



# *the fifth wheel*

JANUARY 2014

[HTTP://WWW.CORVAIR.ORG/CHAPTERS/LVCC](http://www.corvair.org/chapters/lvcc)

ESTABLISHED 1976

## **Inside this issue**

*Oettinger Wasserboxer* 1  
*The Other Flat-Six!*

*Yay! It's January!* 4  
*Next LVCC Meeting*

*President's Corner* 5  
*By Dennis Stamm*

*NECC Update:* 5  
*NY Safety Track*

*NJACE Corvair* 6  
*Parts Auction*

*LVCC Calendar of* 7  
*Events*

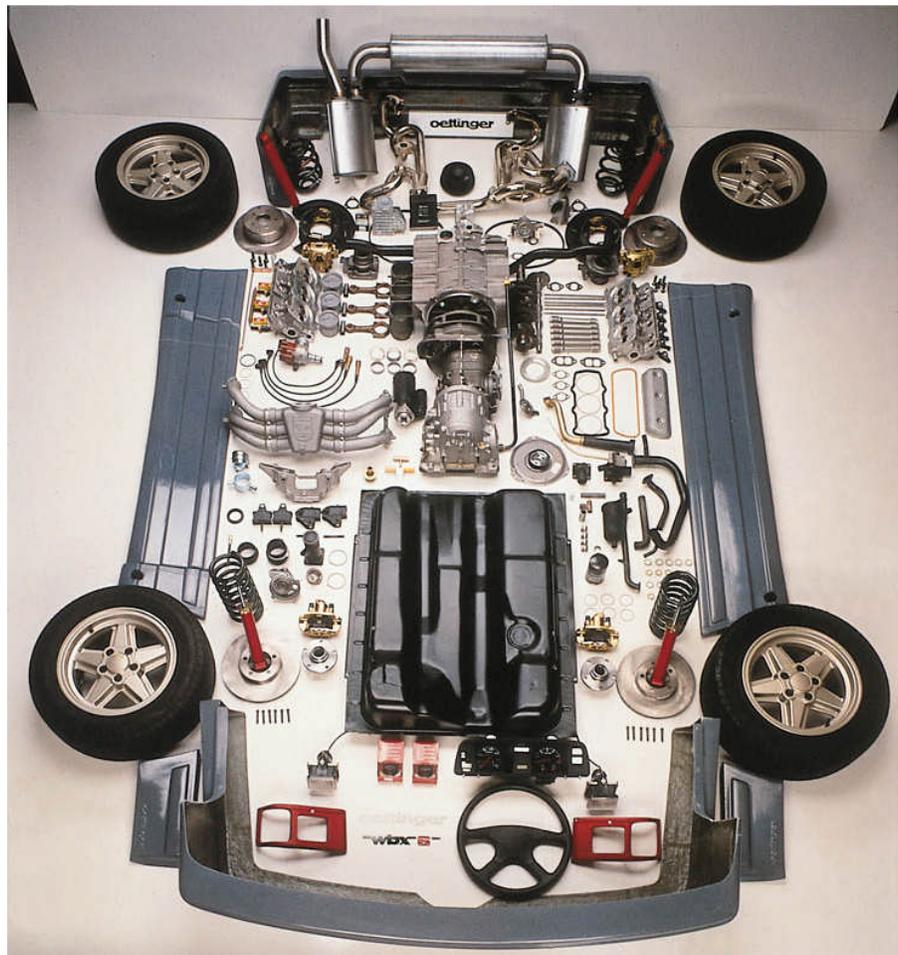
*LVCC Classified* 8  
*Ads*

*Corvair Modeling:* 8  
*Earnhardt Racer*

*LVCC Officer* 8  
*Contact Info*



## **OETTINGER WASSERBOXER THE OTHER FLAT SIX!**



*The Fifth Wheel* is published monthly by the Lehigh Valley Corvair Club (LVCC), Inc. We accept articles of interest to Corvair owners for publication. Classified advertising of interest to Corvair owners is available free of charge to all persons. Commercial advertising is also available on a fee basis. Please contact our newsletter editor, Allan Lacki for details.

LVCC is one of the many regional chapters of the Corvair Society of America (CORSA), a non-profit organization that was incorporated to satisfy the common needs of individuals interested in the preservation, restoration, and operation of the Chevrolet Corvair. LVCC caters to Corvair people who live in and around the Lehigh Valley Region of eastern Pennsylvania. This is a very special car club! LVCC dues are \$10 a year for CORSA members or \$15 a year for non-CORSA members.

## Oettinger WBX6 The Other Flat Six!

At this time of year, I like to sit beside the crackling fireplace with Doggie and Bunny and watch the snow as it dances and swirls about outside my frosty window pane. And as soft light of dusk descends upon the bucolic vista of my vast estate, I often fall off into a gentle dream about the days of old and what could have been...

What if things turned out differently? What if Corvairs remained wildly popular? What if there was a third generation Corvair? What would be the next evolution of the Turbo-Air Power Pack?

It would probably be a lot like the Oettinger WBX6!

By the 1970s, even Volkswagen had pretty much given up on rear-engine cars, phasing out the Beetle and its variants, first with the K70, then with the Passat, and then with the Golf. But VW didn't give up so fast with its hippy vans! It continued to refine and redesign them.

Introduced in 1979, the T3 "Vanagon" was manufactured in Germany right up to 1992. To meet emission control requirements, the classic air-cooled flat-four was replaced by a new water-cooled design: the so-called "Wasserboxer". Like its forebears, the Wasserboxer was a flat-four, but its cooling fins were replaced by water jackets. It became the standard engine for the T3 Vanagon.

Volkswagen even considered offering the T3 Vanagon with a six cylinder Wasserboxer as an upgrade to the four. And that's where the Oettinger WBX6 story begins. Although little known in the USA, Oettinger has been an after-market manufacturer of performance

parts for Volkswagens. The relationship between the two companies must have been cozy indeed, for when the folks in the Volkswagen marketing department put the kibosh on plans for a flat six, the engineering drawings ended up in Oettinger hands and, soon thereafter, Oettinger began hand-building these engines and installing them for discriminating T3 Vanagon owners who wanted to blow the doors off unsuspecting Mercedes owners on the Autobahn.



As you might expect, the Oettinger WBX6 engine was derived from the 4-cylinder Volkswagen "Wasserboxer" engine and had many parts in common with it. It is basically the four-cylinder VW Wasserboxer with two additional cylinders grafted on to it. Oettinger cast the cylinder heads, crankcase, and

crankshaft blanks in its own foundry. The crankshaft blanks, which were cast in chrome-molybdenum steel, were then forged, nitrided and balanced.

Oettinger produced three different versions of this engine. Beginning in 1986, the WBX6 displaced 196 cubic inches, produced 165 horsepower, and 192 foot-pounds of torque. Only one transmission was offered: a beefed-up Vanagon automatic. Nevertheless, it accelerated from 0-62 mph in 12.5 seconds and reached a top speed of 112 mph. Not bad for a vehicle with the drag coefficient of a brick!

Just one year later, in 1987, Oettinger introduced three more versions of the WBX6. A milder 140 horsepower version with a catalytic converter, a 175 horsepower version with higher compression, and finally, a 180 horsepower version with longer stroke. These were available with manual transmissions and all wheel drive. The 180 engine displaced 226 cubic inches, cranked out 225 foot-pounds of torque, and when installed in a T3 Vanagon, accelerated from 0 to 62 mph in 11.6 seconds. Top speed was reported to be 116 mph.

WBX6 Vanagons were not simply hot-rod variants of the Volkswagen microbus. They left the Oettinger factory with a host of other performance and luxury modifications, including four-wheel disc brakes, special springs and shocks, extended-range fuel tanks, air conditioning, high-end sound systems, custom upholstery and even mobile office electronics. The WBX6 Vanagon was intended for sale to wealthy clients and customers included King Juan Carlos I of Spain. Truly an exclusive product, sales amounted to only 700 over the production run, which lasted until 1992 or so.

WBX6 engines are exceptionally rare



A modern Corvair powertrain might have looked like this! The water-cooled flat-six Oettinger WBX6.



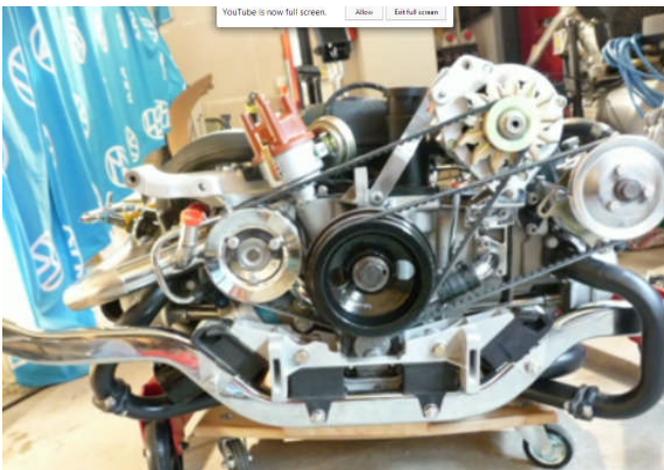
The fancy exhaust headers are evidence of Oettinger's legacy as a high-performance tuning shop for VWs.



Individual steel cylinder barrels are encased in aluminum water jackets in an open-deck configuration.



Even though this engine is water-cooled, it still has exposed push rod tubes!



No cooling fan here! The engine was mounted in the rear, but the radiator was mounted up front.



The aluminum WBX6 engine block without its cylinder barrels. The two crankcase halves are bolted together.



The Oettinger WBX6 was basically a Volkswagen Wasserboxer engine with two additional cylinders. They shared much in common, including this head gasket layout. Each of the individual cylinder barrels had its own ring-style compression gasket, much like a Corvair engine. The water jackets also had their own head gaskets, one for each of the halves of the engine. And this is what they looked like. Coolant would seep between underneath the gasket, corrode the aluminum, and poof! A big coolant leak, and expensive to fix!

today and very collectible. But that does not mean they are especially desirable, for replacement parts are wick-edly expensive and they are plagued by a certain issue common to the four-cylinder Wasserboxer engines manufactured by Volkswagen, namely head gasket failure. Much like an air-cooled engine, the Volkswagen and Oettinger Wasserboxers have individual cast-iron cylinder barrels that are spigotted into the cylinder heads. Each cylinder barrel has its own ring-style head gasket.

But unlike their air-cooled counterparts, the cylinder barrels are surrounded by aluminum water jackets that are cast into the crankcase halves. The water jackets are sealed against the cylinder heads using a perimeter lip gasket. There simply isn't enough surface area available for a conventional flat cylinder heat gasket.

An air-cooled engine with a blown head gasket will simply puff its charge into the atmosphere - or perhaps the heating system - during the compression stroke. On the other hand, a Wasserboxer with a blown head gasket can hydro-lock. While this is a risk associated with all open-deck engines, the differential rates of expansion between the metals, (the barrels being iron and the jackets being aluminum), and the unusual head gasket configuration makes this disastrous outcome more likely to occur.

Nevertheless, the Oettinger WBX6 engine has a loyal following. The fan boys love the powerful sound that emits from the tailpipe of this unique flat six engine. It's exhaust note reminds them of the symphony of sound created by that last remaining flat-six motorcar, the Porsche 911. But as far as I can tell, it sounds a lot like my Corvair!

You can listen to the WBX6 here:  
<http://www.youtube.com/watch?v=DcKMNv-3ekg>

Written for LVCC by:

Allan Lacki

Sources:

1. Oettinger Website. <http://www.oettinger.com/en/produkte/katalog/volkswagen/>
2. Oettinger Caravelle 3,2 Road Test, "Car South Africa" magazine, November 1988.
3. Volkswagen Type 2 (T3) [http://en.wikipedia.org/wiki/Volkswagen\\_Type\\_2\\_%28T3%29](http://en.wikipedia.org/wiki/Volkswagen_Type_2_%28T3%29)
4. Remembering the maddest Kombi. [http://www.wheels24.co.za/News/Custom\\_Cars/Remembering-the-maddest-Kombi-20071008](http://www.wheels24.co.za/News/Custom_Cars/Remembering-the-maddest-Kombi-20071008)
5. Achtuning Website. <http://achtuning.com/tag/oettinger/>
6. Great Moments in Crappy Engine History: Volkswagen Wasserboxer, by Tom Anderson, March 12, 2012. <http://www.sub5zero.com/?s=wasserboxer>
7. Vanagon 2.2 & 2.5L Conversions. [http://www.smallcar.com/index.php?dispatch=pages.view&page\\_id=67](http://www.smallcar.com/index.php?dispatch=pages.view&page_id=67)
8. Vanagon head gasket leaks. <http://www.vanagon.com/problems/head-leaks.htm>

## ***Yay! January is Here!***

Why's that so great? Because we're having our first meeting of the new year! What a great way to get out of the house, meet your friends, and swap exciting stories about your holiday season adventures! Did you get any toys for your Corvair for Christmas? Now's your chance to brag about 'em!

Our next meeting will take place at the LANTA Community Center, (our usual place) on Wednesday, January 22, 2014 at 7:30 PM.

***It's Our Next LVCC Meeting!***

**Presidents Corner**  
*by Dennis Stamm*

Merry Christmas and Happy New Year to everyone. I can't believe this year has flown by so fast. Winter is first beginning and I'm tired of this white stuff already.

I'd like to thank all the people who accepted officer position for 2014. I hope everyone had an enjoyable year and put on many miles in your Corvair.

Remember, now is the time to get caught up on some of your Corvair projects that you have been putting off for so long. I know I am. I'm in the process of preparing to paint a 1965 500 coupe that I put off for the last eight years.

I'm looking forward to spring to drive my Corvairs and Harley.

God Bless and stay safe,  
 Dennis

**NECC Update!**

**SATURDAY MAY 24 2014. HIGH PERFORMANCE DRIVING EVENT AT NY SAFETY TRACK!**

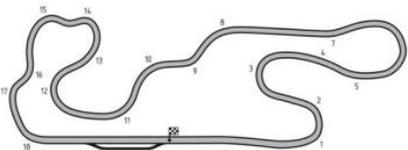
Mark your calendar! Get your Corvair ready!

You are invited to join NECC for a day of high-performance driving at the New York Safety Track! A full day of open track driving beginning at 9 AM capped with timed laps beginning at 3 PM and then more open track driving until 5 PM.

The Northeast Corvair Council (NECC) has signed the contract and paid the deposit to rent this beautiful new facility, rain or shine. The New York Safety track is located about 20 miles east of Oneonta, NY and 40 miles southeast of Cooperstown. It has plenty of twists and turns and elevation changes, plus a long straight-away.

To read about it, visit their website at <http://www.nyst.com/> Stay tuned for more details after the first of the year! To see what it's like to drive, check out this YouTube video! <http://www.youtube.com/watch?v=Nri1ChQx3j0>

LVCC is a member club of NECC.



**UNDER CONSTRUCTION!**

Dennis Stamm is restoring this 1965 Corvair 500 coupe! Here are three photos from his hot rod laboratory!



# ***NJACE Corvair Parts Auction***

Saturday, February 15, 2014, indoors at Ashley's Auto Body, Hillside Avenue, Flanders, NJ.

The New Jersey Association of Corvair Enthusiasts (NJACE) is our neighboring CORSA chapter to the east, and we are invited to their big parts auction! This annual event is always a lot of fun, so why not come out and enjoy it?

Setup begins 9:00 AM, bidding begins 10:30 AM. All interested persons, whether buyers, sellers, or spectators, are welcome. (Bring a chair.) Any Corvair parts, new or used, may be submitted for selling by our auctioneers. NJACE will collect a 10% seller's commission on all items. Seller's may set a minimum acceptable bid, or not, or may donate items for the full benefit of the club. Free lunch for all sellers and buyers!

## Additional detail:

First, plan on making a day of it. Due to the nature of how the auction operates, it is not possible to process any buyers or sellers until the auction is completed. Doors open at 9:00 for set-up, we begin the bidding at 10:30 AM, take a pizza break at 12:30, resume the bidding at 1:00 PM, and finish up typically around 2:30 PM. Only at that time can we tally the sales, collect from the buyers, and pay the sellers.

Second, plan on getting there early. We'll open the doors at 9:00 AM, to allow time to tag and display any parts you are selling, and to allow you to peruse the parts being offered.

If you're selling, you will need to fill out a Lot Card for each part or group of parts being sold individually, so please allow sufficient time to do this before the start of bidding.

If you are buying – or even if you think you are not buying – you will be issued a Bidder Number by which the auction desk will track all purchases.

We ask that items being offered be limited to Corvair parts or Corvair-related items, only. Also, we ask that you not bring more than one of the same item to sell. It is difficult to sell, in an auction setting, multiples of the same thing. You can, however, sell multiple items in a "lot." You could offer, say, one lot of six oil filters, instead of six individual oil filters.

Remember that only quality items sell easily, and that greasy, rusty junk will not only not sell, our very picky auctioneers may not even try to sell it! Bent and broken pieces have limited appeal.

Again, the doors open at 9:00 AM for setup, on Saturday, February 15, rain, snow, or shine!

## Directions to Ashley's Auto Body from Pennsylvania.

274 Hillside Avenue, Flanders, NJ

- From I-80, take Exit 27 for Rt 206 South.  
Follow Rt 206 South, to the traffic light at Main Street. This is the third traffic light from I-80 and comes up after the entrance to the Oakwood Village apartments on the left. Turn left onto Main Street from the left turn lane, which will give you a green arrow. Then follow the directions below.
- From I-78, take I-287 North.  
Exit onto US Rt 206 North.  
Follow Rt 206 North, to the traffic light at Main Street. This is the traffic light just beyond "The After" roadside restaurant on your right. Turn right onto Main Street and follow the directions below:
- From Rt 206 at Main Street, follow Main Street a short distance and bear left onto North Road. There is no street sign for North Road, so look for the sign that directs you to Route 10 - Succasunna. Follow North Road, which will become Hillside Avenue once you cross the railroad. Continue on Hillside Avenue to Ashley's Auto Body on the left. Parking is available both in the body shop lot and across the street.

# ***LVCC Calendar of Events!***

## **Sunday through Sunday, January 12-19, 2014 :::: Barrett-Jackson Car Auction.**

See it on FoxSports TV. <http://www.barrett-jackson.com/television-coverage/>

## **Friday through Sunday, January 17-19, 2014 :::: Auto Mania.**

Pennsylvania's biggest indoor heated swap meet for all things automotive. Also includes a car corral too. Location: Allentown Fairgrounds Agricultural Hall, 302 N 7th St, Allentown, PA 18104. Gate Times: Fri 12 PM-9 PM , Sat 9 AM-6 PM , Sun 9 AM-3 PM. Adult Admission: \$10 Daily. See more at: <http://www.carlisleevents.com>

## **Saturday, January 18, 2014 and Every Saturday :::: Cars & Coffee.**

Hunt Valley Cars & Coffee is held every Saturday from 7:30 AM - 9:30 AM. You'll see everything from a Veyron or new McLaren to a street rod and lots of everyday special cars from garages all over the region. It's a semi-informal meeting of enthusiast and there is no selling, marketing or advertising, just hanging out. Unless it's really ugly out, it's rain or shine. Location: Hunt Valley Town Center, 118 Shawan Rd, Cockeysville, MD . We meet behind the Panera in front of the old Best Buy. <http://www.huntvalleyaudi.com/cars---coffee.htm>

## **Wednesday, January 22, 2014 :::: LVCC Membership Meeting.**

Regular LVCC Club Meeting. 7:30 PM at the Lehigh and Northampton Transportation Authority (LANTA) office building in Allentown, Pennsylvania. The LANTA building is located at 1060 Lehigh Street Allentown, Pa 18103. Directions: From I-78: Take Exit 57, Lehigh Street. At the end of the exit ramp, go east toward the City of Allentown. Follow Lehigh Street of approximately 2 miles - past the Parkway Shopping Center on the right and Faulkner Volkswagen on the left - until you reach the LANTA entrance on your left. It is at the intersection of Lehigh and South Howard Streets, right across from a Hess service station. Drive around to the auto parking lot and enter through the office entrance. Our meeting room is on the second floor.

## **Thursday through Sunday, January 23-26, 2014 :::: Motor Trend Pennsylvania Auto & Boat Show.**

Location: Pennsylvania State Farm Show Complex, 2301 North Cameron Street at the corner of Cameron and Maclay Streets, Exit 23 off of I-81. Hours: Wednesday through Thursday 1:00 PM to 9:00 PM. Friday and Saturday 10:00 AM to 9:00 PM. Sunday 10:00 AM to 5:00 PM. Admission: adults \$9.00 Senior Citizens (62+) - Active Military (w/ID) - Students (w/id) \$5.00 Children 7-12 \$3.00, 6 & under are free. Email: [Shaun.Foley@sorc.com](mailto:Shaun.Foley@sorc.com) Website [www.AutoShowHarrisburg.com](http://www.AutoShowHarrisburg.com)

## **January 24-April 27, 2014 :::: The Art of the Build: An Exhibit of Rods and Kustoms.**

Hershey, PA. The Antique Automobile Club of America (AACA) promotes the preservation and restoration of cars to original specifications. But this "Art of the Build" exhibit focuses on hot rods and custom cars. Each custom vehicle is displayed as a piece of sculpture. Location: AACA Museum, 161 Museum Drive, Hershey, PA 17033. <http://www.aacamuseum.org>

## **Friday & Saturday, February 7-8, 2014 :::: Battle of Trenton Indoor Racing.**

Len Sammons Motorsports Productions has announced it will promote a two-day, indoor racing event at the Sun National Bank Center in Trenton in 2014. The event will feature top drivers from at least ten different States and Canada competing in the Fatheadz TQ Midget Racing Series. A complete program including qualifying and feature events will be held for the TQ Midgets on Friday and Saturday night, February 7 and 8, 2014. Gates open at 6 PM. Action begins at 7:30 PM. Location: Sun National Bank Center. 2829 S. Broad Street, Trenton, NJ. For ticket information, visit <http://www.sunnationalbankcenter.com>

## **Saturday through Sunday, February 8-16, 2014 :::: Philadelphia International Auto Show.**

Recognized by the industry as one of the top shows in the country, the Philly Auto Show displays more than 700 vehicles from a variety of manufacturers. Location: Pennsylvania Convention Center at the NE & NW corners of 12th and Arch Streets, Philadelphia, PA. Saturdays: 9 AM to 10 PM. Sundays: 9 AM to 8 PM. Weekdays: 12 Noon to 10 PM. <http://www.phillyautoshow.com/>

## **Saturday & Sunday, February 15-16, 2014 :::: 36th Annual Motorama & "Tunerwar".**

Live indoor racing including 1/4 midgets, arena cross, go-karts, radio-controlled cars and battle robots. Also, be sure to check out the Rod and Custom Hall which will be packed with 300+ show vehicles including dirt track cars, trail trucks and drag racing machines. Location: Harrisburg Farm Show Complex 2300 Cameron Street, Harrisburg, PA 17110. Hours: Saturday 9:00 AM to 10:00 PM. Sunday 9:00 AM to 5:00 PM. Call Daniel Swisher at 717-865-2085 or Motorama at 717-359-7056. [www.motoramaevents.com](http://www.motoramaevents.com).

## LVCC Classified Ads!

FOR SALE: 1965 to 1969 Corvair wire spoke hub caps. Scratches around edges but good enough for a daily driver. \$100.00 for all four Dennis Stamm home 610-926-4723 cell # 484-336-3466



Can't work on your real Corvair 'cause it's too cold? Winter weather got you down? Build a model Corvair instead! This 1/25th scale Dale Earnhardt tribute was assembled by Dennis Stamm and his son. AMT kits are still available!



### Mail Dues to:

Lehigh Valley Corvair Club  
c/o Richard Weidner  
2304 Main Street  
Northampton, PA 18067

### LVCC Club Officers:

President: Dennis Stamm Phone: (610) 926-4723 Email: dmstamm at comcast dot net  
Vice Pres: Fred Scherzer Phone: (215) 234-4458 Email: jukeboxman at comcast.net  
Secr-Treasurer: Richard Weidner. Phone: (610) 502-1414 Email: rcwvair at rcn dot com  
Newsletter Editor: Allan Lacki. Phone: (610) 927-1583 Email: redbat01 at verizon dot net