



Leaky Seal

Corvair

November 2025



Corvair Minnesota Newsletter

President's message

I worked on my 63 convertible this past week getting it ready for a Halloween display in my front yard, it needed a coat of paint, just 5 cans of spray paint and some red lights inside to light up the skeletons.

This past month we attended the Frankensteiners Car Show in Cambridge. The weather was nice this year, we had 7 Corvair members attend with their cars and a few more walked in to visit us. Our new CMI members Chris and Sandy Rea were there with their recently purchased Rampside camper.

Our next event is our Holiday dinner on January 3rd

- Note: RSVP deadline is December 26th

Elections are this month. We are still looking for someone that would be interested in the Vice President role. The Vice President is responsible for scheduling a tech session at our monthly meeting. Below are the positions that are up for election and the current candidates:

- President: Dave Pedersen
- Vice President: Open
- Director: Tom Quinn

***Please note: We are still in need of someone to fill the remaining Activities Director position responsibilities through Dec 2026. If you're willing to help please reach out to myself, Paul, Tom or Jim Becker.

The next monthly meeting is Tuesday, November 11th

- Board meeting at 5pm
- Food and beverage is available from 5:30 to 6:30
- Meeting starts at 7pm.

See you at our next meeting.

Dave Pedersen

CMI President



CMI Meeting Minutes

September 9, 2025

Meeting was called to order at 7pm, by President Dave Pedersen.

Meeting night was quite a rainy night, so there were no Corvair cars driven, but 24 members came.

We have new members, Sandy and Chris Rea! Sandy grew up in Como Park, a few blocks from where I grew up by the golf course. Welcome Reas (*ed.*: proud owners of a red and white Rampside with a CREE camper and the light blue '62 Rampside – once owned by Jack Bacon).

The fall breakfast was held on a beautiful morning, Jim Bankston, we all hope you are feeling better!•

I wasn't able to be there this year, I went to see our grandsons soccer game. Priorities....!

The Frankensteiners car show had 7 Corvairs driven. Jim Brandberg had trouble with his car that morning (*ed.*: just a small engine fire resulting in minor personal injury to Jim) - all ended up ok.

Elections will be held in November, think about who you would like to elect.

We still have Activities director open, if anyone is interested.

Corvair floor matts went up for auction, and Jerry Audorff got the winning bid.

Jim Brandberg led the tech session on Corvair carburetors thru the years. Clint Olsen won the drawing, a new hat..

The Director of Treats brought something new, everyone smiled.

Meeting adjourned 8-ish.

Acting Secretary, Gail Quinn

Corvair Minnesota Birthdays



October Birthdays:

- **Ray Alexander**
- **Lee Knauf**
- **Dave Pedersen**
- **Dave Steffens**

(I'm sorry for not publishing these last month – *ed*)

November Birthdays:

- **Bill Cook**
- **John Herkenratt**
- **Brent Krause**

As always, let me know if I have missed your name on the Birthday list - Thanks!

Gail Quinn, Director of Treats
Gailquinn263@msn.com

Oil Leak Investigation

When it comes to oil leaks a Corvair engine has a lot of opportunities. Generally speaking when compared to a more conventional water cooled engine, an air cooled engine has more components mounted externally rather than inside a block. There's also more thermal expansion, the engine just grows more between cold start and working hard on a hot day. Then there's the variance of a single crankcase going to individual cylinders and then back to a single cylinder head on each side. Add to that the difference in metals between say an aluminum crankcase, cast iron cylinder and then aluminum cylinder head. Also they are not usually the same temperature; a cylinder head is much hotter than a crankcase. An air cooled engine also gets hot, really hot, water boils at 212 but our cylinder heads can go to 450 or more. It can be challenging but we really can get it all sealed up. Don't you roll your eyes at me, yes we can. We are fortunate in having better materials available today and the hard knock experience of those who came before us. In the interest of not taking on too broad a topic I'll concentrate more on figuring out where it's leaking from rather than how to fix it. In a Tech Session in the 90s Peter Schmit used the word "sleuthing" which struck a chord with me. I read Sherlock Holmes as a youth and enjoyed Adrian Monk on TV. Sleuthing for me speaks to a clean activity where you look for clues without disrupting anything. I like as much preliminary information as possible, a hypothesis is a good thing and fools rush in.

Some leaks are obvious, others not so much. The oil seems to end up on the floor eventually with gravity and all but may take a circuitous route to get there. The wind underneath the car when it's underway can add to the confusion. When in doubt I like to start at the bottom and work my way up. I like to start by cleaning the bottom of the engine. I buy a lot of brake cleaner and blue paper towels but use them thoroughly. Some find the cleaning tedious but I find it therapeutic and I'm also looking for clues. Fixing leaks is often more of a process than an event. Once you fix a big one a smaller one can become more apparent. It's often not one and done. It's good to be well practiced on getting the car jacked up and safely on jack stands. I like to get the bottom of the powertrain cleaned up, take the car out for a drive, run it in on a clean floor, immediately jack it up and see where the oil develops.

Some drips you can see right away but others may take a while. A trouble light is good. You want to keep checking, if it sits too long and there's a pool on the floor you may have trouble seeing where the drip originated. Sometimes I like to use a plumb bob on a string from the engine to the floor. That may only get you to a zone with several possibilities to consider. You know patience is a virtue. When considering a powertrain one may need to discern just what the fluid is; engine oil, gear oil, automatic transmission fluid, gasoline or a combination. Have your senses of color, smell and touch alive. Consider whether it seems to leak all the time or just when it's running.

You may need to remove obstructions such as the lower shrouds for a better view. I've removed the rear engine mount and skid plate to run the engine supported on a jack to examine the rear components. An oil pan leaking on the front edge can look like it's coming from the weep hole in the bell housing. Except for a leak within the bell housing, just about any engine leak can be fixed with the engine in the chassis. I don't get up as readily as I used to but I do have a favorite rug for laying on the floor, it's something I learned in Kindergarten.

Jim Brandberg

Corvair Minnesota, Vice President

REAR ENGINE AUTOS

by David C. Gantenbein me'60

Rear engine autos are fast becoming Americas favorite. 2½ million of these small economical vehicles are on the roads today.

INTRODUCTION

IN THE past ten years a great number of small foreign automobiles have appeared in this country. The most common are the Renault and Volkswagen. These two are unique because each has the engine placed in the rear.

Because a car must have its weight fairly evenly distributed between the front and rear wheels for riding comfort and roadability, rear placement of the engine is practical only in small cars. This is true because in small cars the weight of the passengers is a larger percentage of the total weight of the vehicle. The fact that the passengers are a large percentage of the weight of the vehicle enables us to use this weight to counter balance the engine.

DEVELOPMENT AND HISTORY

The development of the rear-engine motor car which has taken place in Europe during the past ten years may be surprising to many, but not to those who know the history of the industry. Rear-engine cars have always been built. If their numbers remained relatively small during the first half century of the motor car, it was because the slow evolution of

the automobile did not permit drawing on all the advantages of the rear-engine formula.

With an increase in use of the internal-combustion engine the engine became more compact. As an inheritance from the horse-drawn vehicle, the front wheels were used for steering, so it was natural to place the engine as close as possible to the rear wheels which did the driving.

The problem of the gearbox itself was most easily solved by mounting the engine so that its axis was parallel to the rear axle. The rear wheels were then driven by means of belts, pulleys, or chains. Nearly all of the cars built between the years of 1880 and 1900 were of this type.

From this time on engines became larger and heavier, and had to be moved forward to achieve a weight balance. The only development on rear-engine cars from this time until the 1930's was done for racing purposes.

The great industrial expansion of the rear-engine auto began in 1938 with Dr. Porsche's Volkswagen. From 1938 until 1945 development was steady; however, immediately after World War II the popularity of rear-engine cars skyrocketed. During the period from 1945 until

1956 European production of rear-engine autos increased from 5.2 percent to 38.3 percent of the market in Europe.

To have achieved such development in European mass production, the technique must have marked advantages for both customer and manufacturer.

DESIGN AND MANUFACTURING ADVANTAGES

The common rear-engined car is composed of a closed passenger package (the body) at the rear of which is fixed the engine. Because of the car's smaller size, the body is usually made in one compact unit. This unitized construction allows the manufacturer to eliminate an expensive frame. This type of construction is also used on all American Motor Company automobiles. The other mechanical units such as the engine, wheels, transmission, and steering gear are then fastened directly to this unitized body. Because this type of construction is so easy, it is obviously popular with the manufacturers.

Rear placement of the engine allows minimum overall length of the body for a given passenger space. It allows the front-seat passenger's feet to extend to the front

THE WISCONSIN ENGINEER

Continued on page 7



Corvair Minnesota Holiday Party

Saturday, January 3rd, 2026

TST Creative Catering/ Ideal Hall

1494 Dale Street N, St Paul

Social Hour: 4:00 pm – 5:00 pm

Light Hors d' Oeuvres

Cash Bar is available

Dinner is served at 5:00 pm

Cost is only \$25.00 per person



Dinner options:

Stuffed Chicken Breast
Garlic Mashed Potatoes
Carrots

Roast Beef
Garlic Mashed Potatoes
Carrots

Vegetarian
Cheese Tortellini Alfredo
Vegetables



All will be served with:

Salad w/ Dressings, Rolls, and Chocolate Caramel Cake

Questions/directions: call Dave Pedersen @ (612) 385-2241

**Mail in your reservation (opposite side)
along with payment of \$25 per person (check payable to CMI)
to:**

Response is due by December 26th!

Dave Pedersen
14957 Durant St NE
Ham Lake, MN. 55304





Corvair Minnesota Holiday Party

Saturday, January 3rd, 2026

Response is due by December 26th!

***** Annual CMI Holiday Party Response *****

Name _____ Meal choice: Chicken _____ Beef _____ Vegetarian _____

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Name _____ Meal choice: Chicken _____ Beef _____ Vegetarian _____

Name _____ Meal choice: Chicken _____ Beef _____ Vegetarian _____

Name _____ Meal choice: Chicken _____ Beef _____ Vegetarian _____

Cost: \$25.00 per person (make your check payable to CMI)

Return your reservation for the Party no later than December 26th to:

**CMI Holiday Party
Dave Pedersen
14957 Durant St NE
Ham Lake, MN. 55304**

*****Return this part with your check(s)*****



Continued from page 4

Rear Engine Autos



Renault Caravel

wheel centers, while the engine's farthest unit is located under the rear seat. Thus resulting in a minimum wheelbase for a given passenger space. In conventional cars comfort is possible only by increasing the wheelbase, thus increasing the passenger space. It is understandable that this increased wheelbase will also increase the weight and expense of an automobile; however, with a rear-engine car it is possible to have equivalent comfort without the increase in size or expense.

CONSUMER ADVANTAGES

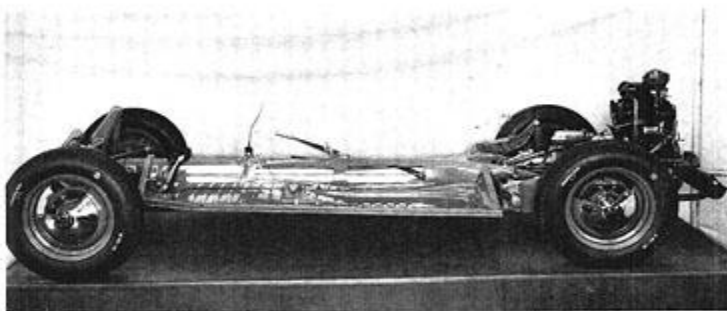
Safety

Undoubtedly the most important question asked by the consumer is, "What does a rear-engine auto have to offer me?" The rear-engine car offers many advantages to the consumer. One of the most important is safety.

Rear-engine cars are much safer in a collision than conventional cars. In a conventional car the motor, which is in the front, has a large mass. It is interesting to

note that statistics show 75 percent of all accidents involve the front of autos. It is a recognized fact that not the fall, but the sudden stop kills people. This same principle applies to a collision in an automobile. Because the engine is in the rear, the front of the car is able to deform, and the deceleration occurs less rapidly. In rear-engine cars, passengers do not have to worry about the engine being pushed into their lap. Because of rear placement of the engine, serious injury due to collision is greatly decreased.

Greater traction is possible with rear-engine placement. The weight of the engine pushes directly down on the driving wheels, and the effect is increased on a grade. Increased traction is very comforting when driving conditions are hazardous. In the conventional car the greater share of the weight is on the front wheels. This large amount of weight causes hard steering, and nose-diving when the brakes are applied.



Volkswagen Chassis

OCTOBER, 1959

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11

Continued on page 8

Continued from page 7

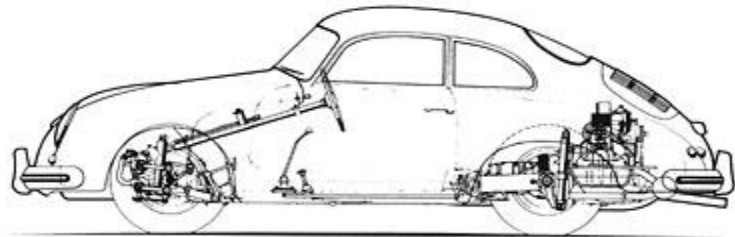
Comfort

Absence of engine heat in the passenger compartment is made possible by the placement of the engine in the rear. The engine is outside the passenger compartment and totally isolated from the passengers. Thus, the heated air does not flow over the floor of the body as it does in the front-engine car.

Rear placement of the engine also overcomes the problem of exhaust fumes. Because there are no pipes running under the car, it is not possible for fumes to leak into the car. In the front-engine car the exhaust pipes which run under the car drastically reduce the ground clearance. These pipes are also very vulnerable to damage on bad roads. Rear placement of the engine easily does away with all these problems.

In rear-engine cars the seats are located between the front and rear suspension. This reduces movement of the car at passenger level. As a result the riding comfort is increased. In most conventional cars the rear seat is placed nearly over the rear wheels, the back seat is then subjected to the movement of the rear wheels.

As was mentioned before, much of the weight is on the rear wheels of a rear-engine car, while in a conventional car a large share of the weight is on the front wheels. This decrease in weight on the front wheels results in easier steering, which is especially useful if a car does not have power steer-



Porsche—coupé type 356A.

ing. Not only is the steering easier, but the short wheelbase, which is inherent in cars of this design, permits a much shorter turning radius.

Economy

Because most rear-engine cars are small in size, one of their principle advantages is economy. As was mentioned before, rear-engine cars may be made lighter in weight without any loss of strength. It is obvious that lighter weight will produce an increase in economy as well as performance.

The drag coefficient is as much as 40 percent lower for cars of rear-engine placement. Cooling air for the engine enters along the side of a rear-engine car.

In a front-engine car it must enter under the front bumper of the car. Front entrance of cooling

air results in turbulent flow of the air, and higher drag coefficients. Since the wind force produced on a car is the product of drag coefficient, cross-sectional area, and the velocity of the car; the force needed to overcome wind resistance is less, if the drag coefficient is reduced. The reduction in wind resistance shows up as an increase in economy.

The unit-type body construction used in rear-engine cars provides a stiffer front section. Because the front section is stiffer, the front wheels tend to maintain their alignment. It is a known fact that many of the conventional Detroit made cars have a considerable problem with maintaining wheel alignment. It is not only expensive to have the wheels aligned, but the increased wear on tires due to misalignment can be very expensive.

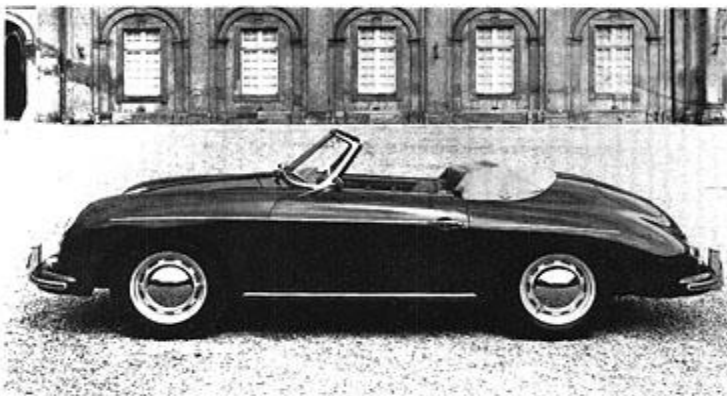
CONCLUSIONS

Has the rear-engine design a good chance to increase its popularity? I believe it has, as long as small economy type cars continue to remain popular.

We have seen that the advantages of this design are numerous. It offers advantages to the designer, manufacturer, and consumer. Now that 2,500,000 rear-engined cars are being driven on all continents and in all climates, customer acceptance is no longer a problem. We can, therefore, conclude that the rear-engine car will not only maintain, but improve its present position in the sales market.

THE END

THE WISCONSIN ENGINEER



Porsche—convertible type 356A.

Classified Ads

I have a Corvair and I'm finally at the point where I am ready to let it go. I have had Jim Brandberg work on her over the years and it's because of him I'm reaching out to "Corvair Minnesota". The car is is a **1965 Corsa convertible** with manual transmission. She runs great (thanks again to Jim) and her exterior is if good condition but certainly not show quality. kirk larsen <kirklarsen123@yahoo.com>

My name is Terry Johnson and I have a **1964 Corvair Monza** that I would like to sell. It is in original condition, and would need some tender loving care. Engine runs good, and it is drivable. I am asking \$6,000 for it. My number is 651-470-4071

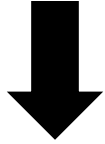


1967 4-Door, 110, power glide, completely redone, new paint and bodywork, new tires and rims. Request for more pictures, too many things to list (*no A/C*).

Call Bill Gautsche @ (715)828-9001 with questions \$13,500



Check us out...



For more information on
Corvair Minnesota,
visit our website:
www.corvairminnesota.com

Follow us on
Facebook:
Corvair Minnesota



793 members

(as of 09/28/2025)

Spot a 'Vair!



1961 Rampside recently acquired by new members Chris and Sandy Rea. It is equipped with a dealer optional CREE camper, 110 hp engine w/ 140 heads and backed by a powerglide transmission.

CMI is a non-profit corporation, chartered with the CORVAIR Society of America. Send CORVAIR Minnesota's \$20.00 annual dues, payable by **January 1st**, to the CMI Treasurer. Membership in CORVAIR Minnesota entitles you to the monthly newsletter, the **Leeky Seel**, with free ads for members, a club window sticker, discounts on club activities, information on parts availability and good advice on the preservation and enjoyment of the CORVAIR automobile. **Yeah!**

THE LEEKY SEEL

408 7th St S

Hopkins, MN 55343-7722

TEMP – RETURN SERVICE REQUESTED



The next CMI meeting will be held on the
11th of November at Ideal Hall in St. Paul