

June 2014

the *Fanbelt* 
new jersey association of CORVAIR enthusiasts

Undesirable?



**Recently, Hagerty Insurance published an article
which included our favorite car
among five previously underappreciated collectibles.
The story begins on Page 2.**

Breakfast Meeting This Saturday, June 7

9 AM at the Empire Diner

No Tech Session This Month

Tech Sessions will resume later this summer

Downtown Somerville Friday Cruise Night June 20

Mark your calendar, details to follow

The Stars Come Out! NJACE Visits a Planetarium, July 12

Summer is here at last!

Five “Undesirable” Collector Cars That Have Skyrocketed In Value

by Rob Sass

The classic car world is possibly one of the most opinionated collecting pursuits known to man, and nearly everyone seems to have an opinion on relative values and desirability. Each car on this list has at one time or another been deemed by “experts” to be hopeless as a collectible and each has one thing in common – they’ve skyrocketed in value.

1. 1956-58 Studebaker Golden Hawk: Poor Studebaker, the cars of the ill-fated favorite son of South Bend, Ind., never seemed to get the same love from collectors as the cars of the Big Three. But they may be getting the last laugh. At a time when the prices of most American cars of the 1950s have been flat, the Golden Hawk has been red-hot. With great looks and some of the best and sportiest interiors of American cars of the era, even European collectors have taken a new look at Hawks, where the car’s small by American standards proportions make more sense. Ten years ago, these were \$25,000 cars. This past January, a not terribly well optioned car sold at an auction in Scottsdale, Ariz., for more than \$100,000. Let’s hear it for the underdog.



Studebaker Golden Hawk

2. 1965-69 Corvair convertible: The air-cooled rear-engine Corvair is perhaps the ultimate automotive underdog. The hatchet job that Ralph Nader did on the first generation of the car tainted even the vastly improved second-generation Corvair. In truth, it was a fantastic car, with great looks and even an optional turbocharger. Jay Leno loves his. Yet,

historically, they’ve appealed to a narrow market—fans of front-engine Chevy muscle shun the car as do import snobs, to whom the car’s size, looks and handling should appeal. Collectors were fond of saying that Corvairs would always be cheap. How wrong they were. Nice convertibles struggled to break \$15,000 less than 10 years ago; they’ve since doubled in value.



1969 Corvair Convertible

3. 1979-80 BMW M1: The M1 was BMW’s first foray into the mid-engine exotic world. Just over 450 were built. With a little development help early on from Lamborghini and some inspiration from an earlier Paul Bracq-designed concept car, BMW produced a credible supercar and the first officially badged M-car that spawned a long line of special Motorsports BMWs. Back in the flamboyant 1970s, though, the car was deemed to be too low-key inside and out. But its subtle good looks have aged extremely well. As recently as 2003 an M1 sold for just \$49,000 at an auction in the UK. Three years later, they were still going for well under \$100,000. This past March, one sold at an auction in Florida for \$379,000.



BMW M1

continued on next page

“Undesirable” Cars, continued

4. 1976 Porsche 912E: Porsche has always struggled with the entry-level stuff. They know that they should have an entry-level car, but they’ve often either fumbled the execution and/or suffered a backlash from the Porsche snobs. The 912E was a one-year-only stop-gap effort that held down the down-market fort after the end of 914 while the front-engine, water-cooled 924 was readied for the U.S. It was essentially a stripper 911 with a VW Transporter-derived 2.0-liter Type IV air-cooled four-cylinder engine. On the surface, a sports car with a bus engine sounds like a bad idea, but it was actually the same engine from the outgoing 914, and if you could get past the sound, it was quite pleasant with tons of low-end torque. Just under 2,100 were made (all were sold in the U.S.), and while in the past it has been derided by supposed Porsche experts as “perennially undesirable,” the 912E’s mid-’70s vintage 911 looks and easy serviceability have made them quite desirable today. I personally paid \$6,500 for a nice one in 2005. The same car would be worth \$20,000 today. A New York dealer has recently advertised one for just under \$40,000.



Porsche 912E

5. 1955-63 Mercedes-Benz 190SL: The 190SL has lived forever in the shadow of its bigger, sportier and more powerful sibling the 300SL. And while they’re outwardly a bit similar, they’re in a whole different league performance-wise. The 190SL used to be dismissed as “a German Thunderbird,” or a car whose looks wrote a check that its performance couldn’t cash. But as 300SLs rose to over \$1 million, collectors began to accept the 190SL for what it was – a very well-built and pretty sunny day cruiser. Cars that traded for under \$50,000 just a few years ago can now bring a quarter of a

million dollars.



Mercedes-Benz 190SL

Our thanks to Hagerty Insurance, and to Dick Kellner who tipped us to this article.

Hot Summer Topic: Corvair Cooling

by Ken Schiffner

Come summertime, our thoughts often turn to... cooling. Not just of us, but of our Corvairs.

The Corvair featured unique methods to maintain the engine in the proper heat range. Since the engine waste-heat was also intended to heat the passenger compartment (except for those customers purchasing the gas fired heater), the engineers had to design a system that would heat rapidly but then be controlled in a simple manner to prevent the engine from overheating. Excessive engine temperatures could cause oil breakdown through distillation of the oil, as well as thermal stress problems that could cause mechanical failure. It is a testament to the Corvair designers that they achieved such a good compromise that many Corvair owners have kept their cool under all sorts of ambient conditions.

"Compromise" is the key word here. Insight into the amount of engineering that went into the cooling system is revealed in R.P. Benzinger's "The Engine," part of the Corvair SAE Papers published by one of the Corvair parts suppliers.

Internal combustion engines typically have a thermal efficiency of about 40-50%. That means that some of the heat generated by the

combustion of the fuel must be "dumped" as waste heat. Some of the heat leaves via the exhaust pipe products of combustion, other radiates from the engine surfaces, some tries to leave as the oil is heated and is partially distilled. The heat transfer from the engine is a function of the heat-conveying capacity of the cooling medium (air), the rate (heat per unit time) at which the medium flows over the heated surface, the difference in temperature between the hot and cold surfaces and the surface area. In an air cooled engine, the cooling air is moved over the engine surfaces. It is known that heat tends to move towards thinner sections of heat transfer surfaces. Thus fins. The fins, their spacing, thickness, and surface area are extremely important. The cooling system is designed to move the air over the hot surface in turbulent flow to increase heat transfer. Turbulent flow essentially allows the moving air to strip away heat from the hot surface by breaking up the boundary layer at the surface.

GM engineers chose two (2) cooling methods. One was cooling the engine surface using a blower and the other was cooling the oil using a small heat exchanger (the oil cooler).

The Blower

It seems that GM was kind of guessing about this. Let's just say they were more empirical than theoretical. Benzinger pointed out that "Cooling system pressure required and needed fin area may be approximated from existing engines" and that "increasing the pressure increases the heat transfer but also increases the blower power requirement". They had a dilemma. They needed enough air to cool but not too much that the blower horsepower would be prohibitive. They calculated how much air they would need and determined the blower size.

Given the design of the Corvair's low flat back deck, the engineers chose to (or had to) to place the blower horizontally rather than vertically. The result however was a centrifugal type blower mounted horizontally driven by the "mule drive" type belt. They selected a blower (in 1959) with 24 blades which had a capacity of moving 1850 cubic feet of air at 4000 rpm engine speed. They sped up the blower by a ratio of 1.6 times the engine speed so at 4000 rpm the blower is

whizzing at 6400 rpm. They also installed baffles under the cylinders to provide slight back pressure for better air distribution.

The horsepower consumed by the blower is about 8 bhp at 4000 rpm. It puts out about 10" of water column pressure at this point which is required to overcome the direction change resistance of air flow through the engine.

Now how do you control all of this? The best way to control a radial blade blower is by controlling the blower inlet. The horsepower the blower consumes is basically a function of how many pounds of air it moves. Throttle (i.e. choke off) the amount of air and it moves less and uses less horsepower. Pinch the outlet and the blower tries to overcome the resistance.

GM engineers (initially at least) used the "Thermostatic Inlet Control." It was only used on the 1960 model. A thermostat located near the outlet of the engine regulated a damper ring that controlled the amount of air allowed to enter the blower.

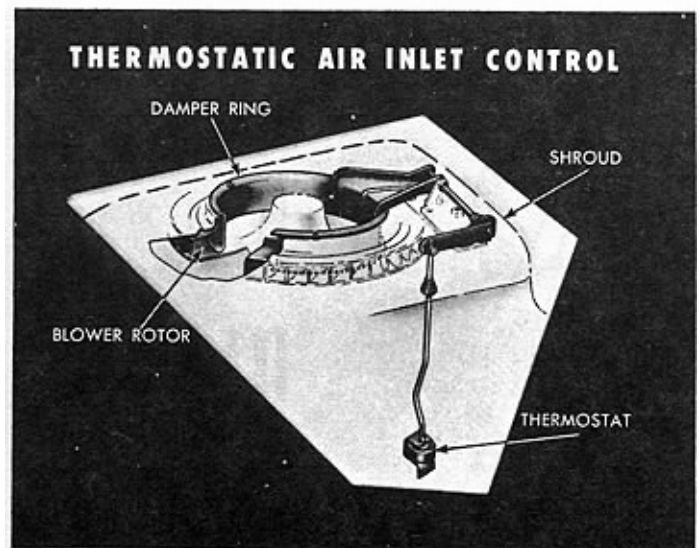


Fig. 34 Thermostatic Blower Inlet Control

For some reason(s), for 1961 the GM engineers changed this to the "pinch off the outlet" concept which is seen in form of the two moving (hopefully) thermostatic doors in the lower rear shrouds. One reason may have been passenger heating requirements. By "pinching off" the airflow outlet by holding the doors closed, one established a pressure that could be

used to help push heated air into the heater box and then into the passenger compartment. Another possible reason was that it was cheaper. In any event, it worked. From 1961 on, the Corvair engine used the shroud damper door technique to control the engine temperature.

The blower wheels evolved over time. Perhaps a result of belt flipping issues related to the inertia of the original steel wheel, the blower was changed to lightweight magnesium casting in 1964. This radial bladed blower produced slightly less airflow (reportedly about 1500 cfm at 4000 rpm) but had a much lower rotating mass.

Since the fan belt has limited stretching capability, the blower speed stays as a fixed ratio of the engine speed. When accelerating, the inertia of the blower tends to load the fan belt. One side increases in tension and the other side goes into compression sort of like a Slinky. When the engine suddenly decelerates, these forces are quickly reversed. This energy has to go somewhere so the belt either shakes, heats up, flips, or all of the above. Running "loose" belts basically allows this energy to be relieved by flapping the belt.

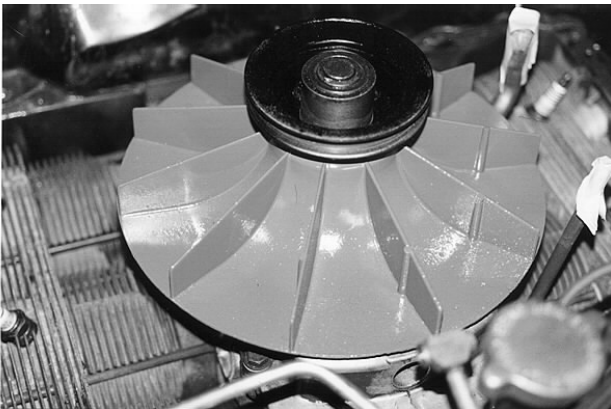


Fig. 64 1964 Corvair Engine Blower

The oil cooler was designed as a small finned type heat exchanger and was neatly packaged at the left rear of the engine. Various oil coolers were used over the years with the earliest twelve-fin design considered by some to be the best for heat transfer.

Later oil coolers were 8 fin designs with supposedly less heat transfer surface. One has to

remember that the turbulence over the fins has a great impact on heat transfer so it may be that 8 is not necessarily worse than 12.

In hotter climates and for racing, some Corvair owners install supplemental oil coolers. These coolers are remotely mounted in locations where air movement and/or convection can be used to cool the oil.

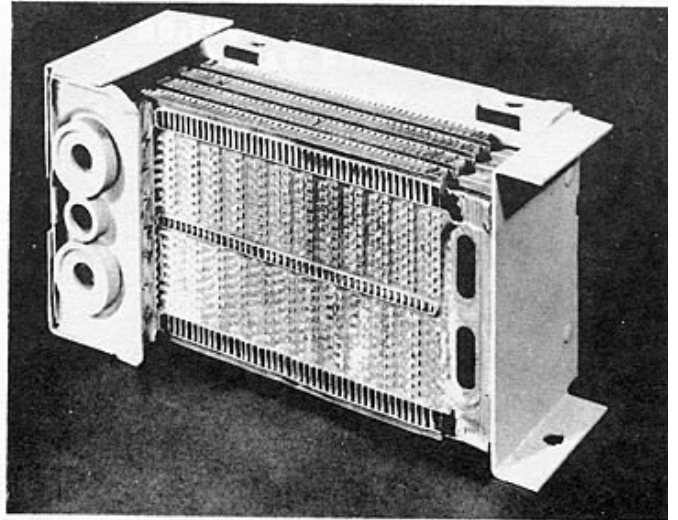


Fig. 33 Oil Cooler Cutaway

Have fun with your summer driving and try to keep your cool!

**Breakfast at the
Empire Diner
Saturday, June 7
9:00 AM**

The Empire Diner is located at **1315 U.S. 46, Parsippany, NJ 07054**. This is on the eastbound side, a short distance east of I-287, and easy to get to from I-80 or I-287.



What's This?



These are two pieces of sound-deadening material that Chevrolet placed inside the interior quarter panels on all Greenbriers and Corvans. Originally, there were flat, and glued in place.

Over the years, the glue fails, the pieces harden, and they fall down within the quarter panel, blocking the flow of cooling air to the engine. Such was the case on Steve Brien's Greenbrier, from which these pieces were removed during our most recent tech session at Ashley's Auto Body.



In this photo, Steve attends to some additional work inside his Greenbrier.

But the primary task at the tech session was the installation of an engine into John Egerton's track car. In the photo below, Brian O'Neill is under the car on a "Lime Rock creeper" while Tony Gervasio assists from above.



There will be no tech session this month due to scheduling conflicts. The tech sessions will return in July.

**No Tech Session
in June**
The Tech Sessions at
Ashley's Auto Body
will resume later this summer

**NJACE Breakfast
at the Empire Diner
Route 46 East, Parsippany
This Saturday, June 7**

NJACE Classified Ads

For Sale: 1963 Corvair convertible. The car was restored in 2002 -- looks great! Runs and drives well but will need some TLC. Top and paint were new in 2002 and it has been garage kept since. Does have a crack in the windshield. \$7,000 or best reasonable offer. Cash only, pick up only -- Bridgewater, NJ. Call Chris (908) 500-8569.

For Sale: Passenger side seat for 1968 Monza Coupe, in Medium Blue. Original seat with new seat tracks, correct back piece, plastic hinge covers, and hardware. The new pieces alone are close to \$200.00. (New skins from Clark's are \$200.00 per seat and it would cost hundreds to have a seat professionally rebuilt.) Seat is still very firm and could be bolted into the drivers side if you don't mind the back release location. A bargain at \$350.00. David Main, 201-320-2628, email dmain90826@aol.com.



Overdue?

Just six members have not yet renewed their membership, and as a result this will be the last newsletter they will receive. Are you one of them? Check the list below to see if your membership is now past due for renewal. (The list has been updated with renewals received as of May 20.)

If your name is on the list, please print and fill out the membership form on the last page, and send it in with your dues payment. Thank you!

<i>Last Name</i>	<i>First Name</i>	<i>Expires</i>
Androvett	Phil & Maryann	03/31/14
Calandra	Steven	03/31/14
Forlenza	Theodore	03/31/14
Niemiec	Gary & Gail	03/31/14
Stanley	William	03/31/14
Swygert	Andre	03/31/14



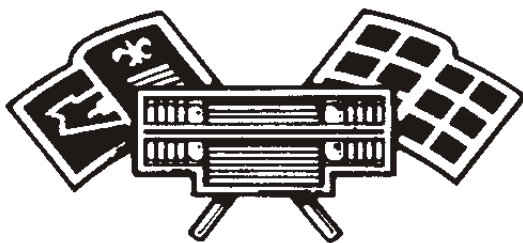
Membership Meeting Minutes April 5, 2014, Parsippany, NJ

In attendance were 27 members as per the sign-in sheet.

The meeting was called to order at 9:35 AM by President Brian O'Neill.

Upon motion duly made and seconded the minutes of the 12/7/13 membership meeting were approved as published in the newsletter.

Treasurer Tim Schwartz reported income of \$2,085.05 and expenses of \$3,336.49 for the period 1/1/14 through 3/31/14, with a checking account balance of \$2710.63 as of 3/31/14. CD



interest for the same period was \$32.74, with a CD balance of \$5,500.21 as of 3/31/14. Upon motion duly made and seconded the Treasurer's Report was accepted as read.

Activities VP Rob Wanhouse reported on the Morven House & Princeton tour, and Rob was recognized for the excellent tour despite less than ideal weather. Next up is a tour to Ellis Island in May.

Publicity VP Bob Marlow reported that club webmaster Al Lacki has updated the web site and added photos of members' cars. Al is looking for more such photos.

New Business: Brian O'Neill and Steve Calandra will work on obtaining new club jackets. A minimum of six are needed. Brian will check also on the availability of button-down shirts.

Ed Natale reported on the Metro Petro advertising and automobilia show in Elmwood Park. Members were reminded that a tech session at Ashley's Auto Body was to follow the meeting. There was discussion of possible alternate tech session locations to assist other members.

The meeting was closed at 9:45 AM.

Respectfully Submitted,
Frank Hunter, Secretary

Corvair

Crash!



It has happened to most of us at some point, and now it has happened to me. On Friday, May 23, my computer – on which I maintain my business and the club files – crashed. The hard drive lay down and died.

It being the Friday of the Memorial Day weekend was both good and bad. Good in the sense that I had three days instead of two until the next business day, but bad in the sense that it was holiday weekend and more difficult to obtain needed help.

Fortunately, I run an external hard drive backup and all my important files were saved. A new computer was assembled and in place quickly. But for reasons yet unsolved I have not been able to recover my old email messages nor my email address list – including the club email list.

So for this newsletter Tim Schwartz has stepped in to save the day by distributing it via the club email list that he compiled while I was out of town last month. Many members are aware that things have been trying for me lately, with the sudden necessity to move my 90-year-old mother into a nursing home, and the attendant multiple trips to Florida. My thanks to Tim and to the other officers for stepping up to carry my portion of the club responsibilities.

–Bob Marlow, Publicity VP



Palisades Amusement

← In this photo, a group of NJACers pose in front of the Bergen Palisades along the Hudson River during our recent Ellis Island driving tour.

In this photo, →
the same group of NJACE members put the Hudson River and the George Washington Bridge to their backs for the camera. No word on whether all the lanes to the bridge were open that day...



Don't miss out! Join us for future tours and other activities!





New Jersey Association of Corvair Enthusiasts
P.O. Box 631
Ridgewood, NJ 07451
Membership Form

Date _____

[] New Membership or [] Renewal

[] Individual or [] Family*

*Family Membership includes two adults and all children under age 21 living at a single address.

Last Name _____ First Name _____

Name of 2nd Adult Family Member _____

Mailing Address _____

City _____

State _____ Zip _____

Phone (_____) _____

E-mail _____

Our monthly newsletter and other updates are delivered via e-mail.
Printed materials are mailed periodically, as needed.
We do not share our mailing lists with others.

NJACE dues are payable as follows:

[] One Year Membership, New or Renewal.....\$19.00

[] Two Year Membership, New or Renewal.....\$36.00

Membership expires on March 31st

Total Remitted: \$ _____

Please make your check or money order payable to NJACE, Inc.,
and mail this completed form and payment to the address above or deliver it to the Treasurer at any
club event.

NJACE is a Chapter of CORSA, the Corvair Society of America.
CORSA membership information is available online at http://www.corvair.org/

Tell us about you and your Corvairs

Your Corvairs (year, model, color, equipment, condition etc) _____

Your other cars and trucks _____

Your other hobbies and interests _____

Your profession _____

Your birthday (and your age, if you wish) _____

Your anniversary (and year married, if you wish) _____

Your children/grandchildren or other family _____

Your pets _____

When and why did you first buy a Corvair? _____

Anything else you'd like to tell us _____