Heart of America Corvair Owners Association

VairCor



February 2021

Volume 57-2



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February 2021

As the saying goes, darned if you do and darned if you don't. While being set to have an actual meeting for February, the weather, not wanting to be one-upped by COVID, turned sour. We had a cold snap with temperatures that would have been dangerous to cars and people alike. Once again a decision had to be made with regards for the safety of our members and canceling the meeting was the safest decision. Here's to hoping that March will be cooperative with us! In the meantime, here are some more photos from the past year. Stay warm and safe everyone!





HACOA Calendar at a glance

Date	Event
Saturday, February 20	Cold Tuna, Terry Kalp's shop, Valley Center, KS
Tuesday, March 9	HACOA monthly meeting, Paul and Jack's Tavern, North Kansas City, MO
Tuesday, April 13	HACOA monthly meeting, Paul and Jack's Tavern, North Kansas City, MO

Presidential Ramblings

Keeping it in the Family

Well we can't seem to catch a break can we? We decided to finally have a meeting in February and the weather put a stop to that. I expect we will be back in March though. Things are starting to improve with the COVID numbers - I hope that continues. One note on Paul & Jack's is that the kitchen currently closes at 7:00 on Monday - Wednesday. It may or may not be back to normal hours when we are there in March, but be aware you may need to order your food before 7:00. They did tell me they'll keep the kitchen open as long as people are still ordering food, but I don't want anyone to be caught by surprise.

Most organizations and groups are trying to get back to normal in 2021 and Corvair people are no exception. Are you planning to travel to any Corvair events this year? I looked at the CORSA calendar and a couple things stood out to me. The Prairie Capital Corvair Association is hosting the CORSA Mini-Convention & Aviation Spectacular at the Corvair Museum in Glenam, IL May 19th to May 23rd. That sounds like it could be a good time. It's too far for me to want to go, but the 2021 CORSA International Convention is scheduled for July 27th through 31sit in San Diego. Then of course the Great Plains Corvair Roundup hosted by the Arkansas Corvair Club in October. I hope we can make a great showing there and encourage people to come to ours in 2022. See the CORSA Event Calendar for more information on any of these events.

On a personal note, I have made a job change. Kind of. I took a full time position with the company I had been contracting with since 2015. So basically the same job but I won't have to worry as much about being in or out of the budget each month. That will be a nice relief after 2020 and far fewer hours than 2019. With the cold there hasn't been much time in the shop but before that hit Julia and I were working on the engine for her Mustang. I won't go into it too much but right now I have 2 Ford small blocks in varied stages of disassembly. Hopefully one of these will go back to fully assembled and running before she graduates in May!

I hope everyone is doing well, and I am STILL looking forward to seeing everyone. Let's hope we catch a break in March and can get back to our monthly meetings!

-Travis



Clockwise from top left: Belton cruise night (August), Olathe cruise-in (August), September meeting (lowest number we've had!), Air Cooled Track Classic (September 12).

The Preventive Maintenance Series

Mike Dawson

Mechanical and Electric Fuel Pumps

The following is the outline used at the HACOA Fuel Pump Tech Session and is offered as suggestions to keeping our Corvairs as safe and reliable as possible.

Mechanical Fuel Pumps Currently Available:

Airtex: Clark's, Rock Auto, Amazon, O'Reilly, NAPA, Advance Auto Parts, Car Quest. Prices from \$45 to \$119.99. Airtex pump are re-boxed by many suppliers at various prices.

Carter: Limited Availability, they used to be re-boxed Airtex.

Delphi: Limited Availability

US MotorWorks: Junk, do not buy! (The "US" part is a grin) The one I bought did not even have a mounting hole and had very high pressure. (See PMS 153 on the HACOA.org website)

Mechanical pumps have contained the following defects from the manufacturer at various times in the past:

- Loose valve assemblies due to poor staking and the rubber flap valves may be affected by ethanol (curling up when hot).
- It may be missing the stand pipe which keeps leaking gas from entering the crankcase.
- Check for reinforced gasket material in all three gaskets (sandwich material). Non-reinforced material could be the wicking type instead of non-wicking.
- Make sure the hole for mounting is correct for your type of lock bolt. There are two bolts, pointed and blunt. Reshape your bolt if needed for best contact.
- Check that the screws are threaded completely through the bottom section of the pump and that they are tight. See PMS article in the December 2020 Vaircor or on the HACOA website: HACOA.org (Number 153).
- Check that the stem protrudes very close to 7/32 inch (.220).
- Check the dimension from the mount hole to the tip of the stem: 15/16 (0.930).

Remove the lower push rod from the engine and check the tip for wear (it has a chamfer for reference check), plus be sure the Teflon button is not missing or turned sideways; either will cause pump issues.

Installation of mechanical fuel pumps is critical. Be sure the lock bolt point fits the hole, do not over tighten or you will pinch the pushrod (but it does have to be tight). Feel the bolt fit in to the hole with your fingers, stroking the pump very lightly as you feel the bolt enter the hole. Snug it firmly and tighten the lock bolt. Recheck after a few miles by trying to rock the pump in its mount.

Electric Fuel Pumps That I Have Used

Airtex: E8016S (2.5-4.0 PSI) Pulse Type Pump – Thumps but quiet while driving. I have installed many with no failures to date.

Airtex: E8012S (5-9 PSI) – Same as above, the higher pressure is not necessary for stock cars.

Airtex: E8016S (2.5-4.0 PSI) Vane Type (Airtex outsourced this pump to China but it has worked fine to date). **Carter: P60430** The "Made in USA" (stamped on the pump) Carter pump works fine at 4.5 PSI, the "Made in China" pump *does not work*. I checked four of the Chinese units and talked to the Carter tech center with no resolution except

to get refunds, which I did. See also PMS 134.

An electric fuel pump must have a pre-filter and the filter that comes with the pumps is small. If you have an original gas tank or one that has had old gas from a decade of storage you should consider changing the tank and the filter on the tank pickup.

- An electric pump should be installed as close to the tank as possible for best results. The pumps are more efficient on the pressure side than the vacuum side plus the less time dry running the better. There is adequate room just to the rear of the vertical member (rear of the tank) on both early and late model cars. You can fabricate a cover plate to protect it from debris depending on the filter you use. FC vehicles have an easy install along the vertical member just to the rear of the tank where the steel line connects to the rubber hose from the tank; also lots of room for a larger, see through filter.
- Another method for cars is to mount the pump in front of the tank against the vertical side of the trunk. This requires longer hoses but allows an easy change of filters (or pump) because unbolting the pump lets it hang down for service. It also protects the pump from debris.
- Mount the pump with rubber bushings, washers, grommets or whatever between the bolt head on the top and the pump bracket for quiet operation.
- Solder and shrink fit all connections and protect the ground connection from weathering.
- The power wire can be attached to a spade connector at the fuse block. I usually use the radio fuse upgraded to a 10 amp, but the electric pumps all pull less than 1 amp and you could switch power source at the fuse block if there was an issue with the radio circuit. Make a note about how you wired it.
- You could also add an inertia switch that would shut off the power in case of a crash. They are available both new and used on eBay for less than \$20. Mount it anywhere vertically and in line with the power wire.
- The rubber fuel hose next to the starter needs to be checked and /or upgraded since with an electric pump it would be under pressure instead of the original vacuum.
- Safety: Since you would be looking up at your work area be sure to use a light source that would avoid any gas drips and would not shatter if it did get dripped on.
- I highly recommend using the Clark's fuel pump by-pass plate installed in a mechanical fuel pump. It is a \$50 item but eliminates fabricating lines (I did that on one of my 140 cars and spent \$30 on lines, fittings and a lot of time). The Clark's plate also appears stock. Installs in your old pump with hand tools and instructions are included

Hose transfer suggestion:

- 1. Use two clamps on the original hose at the tank connection (medical clamps or flat finger Vicegrips).
- 2. Cut the hose over a pan with enough hose after the clamps to insert a plug in the end of the hose coming from the tank. The rear line will quickly drain into the pan.
- 3. When you are ready to connect the fuel pump to the tank, loosen the tank clamp, quickly pull off the hose (with the clamps and plug attached) and push on the newly routed outlet hose. The connection will be easier if you temporarily leave the pump loose. You should be able to keep spillage to a minimum into the pan.
- 4. And finally, electric pumps very rarely leak but if they did, the fuel would not be distributed throughout the engine compartment by the fan belt (and in the heater) plus possibly ruining your harmonic balancer.

Other folks may have different (and better) ideas on the fuel pump situation. If you have a product source or electric pump installation you have good experience with, please share with your fellow Corvair enthusiasts!



Early Fuel Pump Installation



Late Fuel Pump Installation



Greenbrier Fuel Pump Installation



Fabricated cover

Classifieds

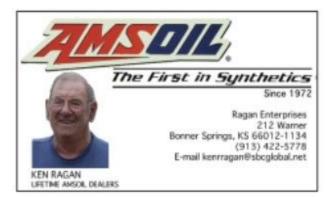
The Tool Crib

Club tools for rent Contact: Ken Ragan

212 Warner Rd, Bonner Springs, KS 66012 913-422-5778 E-mail: kenrragan@gmail.net

Tool	Deposit	Monthly rental fee
Harmonic balancer puller	\$3.00	\$1.00
Ramps, auto	\$4.00	\$1.00
Torque wrenches		
1/2 inch drive 20-150 ft/lb	\$15.00	\$2.00
36 inch drive 100-1000 in/lb	\$15.00	\$2.00
Floor jacks and stands	\$25.00	\$3.50
Ring grove cleaner	\$3.00	\$1.00
Dwell/tach meter	\$5.00	\$1.00
Greaser: Fan and idler bearing	\$5.00	\$1.00
Ken's advice	\$.02	Grain of salt
Hubs: Rear (towing LM PowerGlide)	\$5.00	\$1.00
Pushrod tube extractor	\$10.00	\$2.00

Rebuilt harmonic balancer Internally regulated \$105 exchange for a 63 amp Corvair rebuildable core alternators \$85 exchange Rebuilt Corvair starters with solenoid \$90 exchange Mike Dawson Professionally rebuilt Corvair clutch disc on a mdawson1961@sbcglobal.net welded center Borg & Beck core with a thickness 816-322-4057 of .325" \$55 exchange with same core. Reproduced end plates for the 12 and 8 plate oil cooler. These are the two pieces of sheet metal that help keep all the hot air





from the oil cooler moving out the bottom instead of back in to the engine compartment. \$10 each

 Dick Berger still has several sets of wheels and tires for sale. Most are 14" diameter. Let him know if you're interested. 678-650-4246

Free-

Late model block with two pulled studs (can probably be easily repaired).

Has 164 ci crank (will need turned) and -891 (110/140 HP) cam.

• 4 late model 13" wheels with tires (decent tread but show cracking) and Monza wheel covers.

Contact Chris Green (call or text) 913-369-5861 or email: hacoa1news@gmail.com.

Classifieds, continued

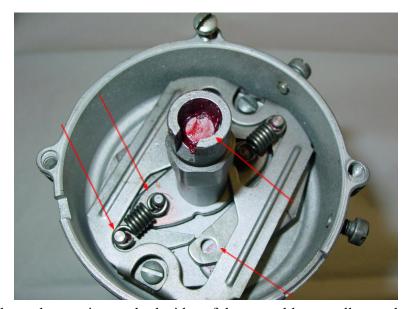
Wilson Liter has several items for sale, including:

- 1966 transaxle, code AA (3.27 non-posi) and V8 bellhousing: \$400
- 140HP engine (code T0223RN). Engine turns over but has not been apart: \$600
- Set of 6 Sealed Power 0.060" over pistons on rods with cylinders (one has a crack): \$600
 Or \$1,500 for all. Wilson Liter 417-667-6927. wilsonliter@hotmail.com

Other Events and Tidbits

Addendum to last month's tech article:

Due to an editorial oversight (which is to say, me not catching it when Google transferred it!), the photo from last month's tech article was inaccurately represented. The image is shown below corrected, with the arrows pointing to the correct locations on the distributor (as Mike had it originally).



Lightly lube at these points on both sides of the assembly as well as under the rotor.

Mid-Winter Tech Session

After a one day delay due to the weather, we had our tech session at the Dawson's on Sunday, January 31. Although it was about 10 degrees cooler than the original date of the previous day, we didn't have to contend with a day-long rain and general gloomy weather. There were about a dozen HACOA members present for the session, including one who was flat and 3-D at the same time.

On tap for this session were fuel pumps, both mechanical and electric. Mike had a wide assortment of mechanical pumps that had failed for various reasons along with some of the different electric offerings. Everybody had their own



pump to disassemble and examine to determine its failure point while Mike discussed the various ailments he's found over the years. As a result, we came away with a list of pumps that work and those that definitely do NOT work (see tech article, this issue).

After getting our collective hands dirty, everyone washed up and enjoyed some pizza and visiting with one another.

Talking while wearing our masks just meant that we had to speak a little louder;

we might just need some more meat lover's pizza! Another great tech session in the books.





HACOA birthdays

February	
Name	Date
Mark Whitman	8
Christine Bacon	9
Irmajean Barta	14
Don Wagner	15
Fred Bybee	19