.org/chapters/corvanatics/membership.php">https://www.corvair.org/chapters/corvanatics/membership.php</a>.

# Searching the Web . . . site 4- Technical Article Search Engine

By Steve Spilatro, Corvanatics Webmaster and Historian

This special Technical Article issue of Corvan Antics is a good time for a reminder about the online

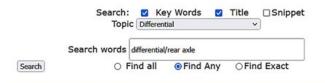
technical article search engine found on our web site. The 450+ technical articles that have been published in Corvan Antics since 1972 can be searched according to topics. Alternatively, you can search using your own key words in the titles and text snippets from the articles. The search engine returns a reference to each article with a hyperlink to the PDF.

We are now preparing an updated print-



ed version of the technical article index. This document has all of the technical articles organized by topics for easy access. The index will be available as a pdf file and hard copies will be made available for members lacking internet access.

## Newsletter Tech Article Search



### Search Results: 12 Articles

Note: OCR (optical character recognition) of the newsletters is imperfect and search results may introduce odd spellings and characters. The article reference is a hyperlink to the original publication.

### FC/Early Rear Wheel Bearings

2016, CorvanAntics, vol 44(3), page 5

"A few weeks ago I carried a real swing-axle bearing to the meeting along with a fake one that I had purchased many years ago. ..."

### More Info On Speedo Gears

1993, CorvanAntics, vol 21(4), page 30

"Robert Ballew has supplied follow-up information to his JAN-FEB article on speedometer gears ...'

Oil Leak From Axle Top Vent Cover

991, Corvan



Vintage Ti	ire Size Co				
Pre-1964	1965-72	80 series metric	Alpha Numeric 78 series	P-Metric 75 series Radial	P-Metric 70 series Radial
5.90-13	600-13	165-13	A78-13	P165/75R13	P175/70R13
6.40-13	650-13	175-13	B78-13	P175/75R13	P185/70R13
7.25-13	700-13	185-13	D78-13	P185/75R13	P205/70R13
5.90-14	645-14	155-14	B78-14	P175/75R14	P185/70R14
6.50-14	695-14	175-14	C78-14	P185/75R14	P195/70R14
7.00-14	735-14	185-14	E78-14	P195/75R14	P205/70R14
7.50-14	775-14	195-14	F78-14	P205/75R14	P215/70R14
8.00-14	825-14	205-14	G78-14	P215/75R14	P225/70R14
8.50-14	855-14	215-14	H78-14	P225/75R14	P235/70R14
5.90-15	600-15	165-15	A78-15	P165/75R15	P175/70R15
6.50-15	685-15	175-15	C78-15	P175/75R15	P185/70R15
6.40-15	735-15	185-15	E78-15	P195/75R15	P205/70R15
6.70-15	775-15	195-15	F78-15	P205/75R15	P215/70R15
7.10-15	825-15	205-15	G78-15	P215/75R15	P225/70R15
7.60-15	855-15	215-15	H78-15	P225/75R15	P235/70R15
8.00-15	885-15	230-15	J78-15	P225/75R15	P235/70R15

# Tires - An "OLD" story, but one that needs repeating.

The other day I happened to want some information off the tires on my 2012 Buick and since it

was pretty small print, I just snapped a photo of the tire so I could read it more easily. Oh. I was looking at the tire-pressure legend and that was why I took the picture. Okay, here's the punch line: later on, after I resolved the tire pressure issue, I noticed something in the picture. Here is part of the photo I took. See where it says 4911? That means the tire was manufactured in the 49th week of 2011.

That brought me up short when I realized my tires were over ten years OLD. I thought about that for a while and was showing the picture to someone when I looked a little closer at the photo in my hand. Take a look at what I saw in the photo below! The entire sidewall is checked with some serious cracking. This is why 10 years is considered to be "time is up" for tires that go on the freeway.



Folks who have OLD cars often have OLD tires!

On the right, you see the date-stamp of my six-year -old tire on my 60-year-old FC. It looks like a new tire to my eyes and the due date says it's still good to go too!

Let's pay attention to these tires that are often out of time, but still look good on our OLD cars!



Keep-on-CORVAIRing! Fran







# Towing your CORVAIR!

If you have ever needed to move your CORVAIR, by means of a towing vehicle, you know there is

**Sector Box** Common Cutouts We can easily add the holes from the other bracket and make a universal unit that fits either side of an EM or a LM. Page 2 shows inversion changes Relay Rod Pivot to this sketch. N.B. The EM has mounts 3.1" apart and the LM's are 2.3", so we need three holes to make a bracket that fits either.

no good way to hook on to your front end. I think I have a solution. Here is a bracket that can be bolted onto existing spots on your two outside anchor points to properly secure that front end. I made a pair of brackets to fit my EM and then measured a LM to find there was need for another hole, so, I added one.

All of this is of little concern when you look under your FC as there are four fine towing holes purposefully built in.

On the cars, this 1/4" steel plate should bolt up to your front stub frames and



will accept a J-hook nicely. They would only add 2.5 pounds to your front weight. I would suggest you install the bracket and leave it there, forever. Like your FC! Maybe you'll never need it for an emergency, but some of us have 'show' cars that get hauled around and some even get sold to overseas buyers!

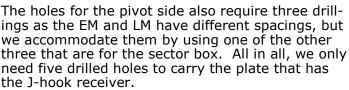
On the left is a little sketch of the layout, showing the bracket for each side. Also, how it can be made into a universal bracket

that will fit either side of an EM or LM.

A standard J-hook, like this, which is common on tow trucks is also used for show cars. It slips into and turns in the long hole of the protruding portion of this new bracket.

The three mounting bolts on the EM Sector are the same as on the LM Sector box so there are only those three holes that need placement, on the left side. Here's a Sector Box showing its

mounts.



Two identical plates are needed to accomplish this unique fixture being able to secure your CORVAIR into or onto any truck, plane, trailer, or ship.

Maybe guys who carry their show cars around using a three-point (Bob?) hookup will re-consider and build/install a pair.

Boy Scouts are Always Prepared, how about Corvanatics being prepared as we too.

Keep-On-CORVAIRing, Fran Schmit





# Corvair 95: Stock was. . .

By Steven Spilatro

# 7- The Dash



Let's look more closely at what's in front of us (and confronts us) every time we drive our FC - the dash. By and large, there was little change to the overall layout of the dash during the Corvair 95's 41/2 year run. The placement of the instrument cluster and Powerglide transmission control lever, ashtray and glovebox, the arrangement of the controls in the cluster, even the design of the instrument knobs never wavered. As the Corvair 95's fortunes dimmed, undoubtedly so did the impetus for unnecessary engineering. Yet changes were occurring every year, even for the last gasp '65 Greenbriers.

# **Only in 1961**

### Colors

A few features of the dash were unique to the 1961 model. For example, only in 1961 did a vehicle with standard trim have a solid color dash. The standard dash was solid charcoal gray color and the twotone version with a silver instrument panel came with RPO 431, Custom (deluxe) Equipment. In later years, the instrument panel was always cameo white and the surrounding dash was fawn or, with Deluxe trim, color-keyed to the exterior body. As mentioned in a previous article in this series, 1961 was also the only year that the heater control unit was painted silver versus black in later years.

## **Choke Call-Out Knob**

Although few '61 FCs retain carburetors with a manual choke, that's how they were originally equipped. The manual chokes were operated via a cable that extended from the engine compartment to a black callout knob mounted to the bottom of the dash. Labeling of the "CHOKE" to the right of the wiper was unique to the '61 instrument cluster trim plate since the manual coke was replaced with an automatic choke in 1962.



### Windshield Wiper\Washer

Only in 1961 would a two-speed windshield wiper without a windshield washer be stock. A single speed wiper unit without a washer was standard all years, but only that first year could a twospeed wiper (RPO 355) and the washer unit (RPO 130) could be ordered separately. Beginning with 1962 models, RPO 130 was discontinued and RPO 355 was a 2-speed wiper with the washer. While not part of the dash itself, a larger, horizontally mounted wiper motor (mounted on the cowl wall below the dash) was used only in 1961. From 1962 onward, the smaller black wiper motor was used - the same as for the car, although the electrical and plumbing connections were different.

(Continued on page 6)

(Continued from page 5)

# Ash tray

In '61 the black plastic handle of the instrument panel ash tray was embossed "ASH TRAY". Possibly deciding that the use of this container could be discerned without a label or that it could hold more than just ash, or more likely as a cost savings, the lettering was removed for future production years.



# Changes in later years

# Gas Gauge

Visually, the gas gauge never changed, although different versions are needed for different models years. Gauge #5643525 was used from 1961 into '63, at which time electronical alterations were made. The late style gas tank, with the passthrough hole for the shifter control, needed both a new sender unit and instrument panel gauge, which was #5644545. Parts catalogs from the early 60's consistently identify gauge #5643032 for non-FC applications, but catalogs from the late 60's onward list this unit for use with the early style FC gas tank, possibly as a substitution when #5643525 was discontinued.



# **Ignition switch**

Unaltered for most of the Corvair 95's production, the ignition switch was... er, switched, for the limited run of '65 Greenbriers. The early style switches had three contacts which was increased to four in 1965, a change related to the replacement of the generator with an alternator that year. Rather than providing a much desired "Accessories" position for the ignition switch, the additional contact connected to the circuit that energized the alternator field coils as the engine was cranked.



# Instrument cluster, dispatch box, and Radio Trim

The embossed pattern of the anodized aluminum trim plate of the instrument cluster and glovebox door was changed annually from '61 - '64. The picture shows the pattern for each year. The pattern of the embossing mirrored that of the cars each year: 1961 - tiled, 1962 checkered, 1963 – banded, 1964 & 65 – stippled.

Standard trim vehicles always received a glovebox (called the "dispatch box" by GM) with a plain, painted metal front panel. The glovebox door of FCs outfitted with deluxe trim (RPO 431/Z60) had a trim plate (front metal panel) with a pattern matching that of the instrument cluster. However, unlike the cars, the edge trim around the instrument cluster and glovebox door was painted metal, not chrome.

Should a radio have been ordered, the front bezel would have had an embossed pattern



that matched the instrument panel. And the housing was painted to match the color of the dash.

(Continued on page 7)

40 60 80 100 120 140 160

Militite

30 40 50 60 70 80 90

(Continued from page 6)

# Speedometer

From '61 - '63 all FCs, including those with a Powerglide transmission, had 80 MPH speedometers with the three shift points (A). Early in the 1964 model run, Greenbriers began to receive a 100 MPH speedometer (C; same as in cars); Corvans and Rampsides continued to receive an 80 MPH speedometer sans shift points marked on the dial (B). FCs destined for European highways received a speedometer and odometer calibrated as kilometers per hour (D).

# Validatilities 20 30 40 50 60 70 80 30 40 50 60

+5888°

# **Cigarette lighter**

While the design of the cigarette lights did not change noticeably, I thought I would include some information about them.

Cigarette lighters did not come with a standard trim package and were included with the deluxe (RPO 431/Z60) trim package. Vehicles with standard trim had a bright metal cap that covered the hole. A complete cigarette lighter unit consist of four parts: a cylindrical retainer secured to the dash by the bezel, the element that inserts into the retainer, and the knob. The knob was the same

Two manufacturers provided cigarette lighters for Corvair cars and FCs, Casco and Rochester. The lighters can be distinguished most easily by the design of the element the Rochester has a black plastic band, and the Casco has





WELD.

WELD

# Moving an FC without a powertrain

It's pretty obvious how this would work, when moving an Early or an FC without the powertrain installed.

I recently saw this neat idea, reprinted from 30 years ago, in the Corvan Antics, and wondered about going around a corner. Of course, this is only for moving things around the shop, or yard, and a person would just

skid the tires and there would be no bother. BUT, I thought, what if that old axle shaft they welded between those yokes were made up of two threaded pipes with a greased coupler between. Let's say you build this and install it with the coupling "un-screwed" a turn or two. Now, when

you move your dead vehicle the axles would thread together, or apart, depending on which rear wheel went ahead of the other. I would think you'd have to do a lot of 'always turning the same way' before you'd have a problem. I checked on a piece of pipe and the threads are an 8 pitch. If you are moving your vehicle with this setup, and the wheels get a full turn out of whack, that only changes the wheel separation by 0.125"!

Here's how it looks, when you build one. Kinda like a dog bone!



EARLY CAR É F.C. AXLE SUPPORTER

FOR MOVING A VEHICLE

WITHOUT A DIFFER

WELD

ENTIAL

WELD

Regardless of which vehicle is being pushed around, don't forget to...Keep-On-CORVAIRing, Fran

# **Corvair Headlight Switch**

Recently I had occasion to dig into this common fixture. I never noticed how complicated it was. Nine wires are plugged into it. Some carry power in/out and some just transfer current from one place to the other.

My thoughts were always focused on the big wire that went "in," figuring that all the little wires went "out." Turns out that the big wire only feeds the head-



lights and/or the front parking lights. The parking lights wire is a singleton that only goes up front and doesn't supply anybody else. That accounts for three of the nine wires (one in and two out). There's even a circuit breaker inside the headlight switch itself in case the head lights take too much power but, since it is really a safety issue, this circuit breaker will self-reset. This means it will come back on after a while so you can try it again, and you don't have to push a reset button. The breaker' is visible as the white hourglass shape shown inside the headlight switch, on the left.

Another of the headlight wires goes off to the rear tail lights directly without stopping anywhere else.

That's wire number four. This wire for the tail light is not getting power from that big "circuit breaker protected" guy. The tail lights are powered by a wire from the STOP-TAIL fuse, making that wire

"always HOT." It just kisses this terminal and then goes on up to the dome light. That's wire number five and six. The power for the tail lights touches the stop light switch on the way from its fuse up to the headlight switch and on to the dome. All of these circuits remain "always HOT" along with the glove box lamp. Everything else must be 'turned on' but not these guys. It's one of those things you don't think about "how does that work?" as they always work...period!

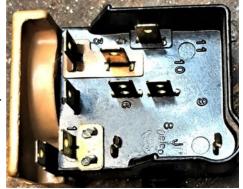
OK, now we've taken power from the dome light circuit and using some sliding contacts inside the



headlight switch we have lit up the tail lights. Note the headlight switch has two detents. The first one powers up the parking lights and the 'tail lights using two separate and unconnected electrical circuits. They are only connected physically by the knob in your hand. This photo (left) shows how two separate sets of contacts can be moved by simply sliding the block from OFF to detent '1' and then to detent '2'. 'OFF' is when these copper sliders are resting on the plastic frame of the headlight and connect nothing. The resting position of these sliders is highlighted in the upper-left photo.

The first pulled position slides both of these contact sets, one onto the BIG plus wire's contact which then touches the 'parks' contact to energize the front parking lights - alone AND with the same movement

(moving the block out to the first click) the other copper slider is positioned over the dome light's connection (which is always HOT from that fuse) and the tail lights wire - connecting those two. This action, of course, lights up the back tail lights, AND the front parking lights - completely independently, from one another. These two are separate because the 'factory design' says the parking lights should go dark when



the Big Guys come on. Hold that thought, as we have a surprise coming, later. The tail lights are lit up by sliding that contact across its brass bump, BUT if you look at the photo of the outside of the headlight switch you see a flat piece of stock has been shoved down onto two of the termi-

(Continued on page 9)

(Continued from page 8)

nals, making an external connection. I'll zoom in on terminals 3 and 5. This added strip takes the power from the dome light circuit, which was delivered to the tail lights (you'd think this would be wire number seven), but they don't put an external wire onto this terminal, as the power goes (internally) around the dash-light resistor (for dimming) which exits the headlight switch on terminal labeled '2', which we then count as wire number seven. That wire goes back to the fuse block where it then takes its (smaller fuse) protected self, up to the instruments/dash lights.

Now, here comes a kicker! Remember the always HOT dome light circuit? The one that does not come in/or out of

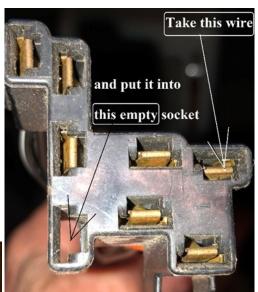


the headlight switch, but gives up some current as it passes by? The dome light bulb itself has one terminal that is always HOT, so how do you make that bulb shine? By grounding the other side, right? Well, the other side is wired back to - you guessed it - the headlight switch! Wires numbered eight and nine are connected to that outboard terminal right next to the BIG B+ wire that services the headlights in the headlight switch. Two wires, because the ground wire from the dome light is connected there, so the door switches can ground that wire. Yes, the door switches ground that dome light wire which is hooked to the headlight switch. There's one more hidden feature to this marvelous device. Rotating the handle of the headlight switch turns a plastic device that changes the dash light illumination, right...that plastic device has a bump on it that, at the end of its rotation, pushes a contact to ground, turning on the dome light even when the doors are closed! Good way to kill your battery if you use this during the day, and then forget to turn it off!

Let's hear it for this wonderfully complex yet, oh so common, MAIN HEADLIGHT switch. YEAH!!!

WAIT! There's even more secret stuff to be told! Remember above when we talked about the terminal that should hold wire number seven? It was casually mentioned there is no wire on that terminal, but in the connector to the headlight switch there is a socket for a terminal in exactly that spot. It's anyone's guess as to why the General put it there, but for your information the purple wire that goes "only to the parking lights" can be moved from its position in the headlight socket, over to this empty socket and simply pushed in. What this gives you is the modern situation (common on cars of today) where the front lighting shows more than the headlights. Sometimes called clearance lights or running lights, but in case one of your Big Lights goes out, and other drivers meet a "padiddle," these parking lights are also 'ON.'





By moving this one wire from its place in the connector over to a factory supplied position, you've modernized your CORVAIR...Early, FC or Late.

While you are marveling at this switch, don't forget to keep on CORVAIRing, Fran



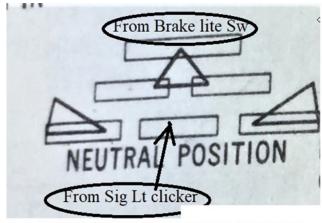
# The Signal Light Switch

The other day I was wondering how the signal lights could work all four corners, but the brake

lights only did the rears. I went digging. Back in the 50's when signal lights became self-cancelling it was deemed to be a 'good-idea' to have them use the same bulbs as the brake lights. Not only did you NOT give the wrong signal but THEY (?) could save a few bucks by using the same bulbs and circuits TWICE! It was also considered dumb to signal braking with the FRONT lights! So, all of this had to be invented at the same time.

To do that doubling up, both signal/brake circuits needed to run through the same switch, namely the DIRECTIONAL SIGNAL SWITCH shown in the drawing.

The squares in the drawing are the actual brass contacts built in that physical position inside the switch in the 1950's and 60's, and therefore into most CORVAIRs



DIRECTIONAL SIGNAL SWITCH

The triangles are sliders that you move when you want to signal left or right. The sliders move together as they are mounted in a matching block that faces the block holding the brass contacts. On the figure above, we see the sliders in 'neutral,' meaning the switch is set to normal driving, not signaling but WITH brake lights. Got that? Working brake lights is a 'normal' function and NO signaling is 'normal.' In the figure we see all three sliders...one slider is touching the three top contacts simultaneously and the bottom triangles are each sitting out in the open with nothing to do.

The single brass contact at the top gets its input from the brake light switch, intending to light both rear brake lights. So, when all three of these brass contacts are touching (and you step on the brake) both brake lights are connected to the brake light switch and are LIT-UP! The other two sliders are still out in the breeze, being normal - doing nothing.

Of the six brass contacts in the sketch, there is one in the lower center position, which is connected to the CLICKER, from the Key, so it's always HOT when we are driving - waiting for the driver to move the sliders, left or right.

Rt Brk Lite Left Brk Lite Lft Frnt Sig Rt Frnt Sig TURN POSITION NOT SHOWN but NOT the right because it's under control from the clicker. Check DIRECTIONAL SIGNAL SWITCH

In this view, on your left, we see the sliders have been moved into the 'right turn' position. One slider is now connecting the right-side lights (front and rear) to the clicker and the right-side light's are blinking. Another slider (upper) has been moved over so that only the left brake light can still be switched on by the brake light switch - the drawing.

If we were to signal 'left,' the top slider would still be touching that lone upper contact, but would then be making contact with only the right-side brake light. The right-hand brake light would be the only one working, if we are stopping, as we would be using the left bulb for signaling!

This circuit is still used today where common brake/signal bulbs are used. Some models have gone to RED brake lights and AMBER Signal lights - separately switched and wired. Probably all computer controlled, to save even more money!

Anyway, that's how you keep the brake/signal lights separate.

Keep on CORVAIRing, Fran

# PG cable leaks onto the floor

Years ago, I thought I had stopped the leak in my PG cable. The leak had been caused by a rubbing bracket that was not supposed to last for fifty years!



Anyway, I put silicone on the hole and shrink tubing over that, so I figured I had done the deed. Turns out that after several years it started to leak again.

This time I got a new gasket for the pan as I knew I had to re-attach the cable's ball-end that way.

I took down the pan and let it drip for a day or two then cut off all the old "fix," so I had a nice clean shift cable with a hole worn in it from the bracket. This time I hosed down the entire cable

length from the PG forward to the tunnel. What did I use to hose it down? Carburetor cleaner/ starting fluid and boy did that stink up the garage, but the plastic-coated cable felt nice and dry after that. I pumped a whole lot of silicone onto the cable (for about two feet) and slid the shrink tube down over that



big gooey mess! The heat gun aimed in the middle of the tube caused the shrinking to move out from the center to each end – squeezing the silicone out towards the end, as I went along. I used a long enough piece of shrink tubing to cover the cable from the tunnel all the way up to the attaching screw at the PG. I went that far back to cover the possibility that the sheath may have been compromised over the years at that end. Now, everybody is covered...BIG time!

The photos show the cable covered by the shrink tubing "tunnel to PG," in the top view. The second photo shows how close the shrink comes to the bolt holding the 'ball end' of the cable to the PG. Also shows my modification to the end of that cable. I cut off the tab that was used to bolt the cable to the PG and substituted a "L" clamp to do the job. This way I could slide a reasonably sized piece of shrink tube over that end of the shift cable.

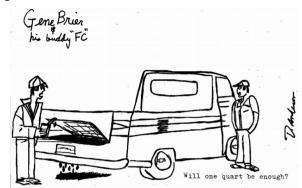


Let's keep on CORVAIRing, Fran



The third shot gives a ground-up view from the crossmember forward to the tunnel. One big fat shift cable, all sealed up nice and tight. You will have to get back to me in a few years to see if this 'fix' holds, but I doubt it will fail...HA!

I baked new paint onto the pan of the PG while I had it off. I even slipped a little magnet in an inside corner for posterity. Wish me a little luck to go along with this latest 'fix."

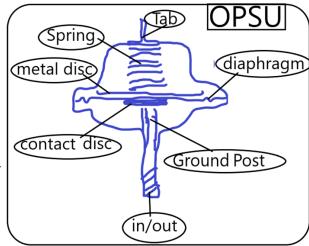


# Oil Pressure Sending Unit (OPSU)

Let's look inside one and see how it works.

On one end is the electrical tab that is hooked to the dash light, making the light go bright when the contact disc touches the ground post under the pressure from the spring, when there is little/ no oil pressure. The large flexible diaphragm keeps the oil down below, where it can come in/ out through the hollow tip of the oil pressure sending unit.

When the pressure gets to be around 4psi the diaphragm rises against the spring and disconnects the contact disc from the ground post - so the dash light then goes dark. If the pressure gets too high the metal disc hits the roof and stops, so the diaphragm is not ruptured.



The specs on these are usually 2-5psi and you can find them at any value in that range. A stronger spring would keep the oil light bright until 10-15psi and customers would complain if their light came on at a stop light - every time! So, the designers picked a lower and more acceptable trigger level. Chrysler units are set around 15psi. Basically, it tells you that you do have some oil pressure and it doesn't matter how much you have, so long as you have SOME! That tab at the top is not sealed, so the spring's chamber is free to let air pressure in or out. If/when it gets plugged pressure can be trapped inside and the lite will not respond to the oil pressure changes and us customers can get confused! If the diaphragm cracks, oil will come out around the tab, and you will have a slight mess. This is a common leak on all vehicles using an oil pressure sending unit. A replacement is less than \$10. Since it is such an unstable product a person should always have a few spares on the shelf. On some vehicles the oil pressure sending unit is placed in difficult to findspots. Of course, replacement on a CORVAIR is very simple, as it sits right up top by the GEN/FAN.

It's a handy little gadget that is hard to ignore and usually tells you it is working. A gauge is better, BUT! When you start your engine, it tells you - YES - you have oil pressure, so you are good to go!

So, Let's keep on CORVAIRing...Fran



# A Welcome Addition – you need an electric pump to use it.

Any carburetor that has sat for a while, especially CORVAIR carburetors because they cook after running, are not full of fuel when you want to start them. This additional device will allow you to check to see that your system is working and that you can fill your carburetor before you begin to crank and crank, etc.

You turn on the key and a few lights glow and this new one will too. You hit your priming system and watch as one of those lights flickers and goes dark. Now you know your carburetors are full and you can hit the accelerator pump to give them a shot. Then when you hit the starter...boom!

You all know what this is: two flare fittings and an 1/8" NPT from the old fuel pump. Cutting a carburetor fuel line and flaring the ends will allow you to insert the tee. An Oil Pressure Sending Unit (OPSU) is screwed into the tee and looks like this.





What you need before-hand is to know the pressure of your pump and the pressure the OPSU requires to "click-off". I have a nicely calibrated 0-10psi gauge, that reads 5psi when subjected to 11.5' of water column, so I know it is right. If

(Continued on page 13)

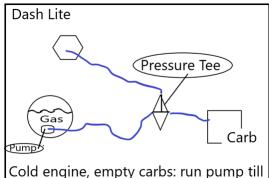
(Continued from page 12)

your OPSU doesn't switch till 5psi and your pump only does 4psi then it won't work. That is why you have to check what you have and maybe hunt around to find an OPSU that is at least one psi under your pump.

I went to the store and bought two OPSUs, measured them at 3.9psi and 4.1psi, which were both really close to my pump's 4.5psi. I didn't like to have them so close, so I took the OPSU off my '66 and it read 4.0psi - put it



back on! Took the one off my Rampside and it measured 3.1psi Great! I put the new one back on the truck and the 3psi guy went on the tee. Anyone who wants to do this can bring their car/truck over here and I will put my nice gauge on them to see if your machinery is a "GO". However, you must be masked if/when you come in person!



carbs are full: lite goes dark...Start!

This way we can Keep-On-CORVAIRing for some time to come. Fran

# A look inside a Temp Sensor

I told you about my problems with the temperature gauge in my FC. I told you that I blew one up! Well, I thought I'd cut it open to see what was inside. Want to see? This is what I saw after wiping the oil off my face. I guess I heated it too fast, and it had no time to accommodate the large expansion. In this condition it was of little, on no, use to me. Of course, I could always use it as an example of some dumb things that a person does, - ME - just poking around.

So, I took a saw to the smooth brass 'can' that you see here, on the right. I figured there was something inside that maybe I could look at or poke at. You can see there is a spring sticking out of the threaded tube, which I pulled on and was surprised to find it was an inch long! That would reach right to the bottom of that tube, it appeared to me.

I cut into the tube about halfway up from the end, hoping I wouldn't wreck anything and figuring the spring went to the end so halfway should be okay. Well, inside the brass tube was a paper lining. Very much like the late model shift-tube and its coaxial collar. I'm fairly certain the paper was there to electrically isolate the spring so the wired terminal at the top would only contact whatever was in the bottom of that tube, and not be shorted to the side.



Here's what was inside. You can see four things in the pic on the left; the threaded tube, the blown-off top, the spring (I threw the paper away) and a little hockey puck sort of thing that must be the sensor.

A Thermistor.

I held it between two wires so I could check its resistance and it was about 2,300 ohms at room temperature, and the resistance went down when I put it in my mouth. I figured if I tried to solder wires to the thermistor, the 500 degrees would kill it.



Anyway, that is what is inside of a temperature sensor. Just sitting down there at the bottom of the tube being held in place by a spring that will follow the length of the tube as it swells and shrinks with the temperature excursions it's built to tell about. The cylinder head temperature sensor in the 140 and Turbo engines is also a thermistor.

Just thought you might like to come along for a "look-see" - INSIDE! Keep on CORVAIRing, Fran

# AGE old question finally answered!!!

Many times, in the past fifty years I, along with others, have asked the question about those three huge dimples on the top of the FC fuel tank. For those of you who have led a more sheltered life this is how it looks to see an FC tank by itself. Notice the banana shape. About half of the volume is in that lower portion. Also note the position of the sender unit's location at the top of the tank which is totally unlike that of the cars. And here is a closeup of those holes (dents) purposefully placed in the top of all those tanks. Many times, I have wondered and have asked many different folks about them, all with no definitive answer and actually no answer at all...ever!



Today I saw why they were put in there, and also saw the perfectly good reason for doing so. Let



me digress just a bit. Remember the "exploding PINTO" where there were some factory-mounted bolts that were improperly positioned and that they punctured the Pinto's gas tank in a collision? Well, here's an example of someone seeing a problem and avoiding it by putting a dent in the tank where there is a nice sharp-pointed machine screw perfectly situated to punch a hole or three - in that FC 's tank.

These dimples are 2 ½ inches across and over an inch deep. Unfortunately, crap accumulates in these dents and as such they

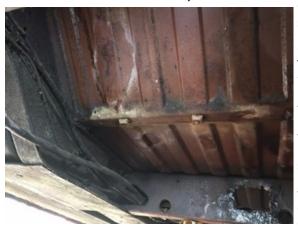
are more prone to pinholes. That's why you see flat bot-

tomed dimples on my nice clean tank as I had them Heli-arced in, about ¼" deep. By the way, Tank RENU in Shakopee (MN) does a very nice job of cleaning, coating and welding gas tanks.

OK, I've teased you enough. Here's why there are big dimples in the FC gas tank. The body of this truck is bolted together and unlike other Corvairs sits on a substantial frame. The FC is load rated from the factory to carry more than 34 Ton and the deep frame shows it. I actually carried 1-1/2 tons in my Rampside and nothing has broken! I would not recommend doing it as the machine is not built to steer or stop or barely GO with



that much load in it. 500 pounds in the bed feels 'good and solid'. Anyway the tank is under the front seat and the truck bed (where the floor slopes down to meet the low floor of the bed is the corner the tank fits around) between the frame members. In the Greenbrier that slope is where



you put your feet when riding in the center seat. That sloping floor meets the low bed where a series of bolts lock the metal sheets together. As you can see they weld a nut in place and drop a 3/8" screw down into it. The tops of these bolts are visible in a Rampside at the very base of the pocket behind the front seat. The bolts are 8-10" apart, all the way across the truck, three of which are directly above this interesting lower portion of the fuel tank. The tip of the screw you see in the photo sticks down about ½" leaving room for a half inch of dirt to accumulate - again! The straps that support the tank hold it tightly up against the truck bed. The factory put slabs of greased cradboard between the tank and the body. I put a few piles of Silicone on top of the tank just before it goes up. Sort of glues it in place.

Anyway - - There's the answer to that question from long ago.

Fran Schmit

# A Glove Box LED

I needed a light in my glovebox and I had some LEDs that I had purchased a while back to light

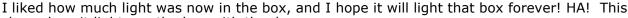


up my Early dash. Turns out that some LEDs give a whole lot more light than the old hot bulb ever did. Just as a comparison I put a hot-wire dash light, a front facing white LED and an LED that shines all around with all three of them together on the same string. To see a comparison, take a look. The hot wire bulb is doing its job at 12Volts. The single LED in the center of the photo is shining nicely out on to the paper. The third guy, which has five LEDs pointing in all directions, is there as well, I chose to use the one with the most light output and set about my building task.

The button has to turn off the light when it's pushed so I chose a SPDT switch. That type of switch gives me the option of being ON when the button is pushed or being OFF when the button

is pushed. Since I wanted the light OFF when the door is closed, I chose that option and it is the same as a refrigera-Since the FC dash has the defroster duct right tor's light. through the corner of the glovebox there is a dent in the cardboard right where the light should be. So, I made a holder for the switch (so only a little of the button showed) and then stuck the LED onto the switch at an angle to miss the corner of the cardboard. Here's how it looked when I was done.

I stuck the unit into the factory hole, where the switch is supposed to go and the light came on right away.



shows how it lights up the box with the door open. That slip in the box is from the radio, telling me how to set the clock when 'daylight saving' screws me up, again.

I had to open/close the door a couple times to be certain the light went out when it was closed. If it didn't, I had planned to add a drop of silicone to the button you see in the top left of the photo. As it turns out my suspicions were in vain as I could see the light snap off as I slowly squeezed the door shut.

Keep on CORVAIRing, Fran



Hi all,

I do hope you've enjoyed this special all technical edition of the newsletter. It's one of the many extras planned for the celebration of Corvanatics' 50th Anniversary in 2022.

Stay tuned for more celebration extras coming in the following months.

Your editor,

MOLLY BACON



# Contact Information

# President

Dale Dewald 906-482-2872 49595 Blessent Road Hancock, MI 49930 d66dewald@gmail.com

### Vice President

Ken Hand 248-613-8586 1896 S. Gregory Road Fowlerville, MI 48836 vairmech@aol.com

# Secretary/Treasurer

Molly Bacon 989-246-8046 5425 Morrow Road Gladwin, MI 48624 corvanatics@gmail.com

# **Eastern Director**

201-447-4299 Tim Schwartz 5 Riverview Lane Ho-Ho-Kus. NJ 07423 tim@bristolnj.com

### Central Director

Chris Brown 989-246-8046 5425 Morrow Rd. Gladwin, MI 48624 funvairs@gmail.com

### Western Director

Stephen Brown 503-628-0291 32829 SW Unger Road Cornelius, OR 97113 SGBGJB@yahoo.com

# At Large Director

Billy Cannon 256-839-1672 2256 Coosa Co Rd. #7 Goodwater, AL 35072 gtochief@gmail.com

### **Technical Editor**

Gary Baxter 918-645-8451 7590 North 140 East Place Owasso, OK 74055 morsa66@outlook.com

### Historian/Webmaster

Steve Spilatro 740-374-8778 635 Fifth St Marietta, OH 45750 spilatrs@marietta.edu

# **Newsletter Editor**

989-246-8046 Molly Bacon 5425 Morrow Road Gladwin, MI 48624 CorvanAnticsNews@gmail.com

**CORVAN ANTICS** is the bi-monthly publication of Corvanatics, a Chartered Chapter of the Corvair Society



of America (CORSA). Established September 1972, Corvanatics is dedicated to the preservation and enjoyment of America's most original and innovative small vans and light trucks, the Chevrolet Corvair 95 Series.

Corvanatics is open to anyone with an interest in Forward Control Corvairs. Annual dues are \$10 for an emailed full color newsletter and \$15 for a mailed black and white newsletter. Application and payment is made to the Secretary/Treasurer

either through the Corvanatics website at www.corvair.org/ <u>chapters/corvanatics/membership.php</u> or by mail. If mailed, include a completed membership form. Forms can be printed from the website or obtained directly from the Secretary/Treasurer.

Stories, articles, photos, memorabilia, or any other item for publication should be sent to the editor. They can also be sent by email to <a href="mailto:CorvanAnticsNews@gmail.com">CorvanAnticsNews@gmail.com</a>. Authors are asked to submit at least a photograph of themselves for the article with any other photos.

Technical material received will be sent to the Technical Editor for review.

For advertising in the newsletter, please contact the Secretary/ Treasurer. Members can have a free small ad in the newsletter. Display advertising is also available at the following rates:

- Full page \$25
- Half page: \$15
- Quarter page: \$10
- Business card (2" x 3.5"): \$5
- Photos for ads are \$6 each and can be color or black/white

Please submit print-ready or typed copy and pre-payment to the Secretary/Treasurer. Authorization and payment must be received prior to each issue. All ads must be Corvair-related.

Deadline for publication is the 15th of February, April, June, August. October or December.

### **Awards**

Old Cars Golden Quill Compact Chapter Award - 2020

Tony Fiore Memorial CORSA Chapter Newsletter Award - 2020 1st place, 2019 2nd place, 2018 2nd place, & 2015 3rd place

Corvan Antics uses material from many sources and may not always give appropriate credit. If your material appears without acknowledgement, we thank you for your contribution. It was used in good faith to help preserve, maintain, drive and enjoy our Corvairs.



Founded in 1969, CORSA is group of automobile enthusiasts working to satisfy the common needs of individuals interested in the preservation, restoration, and operation of the Corvair. CORSA's long range goal is to promote reproduction of parts and render technical assistance to increase your enjoyment of the Corvair, and to further the general public's appreciation of the car.

Corvanatics encourages membership in CORSA. Visit their website, www.corvair.org