

THE FOUR WHEEL INDEPENDENT

CHAPTER 170 EST. 1976

Our next meeting

November 14, 2023



Our next meeting will be held at Hoss's Restaurant
in West York, PA. Come join us for dinner at
5:30pm. The meeting will begin at 6:30pm.



*Happy
Thanksgiving*

TABLE OF CONTENTS

- UPCOMING EVENTS
- CPCC "AFTER" CHRISTMAS PARTY
- MASONIC VILLAGE & ELIZABETHTOWN MODEL
RAILROAD CLUB TOUR
- FIRST THANKSGIVING
- NOSTALGIA
- BIRTHDAY'S AND ANNIVERSARIES
- PRESIDENT'S MESSAGE
- CLARK'S CORVAIR PARTS 50H ANNIVERSARY
- MINUTES FROM OCTOBER 10 CLUB MEETING
- TECH TIP: CARBURETOR SYNCHRONIZING AND IDLE
ADJUSTMENT
- PREVENTIVE MESSAGE: DIAGNOSING AN ENGINE
MISFIRE
- DIDN'T PORSCHE DESIGN THE CORVAIR?



CLUB OFFICERS



PRESIDENT

JOHN Berkheimer
403 Dart Drive
Hanover, PA 17331
(717) 479-2595



VICE-PRESIDENT

John Johnson
550 Gross Road
Fawn Grove, PA 17321
(717) 586-5139



SECRETARY

Earl Holmes
1511 Hicks Drive
Dauphin, PA 17018
(717) 991-7341



TREASURER

Dave Steigauf
599 Westfield Drive
Landisville, PA 17538
(717) 898-7927

BOARD MEMBERS



Bruce Culp
5565-2 Montgomery Church Road
RD#2
Greencastle, PA 17225
(223) 345-8204



Joe Darinsig
1751 Chesley Road
York, PA 17403
(717) 668-4414



Linda Enfield
11925 High Point Road
Felton, PA 17322
(717) 244-7181

NEWSLETTER/WEBSITE EDITOR



Carol Trimper
30 Wheaton Drive
Littlestown, PA 17340
(717) 451-4290

CLUB PHOTOGRAPHER



Lou Trimper
30 Wheaton Drive
Littlestown, PA 17340
(717) 451-4289

Join Our Facebook Page



In Facebook, search for **Central Pa. Corvair Club** and request to join the group.

Corvair Ranch



Located at:
1079 Bon Ox Road
Gettysburg, PA 17325
Phone: 717.624.2805
Email: findit@theranch.today
Website: <https://corvairranch.com>

The Ranch Provides...

New & Used Parts
Full Mechanical Service
Remanufactured Engines
Body & Interior Restoration

UPCOMING EVENTS

November	
4	Masonic Village & Elizabethtown Model Railroad Club Tour. Everyone will meet at the Mountville Exit off Route 30 at Rutter's at 1:30pm. After tour, the club will caravan to a nearby restaurant for an early dinner. It is suggested that everyone eat lunch before you meet the group. Additional details can be found below.
14	CPCC Club Meeting at West York Hoss's in York, PA. Dinner: 5:30pm, Meeting: 6:30pm.
December	
	No Club Meeting This Month
2024	
January	
6	CPPC "AFTER CHRISTMAS PARTY". See additional information below.



Our party this year will once again be held at Perkins Restaurant in Hanover, PA. We will gather at 2PM to celebrate the past holiday season together. We do this because we are all so busy between Thanksgiving and New Year's Day. At the party we will be ordering off the menu. Those who wish to participate (voluntary only) in the gift exchange, please bring a wrapped gift costing no more than \$20.00. Male to male and female to female gifts only. Please let JOHN Berkheimer know (717-632-5617, 717-479-2595, or jhbmail1@comcast.net) by December 26, 2023, if you plan to attend. The restaurant requests a count of how many people to expect. In case of inclement weather, please call JOHN on the status of the party. A notice will also be sent out via email and on our website. Contact a CPCC Officer for additional information.

Masonic Village & Elizabethtown Model Railroad Club Tour

Rain or Shine



November 4, 2023

1:30 PM

Submitted by Dave Steigauf

This month's cruise will be to the MV&E model train display at the Masonic Village in Elizabethtown. The display includes seven different gauge trains O, HO, G, N, Z, Standard and S gauge. All displays are working and running. Hobbyists are there to answer any questions that you may have. The display is free, but a donation is requested.

We will meet at Rutter's at the Mountville Exit off Route 30. Departing time is 1:30pm.

After the show, we will be eating dinner at Gus's Keystone Family Restaurant in Mount Joy before heading home.

By History.Com Editors
Updated: November 15, 2022, Original: November 18, 2011
Taken from the Internet:

Taken from the Internet:

A detailed historical painting depicting the first Thanksgiving. In the foreground, two Native Americans are seated on the left, one holding a bow. A large turkey is on a table in the center. A dog is in the center. English settlers, including a man in armor, stand on the right. A large turkey is on a table in the center. A dog is in the center. English settlers, including a man in armor, stand on the right.

Turkey or no turkey, the first Thanksgiving's attendees almost certainly got their fill of meat. Winslow wrote that the Wampanoag arrived with an offering of five deer. Culinary historians speculate that the deer was roasted on a spit over a smoldering fire and that the colonists might have used some of the venison to whip up a hearty stew.



A photograph of a woman with short grey hair, wearing a light pink long-sleeved shirt and patterned pink pants, standing next to a black classic car. The car's hood is open, and she has her hand on her hip. The car is parked in a lot with other vehicles in the background, including an orange van and a white truck. The background shows a green hillside.

3

November Birthday's & Anniversaries



<i>Birthday's</i>	
Jim Weaver	4
Danny Kirk	6
Mary Ann Stamm	6
Bill Josuweit	10
Beth Lutz	11
Jane Shultz	13
Carletta Moats	23
Robert Moats	28
Sue Miller	29

<i>Anniversaries</i>	
Paul & Sue Miller	16
Steve & Belinda Sabaka	23

THE LAST THANKSGIVING



PRESIDENT'S MESSAGE

Submitted by John Berkheimer

I would like to start off with a few comments concerning our Corvair Day this year. Our Corvair enthusiasts that attended on that beautiful day, I believe had a great time. I heard comments about our great door prizes and auction items. Thanks to donations from The Corvair Ranch, CORSA, Clark's Corvair Parts, and members of our club, we were able to have nice items. Everyone registered received a door prize and 12 people received gift certificates. I would like to say "THANK YOU" to all who helped that day. A big "THANK YOU" to Carol and Lou for the Special Edition newsletter dedicated to Corvair Day. The pictures were spectacular and the whole newsletter just showed how great of a day it was. Lastly, thanks to all that came out to support our club, without our members there would be no club.

Unfortunately, we had to cancel our October 21st trip to Kings Gap. All of our stops were out in the elements and more so than rain, it was to be very windy.

Mark down a few dates coming up:

November 4th - Masonic Village & Elizabethtown Model Railroad

November 14th - Club Meeting

January 6th - CPCC "After Christmas Party".

There will be no meetings in December or January, but February meeting will be our 2024 planning meeting.

FOR SALE: If anyone has a Corvair (parts car, driver or show car) that they want to sell, please let us know. I get calls all the time from people looking for Corvairs. Most of the time they live in our club area. Recently, a guy called looking for a late model driver. He was a long time VW guy and had just sold his last one. He is looking to fill the empty space in his garage and his wife always liked Corvairs. He had many questions about parts availability. I passed along the Corvair Ranch phone number in case Jeff had one or knew of one for sale. I have his name and phone number and did invite him to our November meeting.

We are currently working on our "Constitution & Bylaws". I don't know if everyone is aware, but copies are available to all members upon request. Once we have them updated, we will ask in a newsletter if anyone would like a copy.

I hope everyone received Carols' request on the information on Corvairs you currently own, drivable or not. Please let her know as soon as possible.

Happy Corvairing,

Clark's Corvair Parts 50th Anniversary

Submitted by MiLana Wright

On September 16, Jeff & I traveled to Shelburne Falls, Massachusetts to attend Clark's Corvair Parts 50th Anniversary Fall Classic. Bay State Corvair Club did a wonderful job hosting the event. Clark's held numerous talks and tours on various subjects such as the beginnings of the business complete with slide show, talks about repro parts, manufacturing tour and main order taking, pulling and packing. There were door prizes, raffles and good food, too!

Of course, there were many beautiful Corvairs there! I didn't get a count of how many, but it looked to be around 70. Weather was perfect for a car show. My '64 made its appearance at this show even though it had been to New England several times many years ago. We drove it around town and went to the well-known "Bridge of Flowers".

Congratulations and Best Wishes to Clark's Corvair Parts!!



CORVAIR ART DRAWINGS



NEWSLETTER

Please send your stories, ideas, recipes, photos, and comments directly to Carol at lcl@pa.net. Preferred format for electronic submission of documents is MS Word and format of pictures should be JPEG. Deadline for submitting information is the 20th of the month for the next month's publication.

The Four Wheel Independent is a monthly publication of the Central Pennsylvania Corvair Club (CPCC), Charter Chapter #170 of CORSA. Articles may be reprinted in any CORSA Chapter publication, as a service to CORSA members, provided credit to the author and this newsletter is clearly stated. The Four Wheel Independent newsletter may use material from many sources and may not 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!

Newsletters can be found on our website: <http://www.centralpacorvairclub.org/>.

MINUTES FROM OCTOBER 10, 2023, CLUB MEETING

Submitted by Carol Trimper



The meeting was called to order by our President, JOHN Berkheimer. He opened by Wishing Jeff Ostroff a Happy Birthday.

Carol Trimper read the minutes from the last meeting.

Treasurer, Dave Steigauf, gave his report on:

CORVAIR DAY:

- After balancing the event figures, it was determined that the club lost \$6.87 for the event.
- Dash plaques that were not needed at Corvair Day was distributed to members who would like one.
- We had two new members from Corvair Day: William Kurtz and Curt Bonser.
- Dave thanked everyone for their donations to the Auction and Door Prize tables. There were many nice items this year.
- Linda Enfield donated a book to Club Library.

DUES:

- Dave mentioned to everyone that membership dues are coming up. He passed around a sheet showing the expiration date for members.

Old Business:

- John and Sandy Johnson gave the members an update on the Kings Gap Cruise on October 21, 2023. Everyone will meet at 9:00 AM at Peters Orchard located at 10540 Carlisle Pike Gardners, PA 17324, Phone: 717-528-4380. We will then caravan to Kings Gap and the Fish Hatchery. We will stop lunch in Hampton, PA. In case of rain, the event will be cancelled. Carol will send out an email to everyone on the 20th and post on our website for everyone to view. There is no admission fee for this event.
- Masonic Village Cruise information is located on page 2 of this newsletter. Please be sure to read.

New Business:

- Linda Enfield donated a book the Club Library. *Thanks Linda.*
- JOHN Berkheimer reserved the room at Perkins Hanover, PA for our "After" Christmas Party scheduled for January 6, 2024. See information on page 2.
- MiLana Wright mentioned that a possibility for future Christmas Parties could be held at Cashtown Inn.
- John Berkheimer mentioned that he had been contacted by the New York Corvair Club -Long Island, of their October 15th Corvair event and that possibly one member may attend, Bruce Culp. NOTE: Event was cancelled due to weather.
- The club presented Dave Steigauf with an award for all the hard work he did for Corvair Day. We would have been lost without his dedication to the event. *Thanks-a-million, Dave!*
- John Berkheimer shared that there will be a Zoom meeting on November 1st to discuss upcoming convention events.

Dave Steigauf won the 50/50 tonight. *Congratulations Dave!*

John Johnson made a motion to adjourn the meeting and seconded by Lou Trimper and the meeting was adjourned. The next meeting will be held on November 14th at Hoss's Restaurant in West York, PA.

Attendees

Lou & Carol Trimper
John Berkheimer
Ronnie & Genevieve Wimer
John & Sandy Johnson
Rich Heisler

Dave Steigauf
Linda Enfield
Ron & Betty Hash
Jeff & Jeanette Ostroff

Steve Sabaka
Paul & Sue Miller
MiLana Wright
Duane & Jacquie Aldrich

Jim Butt
Tom & Becky Zinn
Bruce Culp



Corvair Tech Tips



CARBURETOR SYNCHRONIZING AND IDLE ADJUSTMENT

Origin Unknown

Submitted by Lou Trimper

Learning How:

Corvair Engines are air cooled like a VW, however Chevy designed with either a set of two carbs or four carbs. The engines with two carbs have either a 95 or 110 hp, while the four-carb engine has 140 hp, which for a 2000-pound car is more than enough power.

Most buyers of Corvairs have little idea or understand why the two or four carbs need to synchronize. They need to have similar air flow intake levels for the engine to run well. If it is running bad, you probably need to check the air flow suction each carb is at.

There are two basic methods. Method two is commonly used and requires a Unisync tool. It is not hard to find one online. These devices are placed onto the carb when the air filter is removed. The center dial can be used to set the air intake.

There are several ways to adjust and synchronize your two carbs.

Method 1:

1. Disconnect the cross-shaft before starting the car sync to work.
2. Adjust the actuating rod to fit the cross-shaft.
3. Plug the vacuum at the distributor.
4. Set the carbs per shop manual (screw in the Mixture screw all the way in, then counterclockwise 1.5-2 turns out. Turn in the idle speed screw until it touches the lever, then, turn in clockwise two turns).
5. Adjust each carb idle speed screw equally until reaching the desired rpm (66).
6. Place the Unisync on left carb and adjust the center dial on the Unisync until the float is in the middle.
7. Go to the right carb and do the same as in #6, and make necessary adjustments with the idle speed screw, if necessary.
8. Adjust the mixture screw (right carb) in or out until float stops rising any higher and then do the same to the left carb.
9. Redo your idle speed screws on each carb to get them both back to the middle and check your RPM's.

Method 2: (preferred)

1. Disconnect all linkages to carb throttle shaft. Note: If this is not the first time you have done this, disconnecting the linkage at the left carb may not be necessary. Others have done the procedure without this step.
2. Set MIXTURE screws out 1.5 turns. Set idle speed screws per Step 4 in Method 1. Start engine, warm for 15 minutes, idle is steady.
3. Balance carbs left to right with idle speed screws only.

4. Place Unisync on top of left carb, make sure the bottom seats so there is no vacuum. Use the rubber air filter gaskets on top of the carb rim, then place the Unisync on top for a good seal.
5. Try for the middle line on the Unisync, if not possible, try for the lowest line. REMEMBER. try to get the strongest airflow. The ability depends on the car and your carb's condition. Use the dial on the Unisync to raise or lower the ball. Once a setting is secure, go to the right carb. Note where the ball is, if not at the same line setting, adjust it and use the idle speed screw on the carburetor to raise or lower ball. If you are unable to reach the same setting, go back to the left carb and use the dial on the Unisync to readjust to a different line, usually this is lower. Return to the right carb, use the idle speed screw to adjust it to that level. Once both carbs are same level, recheck left and right again. If you need to readjust again, repeat again. Adjust linkage so it slides right in the hole located behind the left carb.
6. Now that the idle speed screws are set and the RPM's are generally 550-700, the mixture screws are not adjusted to smooth the idle further (little engine vibration, a good indicator is the coil. It should not be vibrating much and should be close to the same turns out when done. The mixture screw was set at the start of the procedure to the Corvair's starting point, a bit on the lean side. You may need to richen this. Turning the screw clockwise creates a leaner, less fuel, mix. Counter clockwise, a richer, more gas, mix.

To set mixture, turn screw in clockwise slowly until RPM's drop slightly, now back out counterclockwise slowly until max RPM's are reached and no farther, now turn slowly back in enough to drop RPM's by about 20, usually about 1/8- 1/4". Remember, clockwise is leaner, counterclockwise, is richer.

If you have an automatic transmission, place in gear. If you have balanced carbs and the idle is correct, there will be very little difference between neutral and drive gears. The car will not lunge forward and it will barely move at all. You will be able to idle in drive for three minutes or more without stalling. If your car does not, you need to keep tinkering with the adjustment for the idle RPM's. Automatic idle should be between 500-600 in N. The 67 stick idles at 750-800. They run fine.

When balancing carburetor air flow, you are adjusting airflow, nothing else. When adjusting idle mixture, you are only adjusting idle mixture - nothing else.

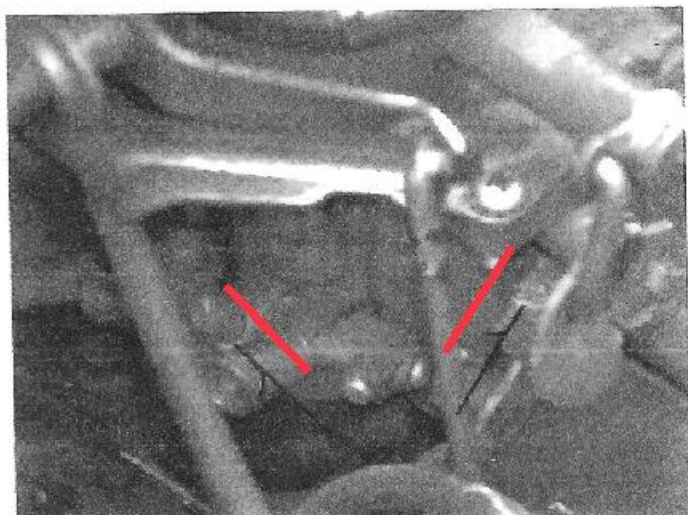
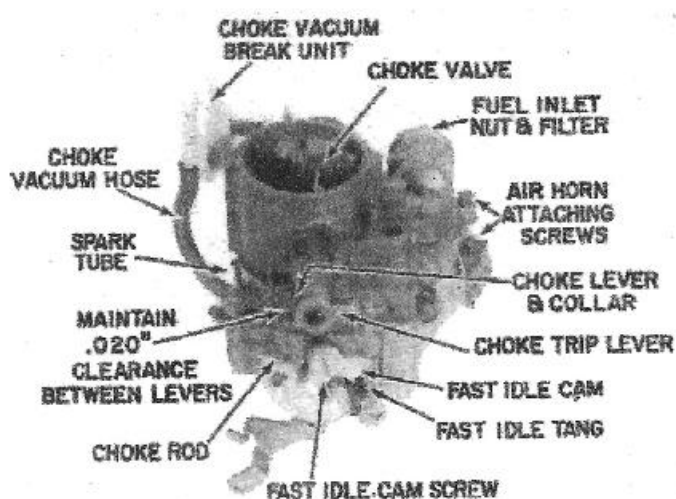
Carburetor (continued on Page 9)

Carburetor

(continued from Page 7)

You cannot harm an engine with an excessive lean idle mixture (less gas) but it won't run good. On the other hand, a too rich mixture (excessive gas) can cause foiled, sooty plugs and may stall the engine. To recap, you want the best carb fuel mix for the idle speed setting you are at. It is a difficult thing to learn. The carb mixture screw smooths out a rough idle. As soon as you press on the accelerator, you are no longer using the idle settings.

As soon as you throttle and accelerate, you are no longer dealing with idle fuel mixture issues. Adjusting the idle mixture does not affect the car when driving only when stopped and idling.



There are two screws to insert a screwdriver in. The right is the Idle Adjustment Screw. The left, the Idle Mixture screw.



The Preventive Maintenance Series

By Mike Dawson

Diagnosing An Engine Misfire

As we all know, diagnosis can be the most difficult part of repair work. New cars will give you video or audio diagnosis that will pinpoint problems and even spell out the replacement or repair needed. However, our Corvairs will do their best to give us hints if we pay attention. Using basic tools, we can get to the bottom of problems just as quick as if we hooked up a high dollar scanner. Keep in mind that a running engine must have each cylinder supplied with compression, fuel, spark, and all at the proper time. Any deviation from the requirements for those four items causes one or more cylinders to reduce engine performance.

The following information is to help with mechanical or electrical problems; another article will address fuel related running problems.

The first consideration is an engine misfire caused by lack of compression. You would have low power and a definite putt, putt, putt syndrome; sometimes described as rumbling as the engine accelerates. The first quick diagnostic tool is a compression check by ear which takes about one minute. With the engine off, pull the coil wire out of the distributor cap and ground it securely so the engine will not start. Then crank the engine and listen to the sound of the starter. It should make a rhythmic sound as it cranks the engine. If you have low or no compression in one cylinder you will hear a definite break in the rhythm when the starter speeds up as it passes the bad cylinder. If necessary, listen to a known good engine crank for comparison and then if you hear that definite break in the cranking rhythm you need to next determine which cylinder. With the engine on a fast idle, use insulated pliers or gloves to remove plug wires one at a time from the cap and check for RPM drop. When you pull the bad cylinder, there will be little or no drop in RPM. If you determine that there is a compression problem, the following are your choices.

Valve Seat Out: You would have zero compression and possibly noise from a valve hitting a piston. This probably would be a suddenly occurring event, usually at a startup following a hot shut down. Also, the rocker arm could be loose with the zero cylinder on top dead center.

Misfire continued on Page 10

Broken Rocker Arm or a Very Loose Nut or Backed out Rocker Stud:

This would be obvious from the noise, and you would spot the culprit when you removed the valve cover. A valve that could not open or could not open completely could cause either no compression or an erratic compression reading depending on whether it was an intake or exhaust valve. Also check the pushrod if you have a broken rocker arm, and if the pushrod is bent be sure it did not rub a hole in the tube.

Broken Valve Spring: The break will be visible unless it is the bottom coil in the head. Also, a broken spring would easily rotate with your fingers when the piston in that cylinder is at top dead center – compare the suspect spring with its neighbors. If you have a broken spring, it can be replaced with the head on the car by using a special valve spring compressor that is readily available.

Broken Rings or Hole in a Piston: With the engine running and the oil filler cap off, you would hear the loss of compression and see excessive blow-by coming out of the filler tube. Oil usually comes out of the dipstick and vent due to excessive crankcase pressure.

Valve Problem: You could have a burned valve but that occurs slowly. A bent valve or a stuck valve (rusted) will leave the rocker arm loose but those usually occur from starting an engine that has been sitting for a long period of time. A really bad exhaust valve guide will make an almost metallic clicking noise as the exhaust gas fires into the valve cover; it mimics a lifter out of adjustment and can cause erratic compression readings.

Head Gaskets: A loose head (usually caused by overheating) will allow combustion gas to blow past the head gaskets, making an audible spitting noise and making the heater unusable. The original 60-63 and some early 64 engines had copper head gaskets that would flow sideways and burn through. They were replaced with stainless steel in 64, so that is hardly ever a problem unless the head is loose. The heater issue would be a major item before there was enough compression loss to cause a running problem.

The second consideration is an engine misfire caused by lack of spark. If your engine has the putt, putt, putt syndrome under acceleration and you have none of the above problems, then you have an electrical problem. Run the engine on fast idle, pull individual wires and note the RPM drop. When you locate the problem cylinder, you next need to determine if the problem is a plug, the plug wire or possibly the distributor cap. A visual inspection of the plug will usually show things like ash buildup, oil, a broken electrode or incorrect gap. If you suspect a wire may be arcing, use an ice pick with a grounded wire clipped to it. Move it along the plug wire with the engine running and watch (and listen) for arcing. Brittle or cracked plug wire boots are sure to cause misfire in cold wet weather and old plugs with wide gaps are misfire candidates when starting in cold damp days.

The following are examples of misfires that need to be considered if you have trouble pinpointing the problem.

1. If the point gap is too small (42+ degrees of dwell), you will start to lose one cylinder at a time as the points cannot open enough to discharge the coil causing individual misfires depending on which distributor cam lobe has the most wear. Sometimes wobble in the shaft creates the same situation when accompanied by a high dwell reading.
2. Moisture in the distributor cap can cause a carbon track to form which will cause misfire in two adjacent cylinders and sometimes from the center to one cylinder. This usually happens after overnight rain or car wash visit. You can see the black-on-black track on the plastic.
3. A 140 engine can have a secondary carburetor sticking open or leaking enough air past the throttle valve to cause a misfire at idle (and off idle) that clears up at high speeds. It gives the impression of a single misfire at idle. With the engine at idle, clamp your hand over the secondary carburetors and check for suction. Or spray a light mist of Gumout into the throat and see if the idle picks up. There is no idle circuit in the secondary, so any vacuum leak leans out the closest cylinder.
4. If you have a bad condenser (capacitor), it can cause a weak spark that causes multiple misfires. Instead of the putt, putt, putt, you have an inconsistent jerking sensation, sometimes accompanied by backfires. The contact points will be light gray on one side and purple or black on the other side from overheating. This same discoloration can be caused by dirt leading to high resistance.
5. A bad coil will act similar to a bad condenser; it can cause jerking under load, or just quit but that is not very common. Coils mounted horizontally can leak oil out of the tower and coils with their bottom resting on the sheet metal can develop a hole from vibration. Loss of oil causes overheating.
6. An individual camshaft lobe worn down will cause an individual misfire but is a very rare occurrence in stock Corvairs due the camshaft bathed in return oil.
7. Depending on age and carbon content, vacuum lines such as the vacuum advance can cause a short to ground at the coil tower if it is close, or it can arc to a plug wire which has poor insulation.
8. If you are helping someone, never overlook the possibility that the plug wires are not installed according to the firing order, and last but not least, keep in mind that just because a part was recently installed does not mean it was the correct part or that it works – trust your own diagnosis!



ABOUT C.P.C.C.

The Central Pennsylvania Corvair Club (C.P.C.C.) is a non-profit organization dedicated to the preservation of the Corvair and Corvair powered vehicles. We provide knowledge about the Corvair to our members and other car enthusiasts, as well as hold monthly meetings, events, and social gatherings for the enjoyment of our members.

C.P.C.C. is Chapter #170 of the Corvair Society of America (COSA). Dues for C.P.C.C. are \$16.00 per year or two years for \$30.00, which must be sent in the form of a check or money order payable to "C.P.C.C." and mailed to C.P.C.C. Treasurer, c/o Dave Steigauf, 599 Westfield Drive, Landisville, PA 17538. Please include C.P.C.C. Membership Application form along with your check.

It is suggested that C.P.C.C. members also become members of COSA, the national organization. COSA dues are \$45.00 per year. Dues may be sent to Corvair Society of America, P.O. Box 68, Long Lake, Minnesota USA 55356 or online at <http://members.corvair.org>.

Newsletter submissions should be sent to the Newsletter Editor, Carol Trimper at 30 Wheaton Drive, Littlestown, PA 17340 or email to lcl@pa.net.

All other club inquiries should be directed to the C.P.C.C. Secretary, Earl Holmes, 1511 Hicks Drive, Dauphin, PA 17016.

***The Four Wheel Independent***

c/o Carol Trimper
30 Wheaton Drive
Littlestown, PA 17340