Corvairsation

Tucson Corvair Association
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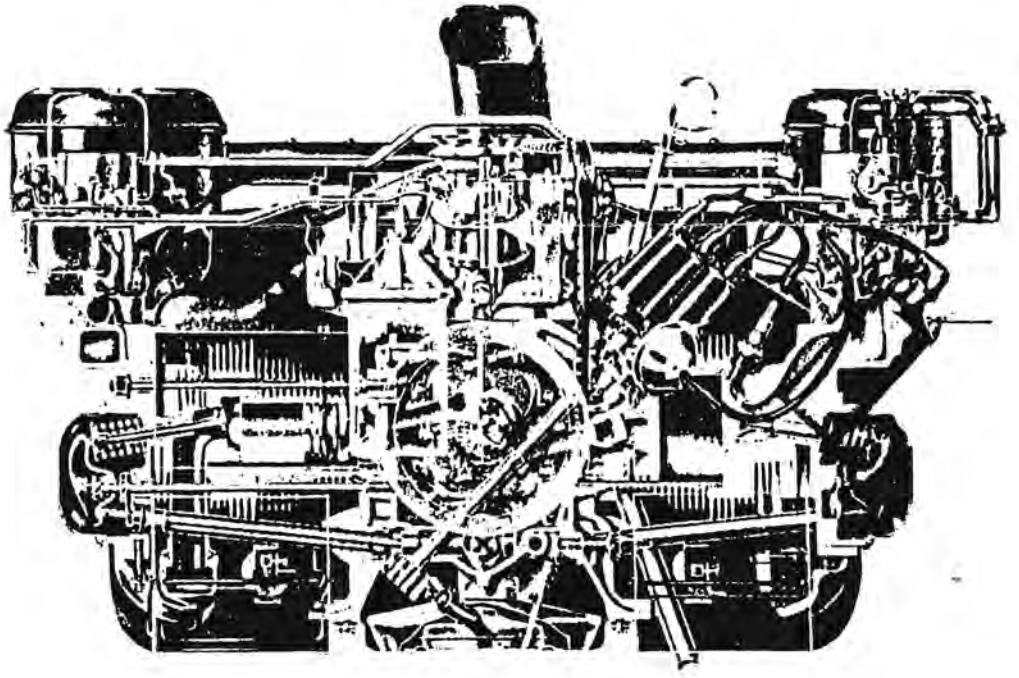
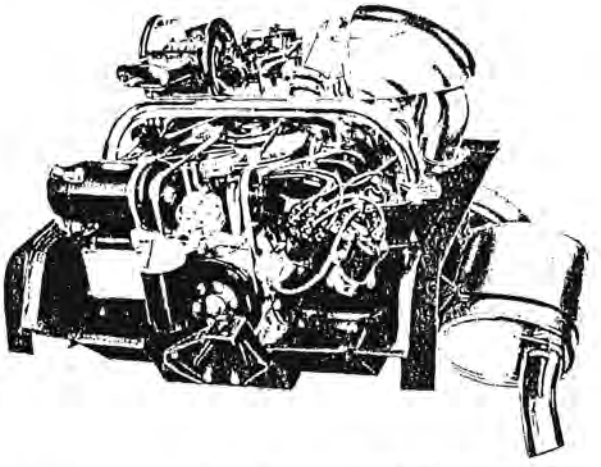
The Corvair Flat Six

The Engine, Like the Car, is Better Than Its Reputation





In turbocharged form, the engine went as high as 180 horsepower.

TUCSON CORVAIR ASSOCIATION

EST. 1975

Corvairsation is a monthly publication of the Tucson Corvair Association, which is dedicated to the preservation of the Corvair model of the Chevrolet Motor Division of General Motors. The Tucson Corvair Association is a chartered member of the Corvair Society of America (CORSA \ 857).

MONTHLY MEETINGS are held on the fourth Wednesday of each month except December. One technical/social event is planned for each month with the exception of July and August.

MEMBERSHIP DUES: Initial dues $22.00 per year for Fa.and $ 15.00 for singles , (includes name tag) renewable $ 18.00 and $ 15.00 and payable to the TUCSON CORVAIR ASSOCIATION through the Membership Chairperson.

CHANGE OF ADDRESS: Report any change of address or phone number to the Membership Chairperson. Do not report such changes to the Editor.

CORSA MEMBERSHIP DUES are $28 per year and include a subscription to the CORSA Communique, a monthly publication. CORSA membership is not require for membership in TCA but is highly recommended. See any TCA officer for information.

CLASSIFIED ADS are free to members and $2.50 per 4-line ad to all others.

DEADLINE for all materials submitted for publication in the *Corvairsation* is the 1st for that month's issue. Mail or deliver all materials to the Editor.

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PRESIDENT'S MESSAGE....

Hello All,

For those who were able to make the April Meeting, I'm sure you will agree that Dave Baker presented us with a super tech session. He showed us all, the process for installing a PCignitor electronic ignition. Included were several significant tips and tricks which will make it easier for the rest of us to do a similar installation. I heard a couple of individuals indicate that they were probably going to try it out. Thanks again, Dave, for a great presentation. We all enjoyed and were enlightened.
We will have a similar treat in store for the May meeting. Cecil Alex has agreed to do a tech session on his process for repairing the carburetor throttle shafts on our old worn out carburetors. I am looking forward this and I'm sure Dave Baker will be paying particular attention to this one. Plan to attend. It should be a an informative session.

Allen

Coming Attractions.....

WHAT: Saturday Lunch at the White Stallion Ranch

WHEN: Saturday May 16th

WHERE: We will meet at Long John Silvers on Ina at I-10 we Will plan to leave at about 11:00 am and tour though Picture Rocks area of the Tucson Mountains to Sandario Rd. into the back side of the Ranch. We will eat at 12:30 Pm. Cost is $7.00 per person payable at the ranch. Hope To see you there.

And then.....

The outing for next month is a trip to Old Tucson. I will be Sat. June 20th. Will meet at the bowling alley on Alvernon and cruise out Ajo Way. More information will be presented at the next meeting. Will plan to Generate a list of future outings. As always, we are open to suggestions.

PICACHO PEAK APRIL 18TH 1998

This is a Saturday morning with a promise of beautiful weather. The promise became a reality as the temperature hovered around 80 degrees with a light breeze for our annual picnic with the Cactus Corvair.
The cars from Tucson met at Mcdonalds on Ina and Thornydale a few minutes before time to leave. It finally dawned on everyone that all of our cars were red, so naturally we called ourselves the "Red Brigade".
There were only 4 corvairs traveling together, as Ruth and Vernon Griffith had gone up Friday night to hold a place. It was good that they did or they would have ruined our color scheme. The Bloom's not only didn't have a red corvair, they didn't have a corvair at all, so they sneaked up a couple of hours later.
The Cactus club beat us by one car, however, they had a better variety of colors. I must apologize to the Cactus club as I only got the drivers names and not the passengers.
Everyone had a very good time and especially the raffle. There were quite a few and unusual prizes. The food was great and much more than was needed
We would like to thank Ruth, Vern, Mary Ann, and David for spending Friday night holding a spot for us. We also with to thank Marianne and Allen for being our chief chefs.
After the Blooms finally arrived, I counted 25 adults and 2 children.
Members attending from Cactus were:
Mel Brown and wife----65 convert
Bill and Rose Hammel—61 PU
Dave and Mary Ann Nissen---Greenbrier
Dave Wilcox---61 PU
Gary Ferstl--65 coupe
Mike Gyintard---64 convert

Tucson Members were:
Allen and Marianne Elvick------60 4dr
Gordon and Susanne Cauble----63 convert
Herb and Johnnie Berkman-----65 coupe
Vern and Ruth Griffith----------61 4dr
Larry Dandridge and Ethel Moore—63 4dr
Ron and Lynn Bloom and R. D. Bloom in those other vehicles that shall remain nameless.
Hope to see more of you out next year....

Larry Dandridge
VP

MAY TREASURER'S REPORT

BEGINNING CASH ON HAND.....1181.65

INCOME: (ACCOUNTS RECEVABLE)

Ads	00.00
Badges/Pins	00.00
Raffle Tickets	12.00
Can Money	7.40
Merchandise	7.00

TOTAL INCOME (ACCOUNTS RECEIVABLE).....26.40

EXPENSES: (ACCOUNTS PAYABLE)

Stamps	32.00
Badges	4.28
Copier paper	21.39
Copier toner	57.78

TOTAL EXPENSES: (ACCOUNTS PAYABLE).....115.45

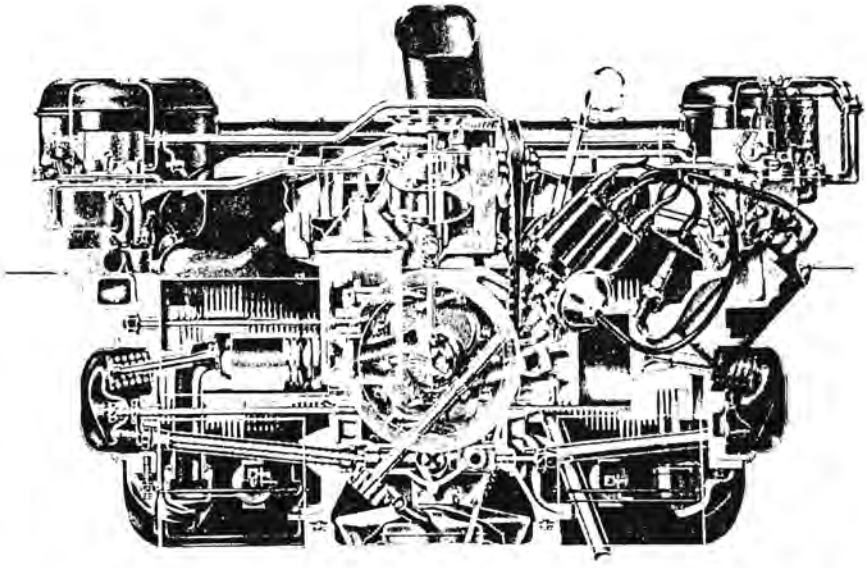
ENDING BALANCE: (CASH ON HAND).....1092.60

Respectfully Submitted,
Allen Elwick

The Corvair Flat Six

The Engine, Like the Car, is Better Than Its Reputation Suggests

BY THOMAS MURPHY



RALPH NADER NOTWITHSTANDING, Chevrolet made a pretty good automobile for the first domestic try at a mass-produced, air-cooled, rear-engined car.

One of the many interesting aspects of this uncommon car was that rear-mounted engine—a flat six with horizontally opposed cylinders, three in a bank, rather than the more conventional in-line or V-type configuration. This flat engine design also is referred to as a "boxer," because of the pistons' horizontal movement.

The Corvair project was initiated in 1956 mostly through the auspices of Chevrolet Chief Engineer Ed Cole (later president of G.M.) and it was introduced in October 1959 as a 1960 model. The engine went through several size and output changes over the 10 years the car was on the market, starting with a 140-cubic-inch displacement that developed 80 horsepower. In 1961, displacement went up five inches to 145 cubic inches, but 80 horsepower was still the standard rating. The Monza, a slightly-upscale Corvair, started with 95 horsepower and grew from there.

At the end, the Corvair's 164-cubic-inch engine was available in three versions, rated at 95, 110 and 140 horsepower. In addition, a turbocharged version introduced in 1962 put out 150 horsepower. That grew to 180 horsepower in 1965 and '66, enough to move the 2500-pound car from 0 to 60 mph in under 11 seconds with a top speed of 115. All un-blown engines had two 1-barrel carbs except the 140-horsepower version that was fed by four.

Originally intended as a low-priced "economy car," the Corvair was powered by a fairly complex engine design compared to the straight-sixes and V-8s of the time. Each cylinder barrel was removable, and bolted to a two-piece aluminum crankcase divided vertically. This design didn't exactly spring into being overnight, of course, as many airplane engines—Lycoming, Franklin and Continental included—were built on the same basic principle. And the Corvair was in famous automotive company as well. Volkswagen and Porsche had been building "boxer" engines from day one.

The Corvair engine originally was planned to tip the scales at 288 lbs. However, by the time it saw production it had gained another 78 lbs. and that 366-lb. powerplant hanging behind the rear wheels sometimes could make for fairly interesting handling—especially in wet weather.

Back in my crazy years, when I'd seen maybe 17 birthdays, I became owned by a 1961 Corvair 4-door sedan with a Powerglide 2-speed. Being in Seattle at the time ensured sufficient rain. And, being a fairly typical young man ensured that the car's life would be unusual, to say the least.

Most of the time, anything above 25 mph was more than enough to allow me to spin the car on wet pavement. Crank the wheel hard in either direction whilst navigating a wet road and the engine compartment gracefully assumed the lead. Memory failure tends to make the early days dim, but I do remember that my friends thought it was great fun to watch the 'Vair make ellipses in the high school parking lot. The car didn't really go round in a circle so much as pivot like a watch at the end of a chain. Great fun! I think another buddy finally rolled it over and down a hill.

The much-desired Monza Spyder appeared in the middle of the 1962 model year. Lower rear gears, heavy duty suspension, 150 horsepower and a panel full of gauges, including a tach, added $317 to the basic Monza. A four-speed and improved brakes were optional, but all the Spyders had them as mandatory. Total cost was $2579, not cheap at the time, but it sure beat what the guy down the street paid for his Porsche. And it could be serviced at any G.M. dealer.

Problems

Many are under the impression that Corvair engines had more than their fair share of problems, but that really wasn't true. The widespread negative impressions are easily understood when you consider Ralph Nader's hysterical bleatings and the truckloads of adverse publicity that brought the car to the forefront of motorists' minds in a highly critical manner. A few quirks aside, however, it was a reliable method of transportation for thousands of motorists. (The car was finally cleared by a Congressional inquiry in 1972—a tad late for the Corvair, though.)

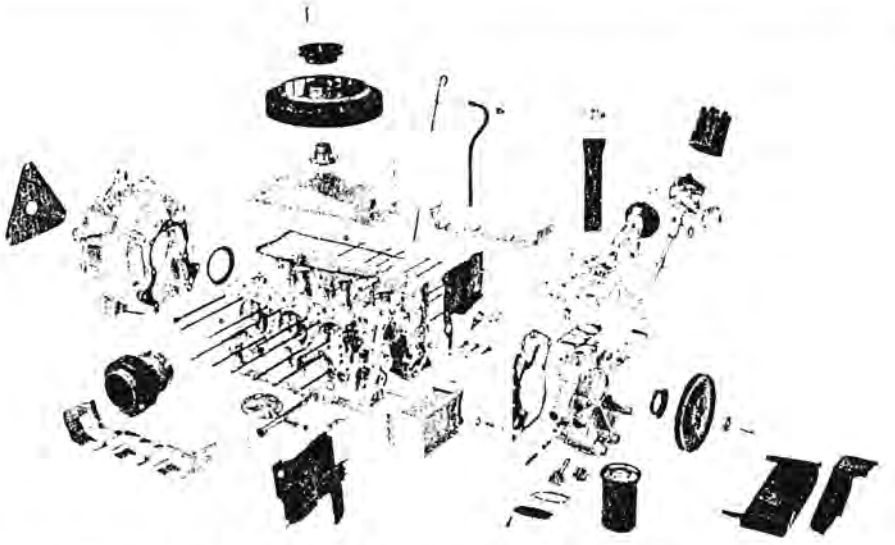
However ...

There are a few trouble areas peculiar to the engine and we'll spend a little more time discussing these by

topic. I'll throw in a few hard-learned fixes, courtesy of CORSA, the Corvair Society of America.

General apathy and the introduction of Ford's hot-selling Mustang pretty much took the wind out of Corvair sales (poor pun intended), but the real demise began when Chevy issued a directive in 1965 that stopped all developmental work—the Camaro was coming and that's where the money was to go. The 'Vair was on its way out and was scheduled to disappear by 1968.

The 1969 model year saw a Corvair, much to people's surprise, as buyers had stayed away in droves when the '68s showed. The situation deteriorated to the point where dealers wouldn't service them or totally refused to sell the cars. I remember last-year Monzas sitting on dealers' lots—way in the back—for quite some time. Wouldn't surprise me if there were still a few left unsold into the early '70s.



The flat six engine grew in displacement and power, but its basic design remained the same.

Cylinder Heads

One problem centers not so much around the heads themselves as it does the air boxes built around them for heater operation. The engine/air exhaust doors stick. Remember, the engine was air-cooled and heating was provided by ducting some hot engine air past a box bringing fresh air into the car. If the thermostatic control failed—usually due to snow or ice—the net result was no heat. The doors originally were designed to fail closed, but a later design saw the situation reversed so if the control went south, full heat was available. Usually the first indication that the thermostatic control quit was an inability to turn off the heat.

Check the engine sheetmetal on a regular basis. Should the rust monster get to the heater sheeting, it can allow carbon monoxide to enter the cockpit with the usual dire results—headaches at the minimum; a long sleep at the worst.

When rebuilding the engine, take time to check the fins on the heads and cylinders to see if all the casting flash has been cleaned off. If not, use a hacksaw blade or skinny screwdriver to remove all the crud and excess metal. Heat transfer qualities will increase and the engine will run cooler. There's an air passage directly above the crown of each combustion chamber, usually pinhead in size, but it's supposed to be much larger. Open it up all the way to the casting marks. Clean any rough bolt holes.

There's a head temperature thermister screwed into the heads of the 140-horsepower and 180-horsepower engines. If it is in any way galled in

1960 Corvair 140-cubic-inch Flat Six

GENERAL SPECIFICATIONS

Bore x Stroke: 3.375 in. x 2.60 in.
Displacement: 140 cubic inches
Compression ratio: 8:1
Maximum brake horsepower:
80 @ 4400 rpm
Maximum torque: 125 lb.-ft.
@ 2400 rpm
Normal oil pressure: 35 psi

Tune-up specifications

Spark plugs: AC 46FF
Gap: .035 in.
Timing mark: on crankshaft damper
Engine idle speed
500 rpm (automatic or manual)
Cylinder head bolt torque:
27–33 lb.-ft. for 1960–64
32–38 lb.-ft. after 1964
Compression pressure: 130 psi min.
Valve operating clearances: 0 (hydraulic lifters). One turn after clearance is eliminated between valve stem and rocker shaft.
Valve spring pressure: 60 lbs.
@ 1.5 in.
Valve seat angle:
45 degrees
Turbo—44 degrees

Piston & ring specifications

All can be removed with cylinders or individually
Ring gap:
Compression–.010 in.
Oil–.010 in.
Piston clearance at top of skirt:
.0011–.0017 in.
Wristpin diameter: .8001 in.

Distributor specifications

Make: AC
Part number: 1110252 (1960) Every year is different.
Breaker gap: New points, .019 in.
Centrifugal advance:
Starts–2 degrees @ 400 rpm
Full advance–16 degrees @ 1800 rpm
Vacuum advance:
Starts @ 6.0–8.0 in. of vacuum
Total vacuum advance–11 degrees @ 16 in. of vacuum (Turbo has no vacuum advance)
If advance is checked on car, double the rpm and degree advance to get crankshaft figures.

Bearing specifications

Connecting rod bearings:
Journal diameter: 2.2488–2.2493 in.
Bearing clearance: .0012–.0037 in.
Rod end play: .002–.006 in.
Rod bolt tension: 20–26 lb.-ft.

Main bearings:
Journal diameter:
#1 & #2—2.0978–2.0988 in.,
#3 & #4—2.0983–2.0993 in.,
Clearance: .003 in. max.
Thrust washer on bearing #1
Crankcase bolt tension:
55 lb.-ft.

Interchangeability Guide

Complete Engines

Corvair 1960–63, up to flywheel, will interchange. Use carbs and linkage from replaced engine.

Corvair 1964 will fit earlier up to flywheel and '65 Forward Control (pickup) up to flywheel.

Corvair 1965 and later (except for the Forward Control) interchange.

Engine Blocks

Corvair 1960 casting # 6256646 and #6257621 interchange.

Corvair 1961–63 casting #378802 and #6255616 interchange and also fit 1960.

Corvair 1964–65 casting #3849112 interchange.

Later castings will have to be measured for exchange. Some machining will be necessary.

Exhaust Manifolds

There were two 1960 designs, early and late. The late fits early, but not the reverse. The 1962–65 right manifold will fit the 1960, but not the reverse. The 4-barrel carb manifolds won't fit the 2 1-barrel version. Normally the later right and left manifolds fit the earlier engines, but not the reverse.

Heads

Corvair 1960–61 hi-performance used #3789428; later hi-po 9:1 compression heads were #3795960. Standard was #3786588 & #3786589.

Corvair 1962–63 Turbo used #3817286 & #3817287 with oil drain-back plug in left head. OEM left side doesn't fit right side.

Corvair 1965 4 1-barrel used #3856727

Corvair 1965 Turbo used #3856756 (It may be necessary to plug left-side drain hole.)

Crank

Corvair 1960–63 casting #6256633 and #6255607 will interchange.

Corvair 1962–63 Turbo used #3817291 and #3817293.

Corvair 1964 Turbo used #3828408

Corvair 1965 four 1-barrel or Powerglide used #3875827. Others used #33856704.

Installing an automatic crank in a stick shift engine will require the installation of a clutch shaft pilot bushing.

the threads it will bring them with it when you try to remove it. Unless it's bad, leave it in place. When removing the sensor wire, if it's bolted directly to the thermister, don't try to unscrew it. Cut the wire and install an in-line connector.

Valve Train and Cams

Corvair engines used a number of different cams depending on horsepower ratings.

The first, 80-horsepower, engine pushed the valves with a very mild lift of only .314-inch. The 1964 95-horsepower engine's bump stick sported a .403-inch lift and the 110- and 140-horsepower engines of 1966–69 were the lift champs at .409-inch. In general, cam numbers for different engines run as follows:

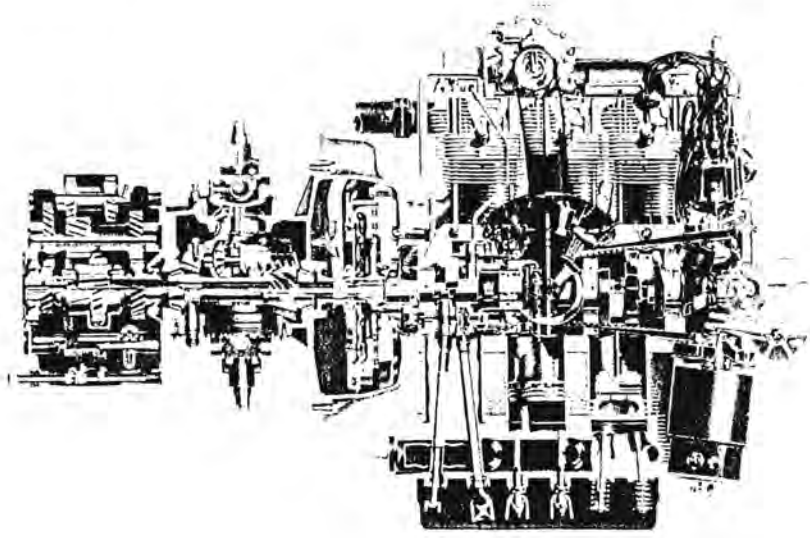
Year	Horsepower	Part#	Lift
1960	80	3779332	.314
1961	98	3777255	.380
1962	102	3777255	.380
1962	150	3777255	.380
1963	150	3832586	.374
1964	95	3839889	.403
1965	110 & 140	3839891	.391
1966–up	110 & 140	3839891	.409
1965	180	3872304	.374
1966	180	3872304	.392

The 1965–69 engines used one of two cams; 3872304 or 3839891 even with the Powerglide. However, expect a loss in acceleration with the -891 cam in front of the automatic as its low torque output below 2300 rpm hampers—kills—performance with the slush-o-matic.

The 180-horsepower Turbo cam will lose some torque below 2000 rpm, but can be taken up to 5700 rpm without valve float, so it shouldn't find its way into a Powerglide car, but will work wonders on a modified four-speed Monza or Corsa.

Pistons and Rods

One aspect unique to the Corvair engine is that it can be split in half without removing the heads. All that's necessary is to remove all the outer bits and pieces like pushrod tubes, pushrods and oil pan, then stand the engine on its flywheel and pull the eight nuts holding the crankcase together. Actually, leave one of the center ones loose but in place for the time being. Pull the nuts off the rods on one side and remove the caps.



The Corvair's flat six boxer engine can be split in two without removing the heads.

Representative Prices

1960–63 Engine Rebuild Kit: $975
(plus $70 core)
1964–69 Engine Rebuild Kit: $985
(plus $120 core)
1965–69 140-horsepower Engine
Rebuild Kit: $995
(plus $120 core)
Options with kit:
Reconditioned rods $120
Isky hi-po cam $95
Valve and guide replacement kit:
Std. $235
140 horsepower: $250
Tune-up kit—all: $50–70
Distributor (rebuilt): ..... $75 (plus core)
Distributor cap: $7
Fan idler bearing: $28

Next, with the engine now laying on 2x4 blocks, remove the flywheel housing and the eighth crankcase nut and ease the engine apart. The cam can fall out, so be prepared to catch it in a rag.

Crank

After opening a number of Corvair engines over the years, I've found that Chevy occasionally didn't have a real good grip on final machining of the aluminum engine cases. Sometimes, different-sized main bearings will be found in the cases. Factory bearings have always been available in .001-, .002- & .003-inch oversize for all engines to "help" finish slight errors in machining, but the only time they've shown up with any frequency on new engines has been on the flat-six Corvair. Usually a slight error in finish machining on the cases after align-boring had to be corrected with a .001-inch oversize bearing.

The drawback is that most shop manuals don't cover this at all. The solution is to check the bearing for oversize—it will be marked on the back—or plasti-gauge everything as it's assembled. All clearances have to be checked anyway, especially as most motors will have been apart at least once by now and many parts changed.

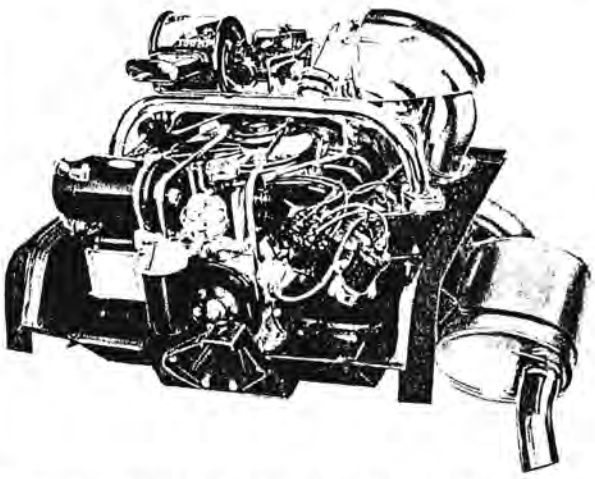
The main bearings can be shimmed with .001–.003 shim stock if the dimensions are off, but a better way to put the bottom end together right is to get another crankcase that has the proper clearances and do the assembly correctly.

One note: When the 140-horsepower engine was mated to a Powerglide, the 95-horsepower camshaft was utilized. The crank was also retarded four degrees at the timing gear. If you look through the indexing hole on the back of the crank and a gear tooth lines up in the center of the hole, the crank is retarded.

Crankcase Studs

When a lot of miles have rolled over the odometer, or after severe use (racing your neighbor's Porsche—tsk, tsk), it's often possible to pull the crankcase studs out of the block. Cast aluminum isn't the strongest of metals when it comes to holding a thread and that, coupled with the vastly different expansion rates between aluminum and steel, sometimes aids in stud pullout. Blowing a cooling fan belt and continuing to "limp" home can raise the engine temperature to over 400 degrees Fahrenheit at which point aluminum loses one-third of its tensile strength. A sure cure for this is not to run the engine with a broken belt.

Sometimes the problem isn't even noticed as the other studs can hold the engine together with no apparent leakage around the head. Studs on the passenger side of the engine are more prone to pull-out due to higher heat load from the exhaust on that side. The rear studs go because they're closer to the oil cooler.



In turbocharged form, the engine went as high as 180 horsepower.

Studs .006 oversize can be located and they might bite enough in what's left of the crankcase threads to hold, but usually Murphy's Law (And I'm Murphy—imagine my luck.) takes precedence and the oversize studs do zilch.

Two solutions present themselves. Either build some oversize 7/16-inch diameter studs, threaded to fit, or go the threaded insert route. Myself, I prefer the insert over the oversize method, with stock parts retained. Manufacturers like Heli-Coil and Renu Thread make inserts specifically for this job. Properly installed and retained, the inserts will hold the studs for many thousands of miles.

Pulled a Heli-Coiled head stud out of the block, did you?

Well, there's only two solutions. First is to get a specialty insert from one of the Corvair parts providers like Corvair Underground Inc. and Locktite the insert in place. Second, and far more expensive, is to change the crankcase. There's still enough Corvair parts around so price and availability are good. However, eventually crankcase halves will become scarcer with a resulting rise in price. If your engine is a leaker, with stud problems, now's the time to start looking for a short block replacement.

Other destroyed aluminum threads, like spark plug holes, can be repaired by the same thread insert solution.

Fan Belt

This is simple. Keep a fresh—less than 5000 miles—belt on the engine and a new spare in the trunk. A 1960–63 engine will benefit from being upgraded to the 1964–up magnesium fan and belt guards. If a belt flips off, throw it away; it'll do it again soon. Any oil on the belt will cause it to deteriorate and make strange squeaking noises. Adjust the belt properly; too tight is worse than too loose.

Super trick, triple-throw-down belts aid you in reducing unsprung weight in the wallet, but do little else. Gates, Dayco and Pirelli make stock belts. A stock belt, properly installed, can last 20,000 miles or five years. To be totally on the safe side, however, your best bet is to stick to the 5000-mile limit.

Oh yeah... throw a 7/16 wrench in with the spare belt—just in case Murphy gets you. ■

PARTS

Corvair Underground
P.O. Box 339
Dundee, OR 97115
800/825-8247
Engine kits to glove box lights

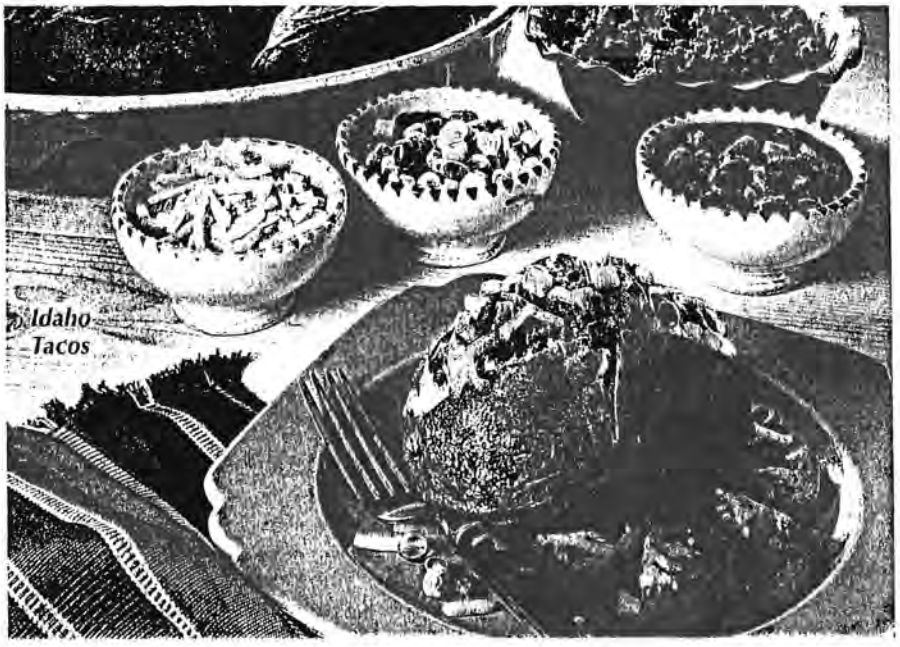
Clark's Corvair Parts
Rt. 2
Shelburn Falls, MA 01370
413/625-9776
www.corvair.com
NOS, used, V-8 conversions (interesting proposition) and body parts

Tater Toppers in No Time

For a hearty meal in a hurry or a speedy side dish, dig up some taters and top 'em!

WITH potatoes in the pantry, you're only minutes from some family-pleasing fare. By adding a few simple ingredients, you can transform baked potatoes into a nutritious side dish or even a complete meal.

Just pop freshly scrubbed spuds in the oven to bake or zap them in the microwave (see recipe below) while you whip up one of the crowd-pleasing toppings here. In short order, you'll be ready to dig into some good eating!



BAKED POTATOES

4 medium baking potatoes (about 1-1/3 pounds)

Oven: Scrub and pierce potatoes. Bake at 400° for 40-60 minutes or until tender. **Microwave:** Scrub and pierce potatoes; place on a microwave-safe plate. Microwave, uncovered, on high for 12-14 minutes or until tender, turning once. **Yield:** 4 servings.

IO TACOS

In Ozona, Texas, Kaleta Shepperson loads her potatoes with a taco topping that's quick, easy and flavorful. "Everyone who tries these potatoes likes them," she comments. "They're almost a meal by themselves. I serve them with breadsticks, a green salad and dessert."

1 pound ground beef
1 envelope taco seasoning
4 hot baked potatoes
1 cup (4 ounces) shredded sharp cheddar cheese
1 cup chopped green onions
Salsa, optional

In a skillet, brown beef; drain. Add taco seasoning; prepare according to package directions. With a sharp knife, cut an X in the top of each potato; fluff pulp with a fork. Top with taco meat, cheese and onions. Serve with salsa if desired. **Yield:** 4 servings.

TANGY CHEESE-TOPPED SPUDS

Horseradish provides the zing in this creamy potato topper from Letha Burdette of Greer, South Carolina. "It's a y t way to spice up dinner," she re- . "My family loves these potatoes!"

1 package (8 ounces) cream cheese, softened
1 cup (8 ounces) sour cream
1/4 cup finely chopped onion
2 tablespoons prepared horseradish
1 to 2 tablespoons lemon juice
2 tablespoons minced fresh parsley
1/2 teaspoon salt
4 hot baked potatoes
1/2 cup shredded sharp cheddar cheese

In a mixing bowl, blend cream cheese and sour cream until smooth. Add onion, horseradish, lemon juice, parsley and salt; mix well. With a sharp knife, cut an X in the top of each potato; fluff pulp with a fork. Top with cream cheese mixture; sprinkle with cheese. **Yield:** 4 servings.

CHICKEN RANCH POTATOES

Top hot potatoes with this colorful mixture from Edie Despain of Logan, Utah for a satisfying meal. "You'll get rave reviews on this one," Edie promises. "Quick to prepare, it's also delicious. Ranch salad dressing is a tasty change from the usual sour cream," she adds.

2-1/2 cups cubed cooked chicken
1 package (10 ounces) frozen mixed vegetables
Salt and pepper to taste
3/4 cup ranch salad dressing
4 hot baked potatoes

Place chicken and vegetables in a 2-qt. microwave-safe dish; cover and microwave on high for 6-7 minutes, stirring once. Add salt and pepper. Let stand for 2 minutes. Fold in salad dressing. With a sharp knife, cut an X in the top of each potato; fluff pulp with a fork. Top with chicken mixture. **Yield:** 4 servings.

POTATOES WITH CRAB SAUCE

Corene Thorsen, from Oconomowoc, Wisconsin, adds crab to the creamy and comforting sauce she pours over spuds. "The mild sauce allows the delicate flavor of the crab to shine through," she declares. "This combination tastes great on leftover pasta, too."

1 cup chicken broth
1/4 cup all-purpose flour
2 tablespoons butter *or* margarine, softened
1 package (3 ounces) cream cheese, cut into 1-inch cubes
1/2 pound process American cheese, cut into 1-inch cubes
3 to 4 drops hot pepper sauce
Pinch onion powder
1 package (6 ounces) imitation crabmeat, flaked
4 hot baked potatoes

In a blender, combine the first seven ingredients. Cover and process until smooth. Pour into a saucepan; cook and stir over medium heat until thickened. Reduce heat to low; add crab. With a sharp knife, cut an X in the top of each potato; fluff pulp with a fork. Top with crab sauce. **Yield:** 4 servings.

R.I. Woman Buried in Beloved Car

c The Associated Press

By JANET KERLIN

PROVIDENCE, R.I. (AP) - Three decades after Ralph Nader portrayed the Corvair as a casket on wheels in his book ``Unsafe at Any Speed,'' 84-year-old Rose Martin was laid to rest in her beloved 1962 model.

``She pre-arranged with us, and this was her wish. It was very well known throughout Tiverton that she wanted this,'' said Robert Ferreira, a director of the Oliveira Funeral Home in Fall River, Mass.

The widow and mother of three, who died Saturday, drove the flat-looking rear-engine white car around the town of Tiverton, population 14,000, for 36 years.

``She just loved the car. She didn't care what it cost to fix the car. If the car was broken, she wasn't one to ask you how much. `Just fix it,'" recalled Tiverton Auto Body owner George Murray.

Mourners at her burial at Pocasset Hill Cemetery both wiped tears and grinned as six police officers acting as pallbearers slid the inlaid wood coffin into an opening in the rear of the Corvair, which had been altered to accommodate the casket.

The car was then lowered into the ground with a crane. It took up four burial plots. An old handicapped license plate, held with a rubber band on the visor, was removed and handed to her relatives.

The Corvair was a popular car in the 1960s before it was buried by the rise of the muscle car and the 1965 expose written by Nader, an unknown Detroit lawyer who said it had serious steering and control problems.

But to Mrs. Martin, a talkative and no-nonsense woman who served as a police matron tending to women prisoners at the town jail, the low-slung car with four front headlights was a gem.

``To us it's just normal because she's imbedded it in our minds,'' Police Chief George Arruda said.

Mrs. Martin was laid to rest next to her husband. Her headstone showed a picture of her and car.

Murray prepared the car for burial last week, removing the rear engine, the steering wheel and seats to make room for a casket. He used a chainsaw-like cutting tool to remove a 14-inch section from the rear, then welded the two pieces together and painted the scar to look like new.

Mrs. Martin had paid $2,500 for the car when it was new, and it served her well, the mechanic said.

``It was a shame to cut it up,'' he said. ``But it's her car and she wanted it the way she wanted it.''

R.I. woman buried in car she loved

By Matt York, AP

Resting place: Rose Martin, 84, is laid to rest in a casket inside her 1962 Chevrolet Corvair in Tiverton, R.I. The mother of three drove the car for 32 years and asked to be buried in it, next to her husband. 'She just loved the car,' said Tiverton Auto Body Shop owner George Murray.

Submitted By:
Ron Bloom
The Corvair Group

Vairs and the Internet

In this day and age, I'm sure many of you CORSA members have your own personal computer or have access to one. There is some great stuff out on the Web related to vairs. Many of you may know of most of these sites and many more, but for those who do not, I hope you find this of some interest.

Of course I must start with CORSA's own web page, which was created and is managed by our own M&P team (www.corvair.org). This page has a lot to offer any Corvair enthusiast. This page has attracted many new CORSA members since its debut, and has been a real plus for CORSA. Check it out!

Virtual Vairs, our Internet chapter, has their own web page with a lot of good Corvair stuff on it, and you can join the chat group and share Corvair stories, tech tips, cars and parts for sale, and much, much more (there is a link to Virtual Vairs from the CORSA web page listed above).

Another way to find many interesting web sites related to Corvairs is use your favorite search engine (such as www.lycos.com) and insert the name Corvair. The last time I did this it came back with over 100 hits on different Corvair-related items, such as parts vendors, repair shops, and more; have fun, but I'll warn you right now you will spend many hours looking through all these web pages.

In the market to pick up another Vair? Go to Auto Trader on-line (www.traderonline.com), follow the prompts, and you may be surprised to find 70-100 Corvairs for sale all across the country. In some cases there are even pictures you can view of the vehicle that is for sale. Good luck!

Everybody loves an auction, right? Well, breeze on over to eBay (www.ebay.com), after arriving there click on collectibles, do a search on "Corvair," and watch what comes up. You will find anything from parts, manuals, model cars, real cars, and much, much more. As of this writing there were 26 different items on the auction block, including a 1966 Corsa convertible. That's right, so get your bids in now!

These are only a few sites which I know of, and I'm sure there are many more, so enjoy yourself. The Internet has opened up a whole new area to explore our beloved vehicle, the Chevrolet Corvair.

David Baker

Submitted By:

of my Corvairs, a 1966 Monza convertible. I would like to contact any member who has done anything along those lines.

Jim Creedon, 315/735-1100
496 Trenton Ave., Utica, NY 13502

Calvair

A great article! I was most pleased to finally see pictures of the Calvair, which I've heard about through some of my own work on Stirling engines and work contact with an old timer at GM Research who was involved in the project back in the early 1960s. Now that the car is at the CPF Museum, I definitely have to make a trip. A couple things:

1. This car was primarily a technology research car, *not* a styling car like the Monza GT and SS, etc. That's why it was done by GMR and not GM Design Staff. Yeah, GMR screwed around with the styling a bit (maybe with help—don't know), but it's really more for function (heat exchanger airflow and engine system access). When you put together a technology test bed, even for internal shows, you want it to look finished, not like a hacked-up piece. Thus, there were styling changes that were made (likely by non-styling oriented engineers) so that the vehicle would function properly. Cutting rough airflow holes with a sawzall wouldn't make it. "Far Out" was okay for this program as it was intended to explore engineering possibilities.

2. The hydrogen was the working fluid for the Stirling engine and *not* the combusted gas (natural gas was used to fire the burner). The Stirling cycle (at least decent executions of it) often use hydrogen as the working fluid because it has very high heat conduction and low pumping losses. Theoretically, the H_2 is not consumed in the operation of the engine. In practice, H_2 is a *very* small molecule and difficult to contain, especially when it's under a lot of pressure and heated. So, undoubtedly they had to "recharge" the working fluid from time to time.

3. Calvair was a *very* weird application of Stirling power, even for a Stirling. Typically, one would have the heat source (combustion) on board the vehicle fired by just about anything (gasoline, Diesel fuel, natural gas, whatever). It's generally right at the engine rather than at the other end of the car. On the Calvair, they actually experimented with off-board heating and then storing the heat in a thermal battery. That's

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TUCSON CORVAIR ASSOCIATION REGULAR MONTHLY MEETINGS

FOURTH WEDNESDAY of each month (except December)

DENNY'S RESTAURANT 6484 E.BROADWAY. Tucson,Az.

6:00 pm: Parking Lot Bull Session
6:30 pm: Dinner (optional)
7:30 pm: Meeting starts

COMING EVENTS

PLEASE CONTACT A BOARD MEMBER WITH ANY SUGGESTIONS

Regular Monthly Meeing, Wedesday May 27,1998
TCA Executive Board Meeting: Thursday, June 2,1998
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