

Heart of America Corvair Owners Association  
**VairCor**



September 2020

Volume 56-9



**In this issue**

Calendar of events.... 2

President's message...2

Preventive Maintenance series.... 4

Classifieds..... 7

Other events and tidbits..... 8

### August meeting

Well it felt like we were having the auction again, even though we weren't. Having their outdoor patio area, Paul and Jack's is in a good position to allow us to still meet while not being inside, and we took advantage of it.

After the board had their meeting, the general meeting was underway. Starting off was member news from Gary Jones reporting that Marti has been responding well to treatments. In addition to this, Don Wagner presented new members Paula and Larry Roberts, and Paula is Jack and Donna Hill's daughter. Despite the losses we've had in recent years, it's a blessing that we continue to have new members like we've had!

Treasurer Suzy Sherwood reported that, as a result of our auction proceeds, we were able to make a donation to Warriors 4 Wyandotte. Our donation makes it possible for them to feed nearly 700 kids!

Reports from the website, newsletter, tool crib and parade chairs yielded nothing new or significant (and partially due to not all chairs being present!). However, following that, Bill Bennett reported on a gentleman in Harrisonville, Missouri, who has a pair of Corvairs for sale (one is an early model convertible and the other is a '69 coupe). Additionally, Fred Bybee advised of a '64 convertible that is for sale at a very reasonable price (read: cheap!).

Mike Dawson then gave a status update on the Airtex fuel pumps which have fluctuated in quality over the past few years. One change is that their mechanical pumps are being produced in Illinois again but their electrical pumps are being manufactured in China. Time will tell how these changes hold up.

Despite many upcoming events being canceled or

*Continued on page 3*

---

## HACOA Calendar at a glance

Date	Event
Tuesday, September 8	HACOA monthly meeting, Paul and Jack's Tavern, North Kansas City, MO
September 12-13	Corvair Track Classic, Hastings, NE
Saturday, September 26	Working Tech Session, Dawson residence, Belton, MO
Tuesday, October 13	HACOA monthly meeting, Paul and Jack's Tavern, North Kansas City, MO

---

## Presidential Ramblings

Early on I had hoped that more things would be back to normal by now but obviously it's more of the same.

There have been a couple of events since last time I wrote to you. In Corvair related events we had a good turnout at the August Belton Cruise night. Thanks to Scott for once again hosting and ordering pizza. It was a perfect way to do a cruise: park your car, go look at the other cars, go to a friends house for pizza and beverages and then go back later and get your car. Not hours and hours of sitting in a lawn chair next to the car. I recommend trying to make it to the next one!

In personal news August was quite a month. Marie moved into her dorm at Iowa State University to start her freshman year of college. She only has a couple labs and a couple small classes in person with the rest being online, but she is making the best of it by making new friends and studying hard. Also in August, Marcia and I celebrated our 25th wedding anniversary! Hard to believe it has been that long but can't imagine life any other way. We spent the day at Nighthawk Winery near Paola helping pick their grape harvest and then enjoying complimentary lunch and wine.

Upcoming events include the Corvair Track Classic in Hasting, NE. We have 7 members going that I am aware of right now including Scott Allison, Chris Green, Keith Hammet, Charlie Clark, Dick Berger, Dominique Allen (who scored a ride in Armen Badeer's really nice late model 4 door) and myself. It will be the track debut for my blow through turbo setup so we'll see how that goes. I am pretty certain we will have a great time no matter what with this group!

Once again the meeting will be outside at Paul & Jack's, which I plan to continue as long as the weather stays good. When it turns cold we will have to revisit what to do with our meetings assuming the pandemic is still ongoing.

Hope to see you there, but as always if you don't feel safe or don't feel well, please stay home.

-Travis

## August Meeting, continued

postponed, including the SCCA Solo Nationals, Ol' Marais River Run and the Round Up, there are still a few things happening. Some of these are the Belton cruise, Boulevard Swap & Shop, Corvair/Aircooled Track Classic, HACOIA tech session, Luna Tuna, and (possibly) the Christmas party. Be sure to check our calendar for these and other events happening.

After a call for a roundup chair, nominating committee, and Christmas party reminder, the meeting was adjourned. Due to the circumstances and being outside, there was no formal program so there was some scattered socializing afterwards. If you're feeling up to it, we look forward to seeing everyone at the September meeting!



---

## The Preventive Maintenance Series

Mike Dawson

### Checking Clutch Shafts and Discs

When you are performing a clutch rehab, one of the checks that should always be made is to insure the clutch shaft is perfectly straight and that the clutch disc turns true and slides easily on the clutch shaft splines. My usual way of checking has been to insert the shaft into the transaxle, slip the clutch disc onto the shaft splines and turn the differential by hand using the side gears. The end of the shaft should not wobble and the disc should only have a slight wave as it turns. If either has excessive movement or the disc does not slide easily, you may not be able to get the clutch to disengage without using the entire pedal travel or the transmission may grind going into reverse plus generally shifting hard. And you can also get excessive wear in the pilot bushing from shaft wobble.

The shafts get bent when the engine is removed while leaving the transaxle in the car or, when the transaxle is removed with the engine still in the car. The clutch shaft will usually hang up in the pilot bushing and the shaft pulls out of the transaxle for its full length as one component is pulled away. If alignment is not perfect while doing this or something slips, you can get a bent shaft that is hard to see. Then there is the guy who may have grabbed a shaft from the shop floor thirty years ago and used it for a pry bar. The shafts will bend and they are hard to check rolling them on the counter. I have found two that were bad enough to cause shifting issues so a check while it's out is important.

During a recent clutch job I needed to check the shaft but I did not have an assembled transaxle to use as noted above. The solution for easy checking took less than an hour to assemble and worked perfectly. There are 5 different clutch shafts used over the years so I built an adjustable lathe setup (spun by fingers) that will accept the shaft at the two original lathe machining points. Threaded rods with 45 degree points sanded on to them and positioned exactly the same distance from the base provide a perfect check. I can now quickly check shafts that I am servicing as well as those in inventory. If you need one checked, give me a call.





The above set up can check any clutch shaft and the disc.



The threaded rod adjusts for the different shaft lengths.



The angled tip fits into the lathe turning point; a drop of oil provides smooth turning.

## **Working Tech Session & Front Yard Car Show**

**Saturday, September 26, 2020 12:00 – Until Finished**

**16001 Oakland Ave, Belton, MO**

Take this opportunity to enjoy some great socializing, get to know other members, and most important, take care of any repair or maintenance item you have been contemplating doing. Come and be comfortable knowing that parts, tools and advice will be available to make sure you can drive home whatever project you take on. There will be a sign up sheet for assistance.

A sample of items that can easily be addressed during the afternoon are: greasing fan bearings, packing wheel bearings (front and rear), carburetor balancing, distributor rebuilding, brake jobs, oil changes, etc. Brake replacement requires

---

turning drums; I can have exchange items ready if you let me know ahead of time. Also available is gas and Mig welding, sandblasting, and glass beading.

The following will be furnished: grill food, service, soft drinks and adult beverage. Please bring a dish or snack to share; grilling begins at 4:00 and spouses are encouraged to attend.

**Please feel free to do whatever you feel comfortable with if attending, such as masks and sanitizer; at recent events I have noticed that all the folks in our groups have been respectful of others. Consumption of alcohol based beverage is encouraged for disease control and I doubt if germs can live very long in my garage anyway! We do plan on grilling burgers and brats.**

**Please RSVP** to insure food and beverage supply and I will email all potential attendees of any changes.

Mike Dawson 816 322-4057, mdawson1961@sbcglobal.net

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](mailto:kenrragan@gmail.net)

Tool	Deposit	Monthly rental fee
Harmonic balancer puller	\$3.00	\$1.00
Ramps, auto	\$4.00	\$1.00
Torque wrenches		
½ inch drive 20-150 ft/lb	\$15.00	\$2.00
¾ inch drive 100-1000 in/lb	\$15.00	\$2.00
Floor jacks and stands	\$25.00	\$3.50
Ring groove 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

Internally regulated  
63 amp Corvair  
alternators \$85  
exchange



Rebuilt harmonic  
balancer  
\$105 exchange for a  
rebuildable core


Rebuilt Corvair  
starters with  
solenoid \$90  
exchange




Mike Dawson  
[mdawson1961@sbcglobal.net](mailto:mdawson1961@sbcglobal.net)  
816-322-4057

Professionally rebuilt Corvair clutch disc on a  
welded center Borg & Beck core with a thickness  
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

**The First in Synthetics**  
Since 1972



KEN RAGAN  
LIFETIME AMSOIL DEALERS

Ragan Enterprises  
212 Warner  
Bonner Springs, KS 66012-1134  
(913) 422-5778  
E-mail [kenrragan@sbcglobal.net](mailto:kenrragan@sbcglobal.net)

*Helen Moore*  
Handmade Ceramics



816-678-8860  
[hrmoore14@gmail.com](mailto:hrmoore14@gmail.com)

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.  
Has crank (will need turned) and -891 (110/140 HP) cam.  
Contact Chris Green (call or text) 913-369-5861.

**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](mailto:wilsonliter@hotmail.com)

**For Sale:** Ray Sego is selling: 1964 Corvair convertible , 4-spd., good top. NOT a rust bucket. NOT running/driveable. \$999.99. Contact Ray at: [SEGO5661@SBCGLOBAL.NET](mailto:SEGO5661@SBCGLOBAL.NET)

---

## **Other Events and Tidbits**

### **The things we find and continue to learn...**

For those that don't know, I took ownership of the '69 coupe that Bill Bennett reported on at the August meeting. It intrigued me because it's the only year of late model that I haven't owned, although I only had the 68 for 2 weeks. For the record I haven't had a '60 or '62 but there is still lots of time to correct that. This makes the 15<sup>th</sup> Corvair for me to date.

Anyway, the body on the '69 is rough which is a turn-off for many. There is a fair amount of rot and copious amounts of Bondo on the car. The bed-liner stripe at the bottom of the sides, some rough trim, a rotting front bumper, and a dent in the driver's rear quarter panel doesn't do anything to help the appearance either. Oh, and as a reminder, it doesn't run and hasn't for 20+ years. However, the interior, floorboards, door jams, and structural areas of the car are in decent shape.

The original engine, with the VIN stamped on it, was no longer with the car. The car came with a spare '65 (RN engine, with 110 heads) and complete drivetrain which I have since installed into the car. The engine only needed a harmonic balancer, carburetors, a few surround tins, and general tune-up items. Compression is good and even across all cylinders and even though there is lots of silicone hanging off the oil pan it doesn't appear to leak with synthetic oil in it. The car itself was missing a few odd-ball things such as the front strut rods on the rear suspension, engine to body seal rails, and the 110 badge on the engine cover. There were also many errors in installation of the engine that had to be corrected; resistor and starter wires were twisted together both going to the starter side of the solenoid, aftermarket heat/cool cable which was way too long and binding, transmission and parking brake cables under the dashed were crossed (where the brake could wear a hole in the shifter cable), rear most perimeter shroud spanner was upside down, and the tunnel pan was cut almost in half.

The engine installed that came in the car was a mutt and will be most of the story to tell here, I've learned a lot. The installed engine is a 61 (Y) block with 1960/80hp heads. I didn't know that 60 heads had a separate hold-down for the pushrod tubes, have the casting through the head for the choke rods, have less cooling fins on the heads and larger holes for air movement, and that the valve covers (6-bolt) were held on with Philips head bolts. Other than the

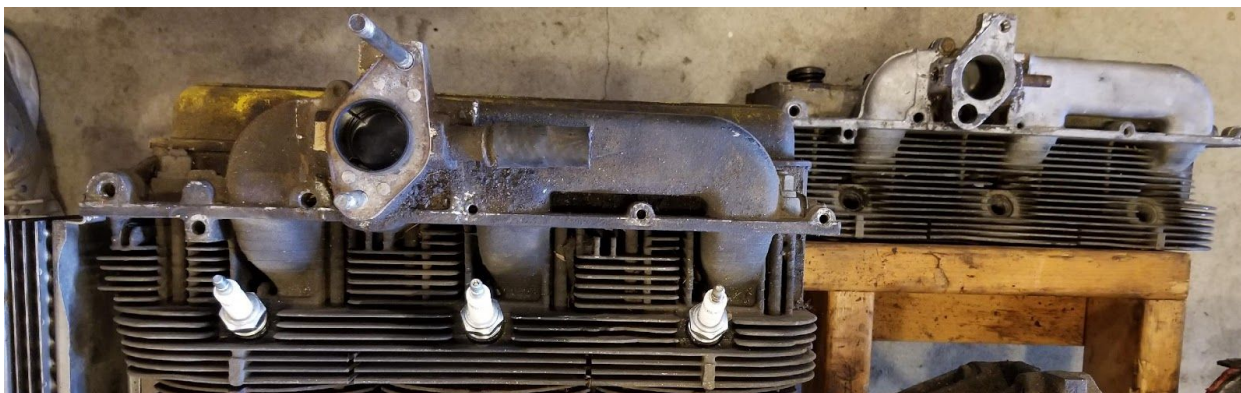
---

relocation of the dip-stick, the block appeared to be the same but this is all mated to, what appears to be, the original 69 drivetrain. I wouldn't count on finding the correct flex plate on this setup only because of the other anomalies discovered. Findings included; 110 distributor on the low horsepower engine, fuel filters in the engine compartment, wrong clips on the carburetor linkage, overly large hole drilled in the late model vent tube, and barn door spring on the accelerator.

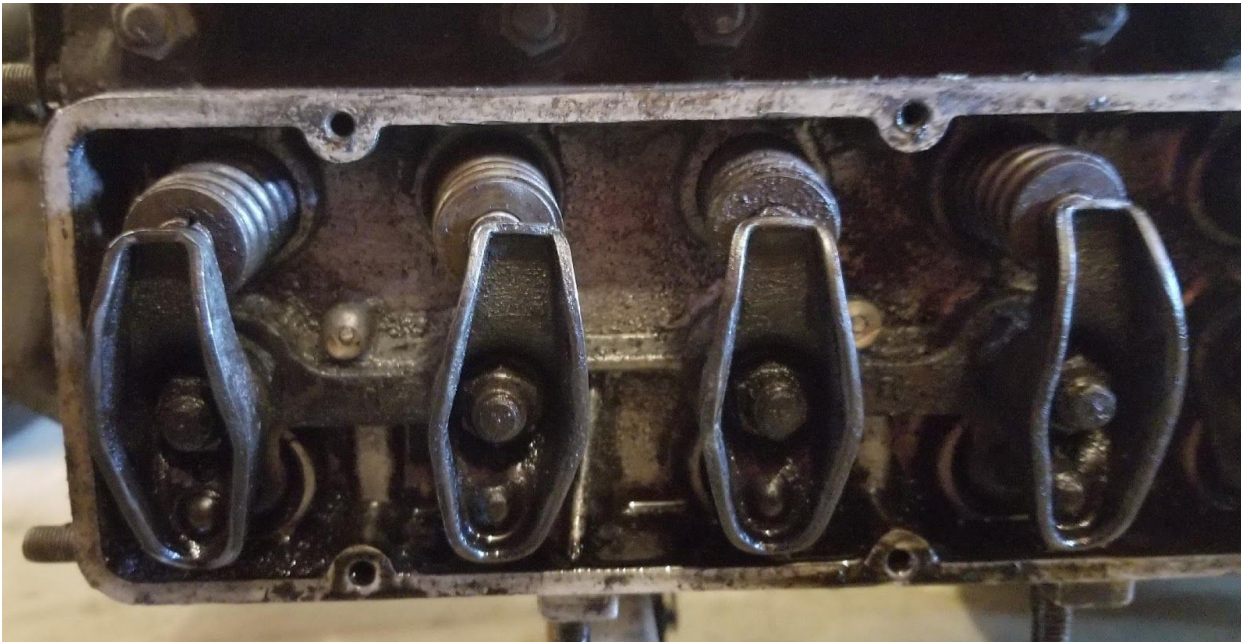
It's a wonder that the car ever ran well with this setup. So, where does one begin analyzing this engine? I decided to begin with a look at the plugs. Easy task right, not so much. The #4 plug didn't want to come out and I noticed that it was an AC while everything else was Champion. I was obviously not the first person to try and remove this plug. I let it soak a couple days and then took the impact to it rather than slowly twist/break the plug in the block, figured if it was going to break then let's break it off quickly and cleanly. The plug did come out but with a fair amount of head with it. Review of the plugs indicated the #1 and #3 had never fired, obviously #4 was burnt up completely. Conclusion #1, the car never ran smoothly. A look down the cylinder with the borescope revealed that #1 and #3 exhaust valves didn't appear to ever close regardless of the crank position. After removing the head I found two broken springs on the two offending valves. I confirmed the valves do move freely, filled the cylinder with rope, and installed replacement springs. I found no other anomalies here but that certainly explains why mechanically the engine would not produce the desired results. Beyond that, the crossed starter wires and the various vacuum leaks (1 created by hose-in-hose connection for the crossover tube created by the 60 vacuum tubes on the heads and the large hole in the vent tube) would certainly have created a fun investigation for anyone trying to troubleshoot idle issues.

I've since made some changes in an attempt to create a late '60 or very early '61 setup, let's call it a 60.5. I'm going to leave the block ('61) and heads ('60) as they are, build a set of very early carburetors, fabricate a crossover tube, reinstall an original 3-plate oil cooler (true to '61), generator adapter, 80hp distributor, and early model motor mount. I'll then soak the cylinders in seafoam, to make sure the rings move freely, then change the oil and see if it kicks back. Anyone looking for an unknown engine that may run decent for an 80hp?

This picture is a comparison of the 60 (left) and 61 (right) heads. Notice the large vacuum tube and that the intake ports are more exposed on the 60 with the 61 having taller cooling fins that go up around the intake ports.



And this picture shows the boss where the pushrod tubes would have attached. Mike explained how one could change pushrod tube seals without removing the rocker arm bolts and therefore not losing torque of the head. You can see the two springs that I replaced.



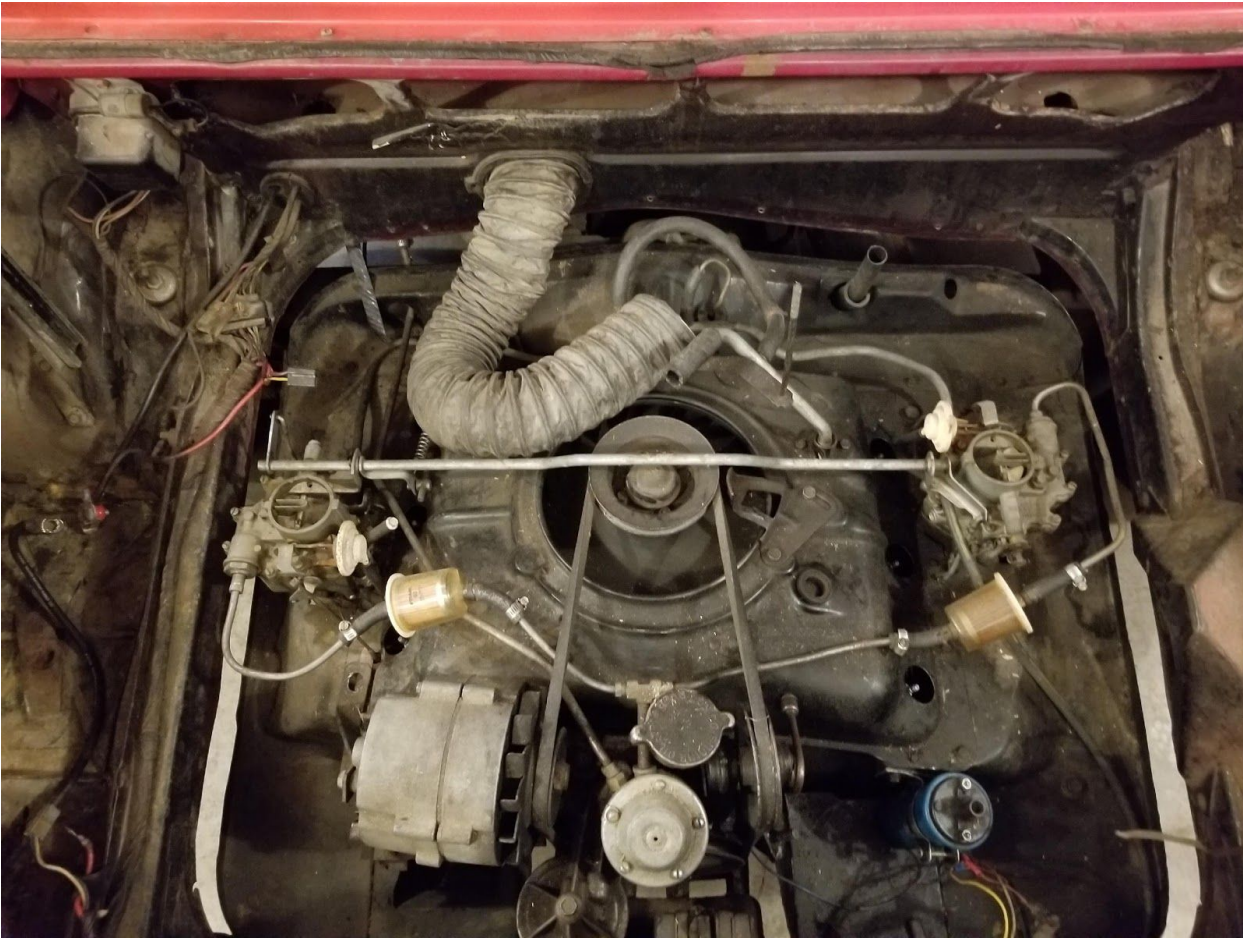
Here is a picture where you can almost see the  $\frac{1}{8}$  shaped guide plate that would have bolted to the bores in the prior picture. The '60 parts manual shows nothing between the rocker stud and the head.

0.439  
GUIDE



And lastly here is a picture of the engine as it came to me in the car so that you can count the errors for yourself. The distributor, cap, and wires were in the trunk so someone had already removed them.





Thanks for playing, Scott

---

## Belton Cruise Night

The cruise night in Belton saw a surge of Corvair cases on August 22. Several members of HACOIA came to the event and we all had a good time. Those attending included Scott Allison, Floyd Becker, Bill Bennett, Travis Bolton, Don and Wilma Cory, Mike and Sandy Dawson, and myself. We had quite the showing and had a good section all to ourselves! There were some cool cars at the cruise, including other orphans like a Chevy Cosworth Vega and Ford Capri (yes, I know it's a four letter word but it's an orphan just like ours!). In addition to hanging out on the "strip", everyone made their way to Scott's house and checked out his newly acquired '69. We also stayed for some food, refreshments and distanced socializing. This is almost becoming a tradition!







---

**HACOA birthdays**

<b>September</b>	
<b>Name</b>	<b>Date</b>
Jeanette Hammett	1
Bob St. John	4
Marti Jones	5
Cindy Anders	5
Ray Curtis	9
Dennis Gordon	13
Ken Ragan	14
Mike Kliethermes	14
Ray Sego	20