

LEEKY



SEEL

CORVAIR MINNESOTA NEWSLETTER

President's Page

Here it is, October again. Soon the leaves will be changing and there will be a crispness in the air. We'll also be enjoying our last few days driving our Corvairs before it's time to tuck them in for the winter. However, before the Corvairs go into hibernation, we have our Fall Day Cruise on October 11th to look forward to. Details are elsewhere in the SEEL. My e-mail hasn't exactly filled up as yet but I'm sure everyone is waiting until the last minute. Please let me know soon so I can contact the two restaurants we'll be going to.

We actually made it to a few car shows in September. Cara and I went to the Blaine car show on Sunday the 31st which is sponsored by the Hudson, Terraplane, and Essex car club. We were the only Corvair there but did see several unique vehicles, including a Chrysler Imperial Limo. Of course the following Saturday was Classics by the Lake in Buffalo. We had several Corvairs in attendance as well as two Corvettes, a Mini Cooper, and a Cadillac Allante. No trophies were won but the weather was near perfect and the company was great. We also made the Victoria Cruise night the following Wednesday with four Corvairs in attendance.

A thank you goes out to Bill Cook again this month for arranging our meeting change of venue at the last minute. The Peppermint Twist in Delano was the original meeting place but they are still on limited hours and were closed on Tuesday. Bill managed to secure the meeting room at the Green

October 2014

Mill in Plymouth. John Herkenratt sent an e-mail out to everyone of the change and we had a pretty good turnout despite the last minute changes.

Our next meeting is back at the MUM at 7pm. We will be opening the nominations for officers for 2015. We are also looking for events and activities for next year so start thinking now and bring your ideas.

In the meantime, enjoy the remainder of the classic car season and drive those Corvairs.

Stay Tuned,

Lee Knauf
CMI President



Answer to last month's back page quiz: our own VP Gary Nelson in about 8th grade. Thanks for playing!

2014 Classics by the Lake, Buffalo MN

This year Corvair Minnesota was represented by Corvairs, Corvettes, an Allante and a Mini! The weather was beautiful and breakfast at J's was exceptional. I believe a few folks stopped at J's after the show for an ice cream cone, too (alright – it was at least me). Sturges Park on the shores of Buffalo Lake is a great venue for a car show – check it out next year!



Rampside by the lake



Early and Late sport trucks (LOL)



Bruce's 'vert always looks classy



Don's Corsa- lookin' prettv nice



Lee shows off the junk in his trunk (kidding!)



Jim's car looking good today, too!



Corvair (& etc.) Minnesota car club?!



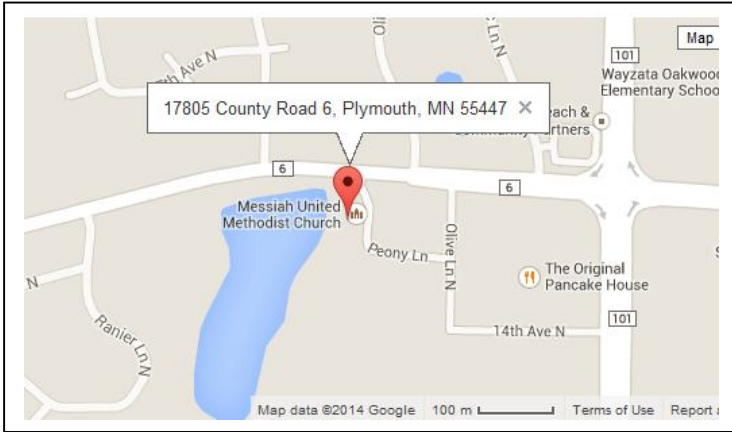
Jake's car – matte black w/ red interior – nice!

Plus hundreds of other cool (but not Corvair) vehicles!

Check it out next year!

Upcoming Corvair Minnesota Events

CMI's next meeting, October 7th, will be at MUM (Messiah United Methodist Church) at 7 p.m.
17805 County Road 6, Plymouth - downstairs



- Oct**
- 07 Membership meeting – MUM
 - 11 Fall (day) trip (& recognition of the introduction of the Corvair (10/02/1959)
 - 12 Roadsters Swap Meet, State Fairgrounds (<http://roadsterstwincities.com/>)
 - 12 12th annual Drive for Kids – (<http://bolderoptions.org/events/drive-4-kids/>)
8-10:30 a.m. start, noon to 4:30 finish; St. Paul to Red Wing
 - 30 Board of Directors – **TBD**
- Nov**
- 11 Membership meeting – MUM (voter's meeting)
 - TBD** Board of Directors

Job Well Done

The other day an old neighbor boy came by with a bad ball joint on his truck. Asked me about it and I mentioned Gary to do the work, but Gary is pretty busy right now - - I said he could use my tools but they can't leave here. He got the ball joints, a video on You Tube of how to do it, and set to work. He did need some assistance, and I did get my hands a little dirty but I did not get on the ground!

In the afternoon when the job was nearing completion I had to leave and told him to "clean up".

The next day when my Mary and I were leaving for our morning coffee I saw something on the driveway where Dave had been working. Some chunks of rust, a little oil spot.....and a used Band-Aid! Truck runs fine! Job well done.



Fran

The Belleville Washer

I was inside my Saginaw the other day and found a Belleville Washer on the Mainshaft, right next to the rear bearing. I had heard of them in my youth but didn't know they still existed. Of course my Saginaw is 50+ years old so that puts it in the age of, "my youth" - - - 50 years ago! So I can't say if they still use them today, or not; however they still sell them, as evidenced by their availability on the internet, so I'm assuming it's still a good idea. In some places I've seen what is called a wave washer, which is a similar device. Our shop manual calls it a spring washer. (Royalties?)

Belleville what, you say? Let's say you have a shaft that has a lot of spinning devices on it...these devices are spinning a various speeds so they need a lot of oil between themselves - - such as gears 1,2,3 &4 in a manual tranny. Once you have checked the fluid level and found the HYPOID lube to be up to snuff, you will want them all to behave themselves. This means no bouncing back and forth while doing the spinning thing. A thin steel washer that has been bent into a "wave" shape, can be slid onto that shaft to prevent bouncing back and forth between the gears by acting as if a spring is pushing 'endwise' on the components on that common shaft. Let's say the washer is made out of 10 mil steel (0.010" thick) and is bent into a wave shape that is 50 mils high....that means anything that comes closer than 60 mils will be sprung back - - keeping those things in their correct positions. If those parts are 30-40 mils apart then the Belleville washer will be placed between them ..."spring-loading" them apart.....and preventing any banging back and forth along the shaft. Angle cut gears will surely push to the side when power is applied...let's look at how the gears face off against one another in a tranny.



The big brown shaft in the back is the guy who does all the pushing. If he's spinning with the top, in the picture, coming out towards me then its angle cut gear is going to try to push the driven gear sideways. When a certain driver is slamming through the gears and jerking out the clutch for maximum effect..... those gears, after taking all this abuse from the powerful CORVAIR engine, will be shoved hard, left or right, along the output shaft. A spring that keeps the banging to a minimum would be a handy thing right in there....hence the Belleville washer. The output-shaft (carries the power out, into the Diff) of this tranny supports all the gears shown at the bottom of our picture. What you see in the picture are 'in' and 'out' gears; input-gears that are turned by the engine -through the clutch - and out-put gears that are fitted to the output shaft that turn the wheels - through the Differential (those are the gears you see at the bottom). The 'in' and 'out' gears have different numbers of teeth on them: corresponding to the ratios of the speeds designed into that tranny. My 4sp Saginaw has ratios of 3.11, 2.20, 1.47 and 1.00 in gears 1 thru 4, with reverse having the same ratio as the first gear (3.11:1).

There is an element on the output shaft in the photo that appears to be a pulley - on the bottom right of the picture - that is, of course, NOT a pulley but it is called a synchronizer sleeve.....pushed back and forth by the shift fork. There are two synchronizer sleeves in a 4sp (and two shift forks) - - one to do the 1 and 2 gears and another for the 3 and 4 gears. The one most visible in the photo is the 3-4 sleeve. Does look like a pulley, doesn't it? The synchronizers are crammed left/right by this sleeve as they forcibly match (synchronize) the speeds of the gears being shifted.

2014 Fall Cruise

Join us for an October Fall Cruise on Saturday, October 11th. We'll start at Egg and Pie Diner in beautiful downtown Chaska at 9am for breakfast. Egg and Pie is located across from the Gazebo Park in the center of town.

After breakfast we'll take a scenic drive to Minnesota Harvest Orchard outside of Jordan. When we say scenic, we mean no HWY 169. We'll spend some time at the orchard enjoying the fall colors, fresh apples, and Corvair camaraderie.

Depending on time and everyone's wishes, we will then travel south to Jim's Apple Orchard, which is the big yellow barn south of Jordan on HWY 169. Not only does Jim's have apples, pumpkins, and squash, they also have over 100 varieties of Root Beer and other sodas. They also bill themselves as the largest candy store in Minnesota.

We will then take another scenic drive (i.e. no HWY 169) through Belle Plaine and north to Chaska Towne Course for dinner at Charlie's Grill.

Please e-mail me at vairy69@comcast.net if you plan on attending. Hopefully the weather will still be nice enough to drive Corvairs (or Corvettes, Novas, Fieros or Mini Coopers). Please let me know by September 30th so I can make reservations at Egg and Pie and Charlie's Grill.



Visitor Update

At our July meeting at the Minnetonka Drive-In, we had a visitor from Texas named Michael in attendance. He's a bit of a Corvair adventurer; you may remember him by the flat tire he was sporting. It may be a story worth telling as most of us tend to err a bit on the careful side of things these days.

I think Michael is older than you might think, as he's been a Nurse for 20 years or so. His job involves being available on the phone in the evenings after regular office hours. He can do this from anywhere and decided to take advantage of that this year and do some traveling. He purchased a 63 Monza 102 HP 4 speed with AC, did a few things at home like new transmission mounts and set out to see the USA. He travels about 5 hours each day, a nice pace to stop and see what's happening along the way.

He was in Fargo when I first heard from him on the Internet. His Corvair had stopped running a few times and had hardly any brakes with an appetite for brake fluid. On his way here, he saw the first Corvair of his trip, turns out it was Don Shafer on his way to Willmar. Michael dropped the Corvair off with me for a few weeks and flew out for a family vacation. I installed a dual master cylinder to get the brakes working properly. I think with the AC and hot weather, he was having vapor lock trouble, so I installed an electric fuel pump. It was missing some perimeter seals, so I got them patched up to keep the hot air from recirculating. I did a little work on the carb linkage to get things synchronized and did a little tuning. I put in a new rubber Pitman Arm bushing as it was "all over the place when passing Semis". I didn't think the tires were good but he planned on getting some along the way.

It can be difficult to figure out where to draw the line. This was a solid chassis Texas car but not restored by any means. The rear wheel bearings looked like they'd been replaced. It had a stock generator, charging fine, gave it a few drops of oil. I did what I could along the lines of a certain philosophy and wished him well.

I picked him up at the Anoka train station with the Corvair on the trailer. He had the flat tire in Minnetonka but found a pair of replacement tires the next morning and was on his way. I got a picture from him in South Dakota and another from Times Square en route to Maine. I hadn't heard from him for a while and wondered if he'd made it to Florida as planned. He had been to Florida, was in Texas and returning to Florida. I guess he did okay with the white Corvair on a wing and a prayer.



Jim Brandberg

The Belleville washer fits right in there....see photo of a real one.

Once the gears are spinning at the same speed – synchronized - they can be connected (usually without grinding....!). The power then comes from the clutch gear (the first one at the right in the picture, which is 'married' to the countergear) and through the transmission. All the gears are doing their ratio thing and spinning under the push of that countergear until you go to shift. When a gear is selected and you crank on the stick - - the synchronizer has to slow or speed-up the all of the powertrain between the engine and that gear (not just the gear) – This means a lot of spinning steel.....the countergear and the clutch gear along with the input shaft and the clutch disc (!) all get synchro'd – all in the fraction of a second that you are "feeling" it go in. I often think of my synchro's when I am shifting, as they do their job so smoothly without a squawk, and certainly never a grind!



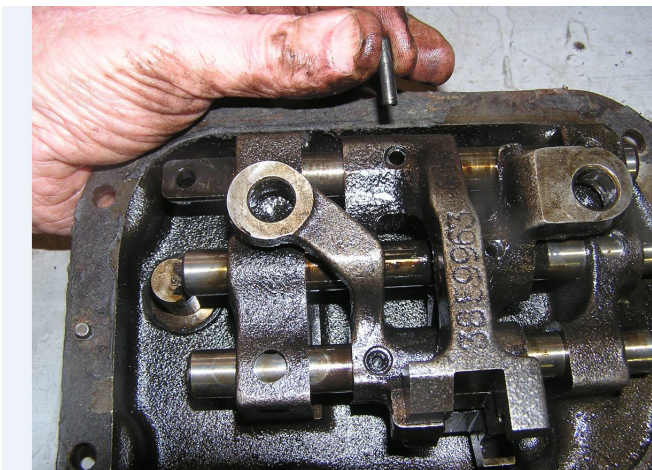
Happy shifting! Fran

Good Tranny – NO reverse

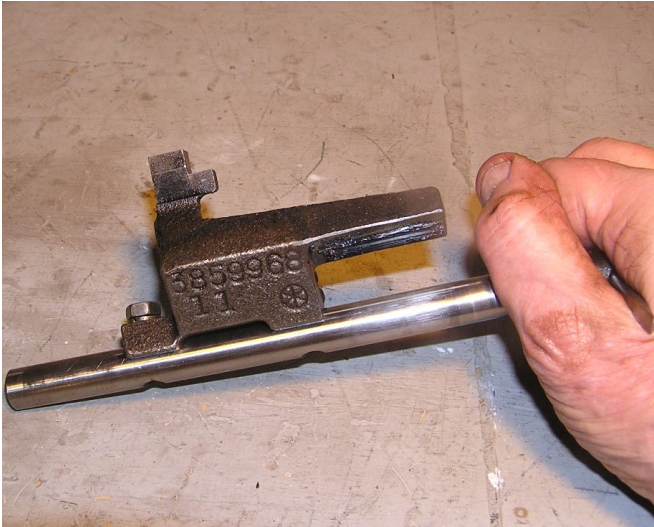
I have this Saginaw that I am preparing to put into my '66. I don't remember who I got it from – or when, but it is painted on its top...."GOOD" and then along the side it is also painted – in a different color....NO REV. For years I have pushed that tranny from corner to corner thinking that someday I will investigate that NO REV, because usually in a CORVAIR the NO REV is because the linkage is too loose and it can't move the shaft for Reverse - - not that there is actually NO reverse gear.

OK - - I put it on the bench and cleaned it off - - it was sort of piggy! I checked that it did turn in 1,2,3 &4. Then I tried REVERSE. I twisted the shaft and felt the detent – strong and definite – that was good. That is where I hit the roadblock....the SELECTOR shaft would not move in the correct direction. Well, I thought I guess that would give me NO REV if I couldn't get the shaft to go in. I ran through the gears a few times to make certain I was going the right way - - neutral between 1 and 2 then depress the detent and shove in the direction of 1. It was a "no go" situation.

So, I took off the side cover. What a complicated mess! Yeow!, I was certainly getting in a lot deeper than I ought to be!!! Here's a quick photo of how the insides of that side cover appeared to me.



I figured that if I could depress the detent but not slide the shaft inwards then the problem was with the Selector Shaft's not being able to slide in. The selector shaft is in the case – not in the cover – so I turned my attention away from the complicated three shaft cover to the one shaft at the bottom of the case. I took out the shaft and inspected it for nicks and scratches or burrs or any evidence of wrong-doing. It appeared to be – as far as I could see – normal! I looked down into the case to see if the detent was at fault. There was/is the detent sitting nicely down in the corner of the case, with a shiny spot on the end of it where the selector-shaft's-bolted-on-arm [the SHIFT FINGER] made contact.



The photo showing the Saginaw's innards has a big arrow painted on it - - pointing to the tip of the detent. The detent was fine and so was the shift finger. I put it all back together - - which is the hardest part of this whole procedure.

The shift finger is in the case, as I said before, and the shift-shafts are in the cover along with the forks that do the 1:2 shift and the 3:4 shift and the reverse shift. Getting them all back in/on the moving parts is fun! I did it a few times till I figured out how to read what it said in the manual. Anyway after I reinstalled everything I tested it to find - NO change! A good tranny with NO REV! As all of this testing and stuff with the gears, etc. was going on I finally found that I could get it into REV by banging it REALLY HARD. I was assured that it was safely in REV when I did that and it would come out of REV very nicely. The clue was right there in front of me but I couldn't see it.

After sitting on the situation for a couple days I decided the problem had to be in the reverse detent built into the side cover. Again, I removed the side cover and went after the shaft that is hooked to the reverse shift fork. In the first photo above I showed the cover's complexity - you can also see my fingers holding a roll pin. That roll pin connects the shift finger to the reverse shaft to the reverse shift fork. All of that worked fine albeit a bit stiff. Very firm but doable! I took out the reverse shaft and saw the nice shiny 3/8" ball sitting snugly down in its pocket.....on top of its very own actuating spring. I figured that for some reason that spring was too strong for my transmission. The book says all the springs and all the detent balls are the same (so you don't have to keep track of them), so I figured if I screwed up on this spring I could always get another one. I took out the spring and slid the shaft back and forth with the utmost of ease. The spring was a stiff little bugger (see photo of spring and ball in my hand)so I decided to shorten it. The factory spring was about 0.80" long and I kissed it a couple times with a grindstone to shorten it to about 0.7". Since cutting off the end of a spring changes the shape of that spring's end, I reversed the direction of the spring in its hole and dropped the ball onto a 'normal' end.



I reinstalled the reverse shaft and the reverse shift fork and the shift finger part into the cover and then replaced the cover onto the side of the Saginaw.

I scrubbed off the paint that said NO REV, as it now seems to function exactly as I would expect/want. Happy Shifting!..... both forward AND Reverse!!! **Fran**

CMI Classifieds

Parts for Sale:

- '64 - steering box (core value \$145.00) rebuilt \$185.00
- '62 - 3 piece front trim NOS \$250.00
- '65 - front grill - very good \$100.00
- '63 - 700 rocker trim (narrow) NOS
- '62 - 500/700 (narrow) rocker trim NOS
- '61 - '63 car steering box - used (core value \$125.00) \$125.00
- '65 - '66 steering box - used (core value \$125.00) \$125.00
- '65 - '69 headlight bezel NOS (1 left)
- '64 rear exhaust air grill NOS

FOR SALE ---- (25) 1965 WHEEL COVERS - (2) WITH CORSA INSERTS ONE OR ALL -- REASONABLE
 JERRY BERGE 480-250-8816

New: Engine electrical harness, ball joints, Pertronix ignition; headers (110 and 140); custom exhaust; Wallen rebuilt starters generators and alternators; mufflers; rebuilt flywheels; new belly pan for late; crank and rod bearings.
Used parts: complete engines, transmissions, differentials: call for parts – I have a large inventory.
Also: 1969 110hp engine (runs great, sealed & pretty) Rare – aftermarket tube style early air grill – Solid flywheel

I also offer full time Corvair repair

Gary Nelson 612-866-3247 or cell: 612-644-1258

I have four Corvair Bucket seats if anyone has a need ...
 Two are black not sure of year, one white 64, one red 65.
 Bud Brady, 952-891-4790....Cell 942-303-2340

Wanted: Looking for a “fixer – upper” Greenbrier or van.
 Ken Laursen phone 612-735-8955 or:
rockabillyrebel61@yahoo.com

Corvair Repair In Minnesota

Your Place or Mine
 Part Time Casual, Off Season Is Best
 Mobile Service, Trailering Service, Reasonable Rates
 CORSA, Corvair Minnesota and SCCA Member

Jim Brandberg
 2214 - 293 ½ Av. NW, Isanti, MN 55040
 763-444-9334 jimbrandberg@aol.com

1962 Monza Coupe- Slightly over 42,000 miles, runs well, no rust, in very good condition. Automatic transmission, four new tires. White with black interior. Fun to drive but at my age it's getting tougher to get in and out! **Make offer**
 Bill Von Hassel 952-946-2245 or VonH9700@aol.com





1964 Spyder. Low mileage runs & drives excellent. W/ 5 factory orig. knock off wire wheels. interior very nice. rare tissue dispenser. new tire & brakes. tuned up; new silicone wires.some rust on bottom but not through floors. 20 footer could use paint but presentable as a driver. \$6000/ offer. Bruce Alexander 605-996-1039 Mitchell, SD.
brucealexander11@yahoo.com
<http://sd.craigslist.org/cto/4609889228.html> for more pics



1964 Monza convertible; Maroon, Black interior and top.
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 45587 Chippewa Trail, Vining, MN 56588
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This 1967 Chevrolet Corvair was converted by John Fitch's shop in Connecticut to Fitch Sprint spec including a four carb, 140 HP motor and 4-speed at the behest of the then owner and CORSA founding member Chris Happe of Ontario, Canada. Conversion took place in September of 1971, right as Fitch was closing up his shop for good, and the seller believes this car could very well be the last one converted - and chances are it was also the only four door Sprint.

<http://bringatrailer.com/listing/1967-chevrolet-corvair-fitch-sprint/>



Have a safe Halloween!

CMI is a non-profit corporation, chartered with The CORVAIR Society of America. Send CORVAIR Minnesota's \$20.00 annual dues, payable by Jan 01, to the CMI Treasurer. Membership in CORVAIR Minnesota entitles you to the monthly newsletter, "The Leeky Seel", with free ads for members, a club window sticker, discounts on club activities, information on parts availability, and good advice on the preservation and enjoyment of the CORVAIR automobile.... Yeah!

THE LEEKY SEEL

3370 Library Lane
St. Louis Park, MN 55426-4224
TEMP - RETURN SERVICE REQUESTED



October 2nd - Anniversary of intro of the Corvair - Drive yours!