

Newsletter of Lehigh Valley Corvair Club Inc. (LVCC)

the fifth wheel

FEBRUARY 2018

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HTTP://WWW.CORVAIR.ORG/CHAPTERS/LVCC

ESTABLISHED 1976



Come to Our Next Meeting! Date: Wednesday, February 28, 2018

Time 7:30 PM. Place: Lehigh and Northampton Transportation Authority Headquarters (LANta), 2nd Floor Meeting Room, 1060 Lehigh Street, Allentown, PA 18103. Latitude : 40.587607 | Longitude : -75.474405. Bring a guest!

Don't get locked out. If you arrive late, the main door of the LANta office building may be locked. This is for security purposes. But the facility is open around the clock, so ask one of the garage employees to direct you to the second floor.



The Fifth Wheel is published monthly by Lehigh Valley Corvair Club Inc. (LVCC), a chartered chapter for the Corvair Society of America. We accept articles of interest to Corvair owners for publication. Classified advertising of interest to Corvair owners is available free of charge to all persons. Commercial advertising is also available on a fee basis. For details, email our newsletter editor, Allan Lacki, redbat01@verizon.net.

Action Item List for Chevy Engineers (Sixty Years Too Late!)



It's a fact that the engineers at Chevrolet never had the time to make fundamental improvements to the Turbo-Air 6. Too much time was wasted exploring dead-ends in the quest for higher performance.

This was made clear by Robert Benzinger in his speech at the 1975 CORSA National Convention. Benzinger, who was Senior Project Engineer at Chevrolet during the development of the Corvair engine, explained the situation like this:

I think Chevrolet's top management made an error in judgment on many of the things that happened in the high performance image of the Corvair. We spent an awful lot of time chasing fuel injection, chasing all those things that would relate to the enthusiast's impression of high performance. And we spent an inordinate amount of time, resources and valuable engineering talent in chasing a piece of the market that was really rather fickle. That jumped from Corvair to Mustang to Corvette to ... you know. Fickle is the right word. In the mean time I think we neglected some of the things in the Corvair that would have appealed to a more stable portion of the market; to wives, the families who were looking for the handling and reliability in terms of wet and sloppy weather. It was one of the things I was a bit peeved with. By mentioning it tonight you see, I'm still a bit peeved. I think we spent too much time, too much effort. Squandered too much in terms of resources chasing a performance image that just plain wasn't in the cards.

We've all groused at one point or another about Corvair fan belts and oil leaks from push rod tubes. Maybe those are some of the things Mr. Benzinger had in mind when he mentioned reliability. But in hindsight, there are other things that could have been done better with the engine for the sake of the mechanics who work on Corvair engines. Here's a to-do list for the engineers, sixty years too late!

<u>Changing the Oil Filter</u>. OK, it's 1961 and you bring your brand new Corvair to the local Shell station for an oil change. The kid removes the oil

filter and spills the oil all over the engine compartment. You can't blame him. It's almost impossible to remove a Corvair oil filter without spilling it, and the kid surely isn't aware of the plastic bag trick. (Did they even have plastic bags in 1961?)

The spilled oil runs down into the lower shrouds and now your heater blows smelly hot air, your windshield has an oily film and the fancy aluminum grill below the bumper turns into a greasy dirty mess.

Chevy could have been avoided this maintenance problem by locating the filter in a better location, like below the engine tins, where spillage would not make a difference.

Cylinder Head Stud Pull-Out.

You're installing rebuilt cylinder heads on your Corvair. You're tighten all the nuts with your torque wrench. You get to the last nut and all of a sudden, the wrench spins free. Uh-oh. The stud has pulled itself right out of the block. And now you need to disassemble half the engine to fix it!

Well, you can't blame Chevy for that. This wasn't a problem with new Corvair engines. But after years of service, corrosion sets in and the threads in the aluminum block weaken. How much better it would be if the threads were deeper and larger in diameter so they would hold more torque!

<u>Replacing the Camshaft.</u> Wouldn't it be nice if you didn't have to split the engine from the transaxle and then split the crankcase to replace the camshaft? To get at the camshaft, you basically need to rebuild the entire engine!

According to the experts, Chevy located the camshaft below the crankshaft so the hydraulic lifters would be bathed in oil. OK, fine.

(Continued on page 5)

Action Item List - Photos

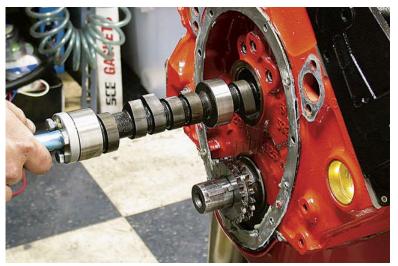


Oil Filter! This Volkswagen 411 engine has the oil filter located low so it can be changed from beneath the car. Removed from below the car, it can be replaced without spilled oil on the engine tin.



Camshaft Installation! Here's a small block Chevy V8. The camshaft can be pulled straight of the engine block because the bearing journals are larger in diameter than the cam lobes. If applied to the Corvair engine, this design would eliminate the need to split the crankcase in half to remove the camshaft.

Trivia! Flat-tappet camshafts are machined with a slight 0.0025- to 0.005-inch taper on the face of the cam lobe that spins the lifters. This also imparts a rearward thrust to the cam, to keep it from walking out of the block.





Deep Sump Oil Pan. Here's an upside-down view of a Subaru boxer engine. Their oil pans have a deep sump, made possible because their camshafts are located in the heads rather than below the crank-shaft.



Action Item List - Photos

Rod Caps! It takes patience to install rod cap nuts on a Corvair engine because there is so little room inside the crankcase to fit a torque wrench.

Access would be improved a bit if the engines were equipped lamp-chop connecting rods, like a Triumph.



Distributor Cap! One of GM's better ideas from the '60s - a distributor cap with a sliding-door window. This made it possible to adjust the points with-

out removing the cap.





Engine Tin! It takes so many kinds of screws, nuts and bolts to fasten the tin to the engine! Here's a list compiled by "Melb-Mike" a Greebrier owner out on the Corvair Center Forum.

LOWER SHROUDS AND REAR BODY-ENGINE SEALING STRIPS;

14 @ 1/4-20 x 1/2" cap bolts
4 @ 10-24 X 3/8" cap screws
6 @ #10 X 5/8" (approx) Hex Head sheet metal screws
2 @ #10 X 1/2" slotted head sheet metal screws
1 @ #12 X 5/8" Hex Head sheet metal screw

UPPER SHROUDS

13 @ 1/4-20 x 1/2" cap bolts
6 @ 3/8-16 X 3/4" cap bolts
1 @ 5/16-18 X 3/4" cap bolt
9 @ 10-24 X 3/8" cap screws
6 @ #12 X 5/8" Hex Head sheet metal screws
3 @ #10 X 1/2" Hex Head sheet metal screws

We Welcome New Member Frank Johnson!

(Continued from page 2)

But the experts go on to say the camshaft drive gear had to be located at the front of the engine, next to the bellhousing so that it would be protected if the back of the engine scraped the pavement - a possibility while driving your Corvair in rough terrain or perhaps a steep driveway ramp.

I'm not convinced that the camshaft drive gear had to be located at the front of the engine. The rear of the Corvair engine is protected by a hefty skid plate. If the camshaft drive gear was located there, at the rear of the engine, you wouldn't have to split the engine from the transaxle to get at the camshaft.

And to eliminate the need to split the engine case in half, the camshaft journals could have been made larger in diameter than the lobes. This is common design practice with most other engines.

Oil Pan Leaks. Corvair oil pan gaskets are prone to leak. Why? Because the oil pan gasket is always submerged beneath four quarts of oil in the crank-case.

If Chevy replaced the flat oil pan with one having an honest-to-goodness sump that could hold all four quarts, that would put the crankcase oil below the oil pan gasket and stop some of the leaks.

Installing Rod Caps. Have you ever removed or installed Corvair pistons? There isn't much space inside the crankcase to loosen or tighten the rod cap nuts, especially the ones on the bottom. It's difficult to get any wrench in there, especially a torque wrench. Imagine the poor ladies on the assembly line trying to torque the rod cap nuts. Ugh!

Chevy could have made it easier by

specifying asymmetrical connecting rods, also known as lamb-chop rods. It's not a farfetched idea. Triumph engines had lamb chop rods back in the 1950s and so does the current Subaru 3.6 liter boxer engine.

Setting the Dwell. The distributor caps on GM V8 engines had a little shutter window that made it easy to fine-tune the ignition timing dwell. Their 6 cylinder distributor caps didn't have this feature. I don't know why. This is a long-standing gripe among all enthusiasts of 1960s 6-cylinder Chevy and Buick engines, not just Corvair guys...

So Many Screws! Corvair engine shrouds are held together with so many little screws, nuts and bolts and in different sizes, too. What a pain in the head! Wouldn't it be better if you could remove and install the sheet metal with only one or two sockets?

And speaking of tins, couldn't they have combined some of them, so there wouldn't be so many to assemble?

January Meeting!

Attendance: Rich Greene, Tom Hambrel, Al Lacki, Larry Lewis, Scott Oberholzer, Ed Prescott, Fred Scherzer, Dennis Stamm and Dick Weidner.

Secretary / Treasurer Report: Dick Weidner read the minutes of the last LVCC meeting held in October. He also gave the treasury report. At the beginning of November, the club had \$1,308.14 in its checking account. Since then, the club received \$321.98 from the sale of turbo carburetor donated by Charlie Potts and \$10 in dues from new member Frank Johnson. Expenses amounted to \$23.57 for the newsletter. Our current checking account balance is \$1,616.55. The members in attendance approved both of Dick's reports. Tech Questions: Scott Oberholzer is looking for a way to either repair or replace the speedometer in his Corvair Corsa instrument panel. It registers vehicle speed correctly, but the odometer no longer works. He rummaged through his spare parts and found another Corsa speedometer, but the odometer in that one doesn't work either. Scott also found that Clark's Corvair Parts no longer stocks rebuilt speedometers for Corvair Corsas. Al Lacki said he has the same problem with his Corsa speedometer. Al had a spare speedometer rebuilt by a shop, but he hasn't installed it yet. (The repair shop is Powl's Speedometer & Auto Repair in Lancaster, PA).

Show & Tell: Dick circulated two GM parts manuals – one for 1960 Chevrolets (including Corvairs) and one for all Corvairs, 1960 through 1969. They list each and every Corvair part, including engine parts, body parts, suspension parts, trim parts, radio parts – every-thing! Dick and Dennis Stamm pointed out that several parts, such as brake drums, are interchangeable between Corvairs and other Chevrolets depending on year and model.

Dick also circulated a comprehensive Corvair air conditioning book written several years ago by CORSA member Greg Reilly. It covers not only air conditioning systems installed by the factory, but also aftermarket and homebuilt systems for Corvairs. Alternate locations for condenser installation are illustrated, including condensers in the trunk and in the rear fenders.

Prescotts at Barrett-Jackson. Ed Prescott circulated a photo of his three grandsons, Davis, Kyle and Luke, standing next to the Corvair Corsa that sold for \$27,000 at the January Barrett-Jackson auction in Scottsdale, Arizona. See separate article in this issue of the Fifth Wheel! THE FIFTH WHEEL

Corvair Cooks Corner! Texas Red Chili

Here's a recipe from the Martha Stewart website. (https://www.marthastewart.com/859641/heathers-texas-red-chili). For many Texans, it's sacrilegious to add beans to chili, which originated in San Antonio and is the state's official food. Whether you're Texan or simply legume-averse, you're going to love these hearty no-bean chili recipes. Two different types of beef and chiles give this classic deep flavor and Texas-red color -- it's definitely not for the faint of heart.

INGREDIENTS

- 1 1/2 ounces dried guajillo chiles
- 1 chipotle chile in adobo sauce, plus 1 tablespoon sauce 1 pound boneless beef short ribs, cut into 1-inch pieces Coarse salt and ground pepper
- 1 tablespoon vegetable oil
- 1 1/2 pounds boneless beef chuck, cut into 1-inch pieces
- 1 medium white onion, diced small

Chipotle adds a hint of smokiness as well as a touch of heat to this earthy chili. If they're not available in your grocery store, substitute 1/2 cup dried chili powder instead.

DIRECTIONS

1. Place guajillos in a large bowl, cover with boiling water, and weight with a small plate to keep submerged. Let sit until pliable, 15 minutes. Reserve 1 cup soaking liquid. Drain guajillos; discard stems and seeds. In a blender, blend guajillos, chipotle chile and sauce, and soaking liquid until smooth, about 2 minutes, scraping down side as needed. Pour mixture through a fine-mesh sieve set over a medium bowl, pressing on solids; discard solids. Set chile puree aside.

2. Heat a large Dutch oven or other heavy pot over medium-high. Season short ribs with salt and pepper and cook until browned, about 5 minutes. With a slotted spoon, transfer to a medium bowl. Add oil to pot, season beef chuck with salt and pepper, and cook until browned, about 5 minutes (do not crowd pot; work in batches if necessary). Transfer to bowl with short ribs.

- 4 garlic cloves, smashed and peeled
- 1 teaspoon ground cumin
- 1 teaspoon dried oregano (preferably Mexican)
- 2 tablespoons cornmeal
- 3 3/4 cups low-sodium beef broth
- 1 to 2 tablespoons white vinegar



3. Reduce heat to medium and add onion, garlic, and 1/2 cup water. Cook, stirring and scraping up browned bits with a wooden spoon, until onion is translucent, about 3 minutes. Add cumin, oregano, and cornmeal and cook until fragrant, 1 minute. Add meat, broth, chile puree, and just enough water to cover meat, if necessary; bring to a boil over high. Partially cover, reduce heat, and simmer 1 hour. Uncover and cook until meat is tender and chili is slightly thickened, 30 to 45 minutes. Add vinegar to taste.

COOK's NOTES

Suggested toppings: corn chips, chopped white onion, grated cheddar, yellow mustard.

THE FIFTH WHEEL

SureGrip Head Studs

So, you're rebuilding your Corvair engine and, lo-and-behold, you pull a head stud out of the block while torqueing down one of the cylinder heads nuts. You think you've got problems?

Unlike Corvair engines, Cadillac Northstar engines are prone to blowing head gaskets after 80,000 miles for no apparent reason, and to make matters worse, the head bolts often pull out of the block when rebuilding the top end of the engine when making the repair. Many otherwise-roadworthy Caddy's have been sent to the junkyard because the cost of the repair is more than the car's worth.

A small company named Northstar Performance has developed a kit for fixing the damaged threads in the block and replacing the bolts with special studs. Here is what they claim:

Forget about helicoils or threaded inserts. There are all kinds of kits on the market. But nothing even remotely comes close to the SureGrip Stud Kit designed and developed by Northstar Performance.

These one piece CNC machined and heat treated studs completely eliminate the need for any type of threaded insert- the repair is the stud itself. There is a full 2 inches of thread gripping in the block- the most of any Northstar repair kit- and best of all it's a one piece repair.

The problem with threaded inserts is this: threads by nature are angled in a way that when you go to torque the head bolts down, it expands the insert in diameter. Sometimes when the insert expands in the block, the block cracks, or the insert expands enough to let the fine-thread M11 bolt slip over inside the insert. This is completely eliminated with the SureGrip Studs. Also when you go with these studs, the torquing is now done from on top with a nut (steel on steel) rather than twisting a bolt under load into the aluminum. You drill the holes in the block, tap them, and then install these studs. Then install the gasket, head, and secure with the special washers and nuts included in the kit. It's that simple. Stronger than stock and more durable.

These studs have been tested and proven on over 200 engines to date with 0 failures. General Motors and Cadillac technicians who have used our studs swear they would never use anything else again.

Molzon GT38 Update

The 1968 Molzon Concept Corsa GT38, designed and built by GM designer Bill Molzon, was featured in the December issue of our newsletter. At that time, it was being put up for auction by Bonhams.

You may be wondering what happened at the auction. The GT38 sold for \$41,800 including commissions.



LVCC Classified Ads!

For Sale: : Right & left rocker panel trim for 1963 Monza. Used but fine for daily driver. Best offer. Clutch cable, new old stock and still in GM wrapper for 1965 to 1968 Corvair. Best offer. Pickup in Mohnton, PA. Call Carl Moore. 610 856-7630.

For Sale: 1965 Corvair Monza Sport Coupe. 110 hp Powerglide. Factory A/C. Evening Orchid paint. Approx. 60,000 miles. One owner for the past 37 years. New show-quality paint. All engine tin and suspension parts have been powder coated. Front disc brakes. Clark's AM/FM digital radio. Dual rear speakers. Rear antenna. A/C condenser relocated to 1966 position. Several additional features. \$14,000. Location: Clinton, South Carolina. For more info contact Jerry Lopez at (864) 547-1015.

Parts for Sale! Don Reinert, one of our members, would like to sell a number of items from his inventory of used parts.

- 1966 Front End Assembly: Complete with cross-member, upper A-arms, lower A-arms, brake reaction rods, springs, shocks, backing plates, spindles, wheel cylinders, etc. Basically, an entire front suspension assembly but without the steering linkage (also being offered for sale separately). Used except for the brake linings.
- 1966 Steering Linkage. Includes drag link, steering arms, idler arms and pitman arm.
- 1966 Rear Cross Member. The "yoke".
- 1966 Gas Tank with Filler Tube. Comes with filler tube and working sending unit.
- 1966 Right and Left Training Arms. Includes backing plates and hubs.
- 1966 110 Motor # T0922RA. Engine is completely intact and turns freely.
- 1966 140 Engine. Partially disassembled long block. Includes heads, bell housing, etc. Appears to be solid.

Prices are negotiable. With the exception of front brake linings, the parts are used. You can reach Don by phone at (610) 367-6830 or by email at dgreinert@comcast.net

For Sale: Parts, Parts, Parts New Parts Brakes Hoses, Air Filters, Oil Filters, Tune-up Parts, Brake Shoes, Shocks, Tail Light Lenses, Gaskets, Plugs, Cables, Choke Pull Offs, Electrical Switches, gas filters, caps, backup switches, suspension parts, Engine Bearings, Valves, Emblems, Exhaust, Turbo Parts, Patch Panels, Early Bezels, Head Studs, 140 Exhaust Extractors, Y Pipes, Mufflers, Fuzzies, Clutch Cables, Lower Bracket, Heim Joints, Models, Magazines, CORSA Magazines, Hot Wheels, Racing Champions Cars and much, much more. Contact Larry for pricing. Used parts Too many to list. Also – Corvair maintenance and repairs, October through March Larry Asheuer Call 267-994-1569 or email a-lcorvair@msn.com

For Sale: 1964 Greenbrier. 95 hp 3 spd. 105,000 on odometer. Located in Delaware. \$4,500.00 obo. Brand new complete brake system master cylinder lines shoes everything. Motor running and just resealed, rebuilt carbs. Complete fuel system redone with new rubber lines and tank cleaned. Starts first time. Body in great shape. Needs axle seals, shocks and some hinge pin work. Body work done (not a great job) in 80's and stored in barn since 1990. Some body filler in spots but not bad. No rear seat. Tires are 95% new. It does have rust underneath from wet floor in barn. (302) 377-5268.





Local Car Shows and Other Events

October 28 2017 - March 31 2018 :::: "They're Only Original Once, Survivor Cars"

Location: America On Wheels Museum, 5 North Front Street, Allentown, PA 18102. Call 610-432-4200 or visit http:// americaonwheels.org for time, map and directions. America On Wheels Museum is excited to announce the debut of the Changing Exhibit Gallery, "They're Only Original Once, Survivor Cars." The Gallery will showcase 12 totally un-restored vehicles. "These well maintained original vehicles are the standard by which restored vehicles are judged. They are the definitive document on how they were actually assembled at the factory as well as the parts and finishes that were used," states Alan Gross, Exhibit Chair.

Every Wednesday Night Year-Round :::: Cruise-In Car Show-Morgantown,PA

Location: 6176 Morgantown Rd, Morgantown, PA 19543. Behind McDonald's and Holiday Inn, Morgantown, PA. Time: 4 PM – 8 PM. All clubs, car types, trucks and motorcycles welcome. Open to the public. For additional information, call (610) 207-6100.

Sunday March 4, 2018 :::: 51st Annual Hamburg Swap Meet & Car Corral

Location: 123 South 4th Street, Hamburg, PA 19526. Time: 7 AM – 2 PM. Rain or Shine. Free paved parking. Over 100 indoor spaces with unlimited outdoor space & car corral Vendor information: 610-262-9718. General information & directions: 610-823-4656. Email: Lhedgehog1@aol.com. Hosted by the Ontelaunee Region AACA

Saturday & Sunday March 10 -11, 2018 :::: Hoods Up Weekend

Location: Boyertown Museum of Historic Vehicles, 85 S Walnut St, Boyertown, Pennsylvania 19512. Time: 9:30 AM Saturday to 4 PM Sunday. Come in and see early and experimental engines from Pennsylvania vehicles built right here in our backyard! Docents will be available throughout the gallery and carriage factory to answer your questions. This event is included with regular admission.

Monday July 23, 2018 :::: Northeast Corvair Council High Performance Driving Event

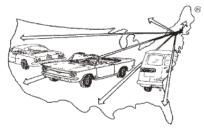
Location: Pittsburgh International Raceway Complex (PittRace) North Track, 201 Penndale Road, Wampum, PA 16157. Supplement your trip to the CORSA International Convention with a day at the track. Corvairs definitely welcome. Special "Taste of the Track program for novice drivers. Complete details at www.neccmotorsports.com

Monday through Saturday, July 23 -28, 2018 :::: CORSA International Convention

Location: DoubleTree Pittsburgh-Green Tree, 500 Mansfield Avenue, Pittsburgh, PA. For room reservations, call 1-800-222-8733, Group Code, CCA. Complete details about the convention are available online at: http://corvairpittsburgh.com/

Clark's Corvair Parts[®]

Our catalog lists over 15,000 parts for your Corvair. We carry engine parts, body panels, upholstery and much more! There are 1,000's of reproduced items available, pages of technical information and lots of other helpful hints.



Check us out at www.corvair.com or call today to order a copy of our printed catalog. You will quickly see why we are the world's largest supplier of parts and all your other Corvair needs. Clark's - More than Parts!

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Clark's supports LVCC by donating gifts every year for our door prizes at Das Awkscht Fescht.

Prescotts at Barrett-Jackson Auction

Ed Prescott's three grandsons attended the Barrett-Jackson auction in Scottsdale, Arizona in January. Their Mom and Dad live within walking distance of the auction, so they went just for fun. Ed has been there too, as recently as last year.

Here is a photo of Ed's grandsons standing next to the 1965 Corvair Corsa that sold for \$27,500. (Wow!)

And here is some information about the car from the Barrett-Jackson website:

Lot #165 - This Corvair Corsa underwent a high-quality, pan-up restoration to its original specifications and appearance down to the spread tire and the washer bottle. The original, born-with 164 ci 4-cylinder engine and 4-speed manual transmission were rebuilt and it has a rebuilt transaxle, new exhaust, carburetors and wires. It was finished in new paint throughout, with a new factory interior that features factory Rally gauges and tachometer and a hidden glove box stereo. This stock appearance show car includes its original spoke wheel covers and restoration receipts totaling over \$25,000.

It's worth noting that this particular Corvair has that rare "4-cylinder engine". Hah!

LVCC Officers

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Next Meeting: Wednesday 02/28/2018

From left to right: Ed's grandsons Davis, age 18 and then twins Kyle and Luke, age 16.

Photo of the same car from the Barrett-Jackson website.

