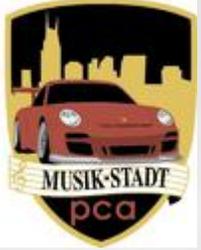




Solid Gold



Musik-Stadt Region Porsche Club of America

www.musikstadt pca.org

Next Club Meeting

The next meeting of the Musik-Stadt Region PCA will be held on
Tuesday, December 13 at:

Brewhouse South
1855 Galleria Blvd
Franklin, TN 37067



Meeting time is 6:30 PM

Next Club Event

The next Musik-Stadt Region PCA event is:

January 7, 2017 - Breakfast Meeting at Puffy Muffin in Brentwood
at 8 AM.

Regional Officers

President

Mike Moody

president.mskpca@gmail.com

Vice President

Rick Arnemann

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JC Costarakis

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Newsletter Editor

Ken Maurer

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**You are cordially invited to the Annual Musik-Stadt PCA Region Banquet
January 28, 2017**

**Brentwood Country Club
5123 Country Club Drive
Brentwood, TN**



The evening includes:

Porsche Platz (separate parking for Porsche's)

6:00 – Reception & Cocktail hour (cash bar)

7:00 – 3 course dinner - filet mignon

(Specify in PayPal or on your check if you want chicken or vegetarian entree)

Awards Ceremony & Guest Speaker & Door Prizes

\$50 per person

For reservations, mail check made out to Musik Stadt PCA to:

**Randy Lynch
1308 Haber Drive
Brentwood, TN 37027**

PayPal available soon on www.musikstadtpca.org

Reservation deadline January 12, 2017

A Message From The President

Happy Holidays and may Santa (or PCA) bring you a new Porsche. I keep hoping that PCA will show up at my front door when the raffles are over, but it hasn't happened yet....but I can dream, right?

It is hard to believe that 2016 has come and gone. This has been a good year for club events, with our many tours, January banquet, the concours with great weather, club meetings and I even squeezed in a track day at NSS without any issues from my replacement knee. I also went to Amelia Island Concours d' Elegance and had a great time so doing it again in 2017 along with several club members who are also going. It will be special this year with the PCA Werks Reunion on Friday at the Omni, then Cars & Coffee at the Ritz and finally the big event on Sunday at the Ritz. Historic Fernandia Beach is a great place to shop and eat and sight see, and did I say eat. Found a great little French Country restaurant also thanks to Joe Questel. If you are going, let me know and maybe we can drive down together, or grab lunch or dinner on the island.

Our 2017 banquet will be on Jan 28 again at Brentwood Country Club thanks to Dan Martin, our sponsor. This is always a great event with steak dinner (chicken or veggie available by request), lots of door prizes and a few awards to club members, like the Enthusiast of the Year Award that goes to the club member who participated in the most club events of the year. We hope you will join us as we normally have about 100 in attendance. Dress is business casual up to cocktail dress/coat & tie. Cash bar available for cocktails & wine.



After about 12 years as Dealer Liaison, Mike Gillespie is stepping down for a break, but we have a great replacement in Robert Shadoin. If you have anything to share on Porsche of Nashville, you can share with Robert or myself. We stopped having elections for officers when it became evident that no one was looking for a leadership role with the club - BUT IF YOU ARE, we can help you with that. If you are interested in running for President for example, I can make sure your name gets on the ballot (and mine comes off) or whatever your interest is. Just let me or one of the club officers know.

We will again have first Saturday breakfast at Puffy Muffin in Brentwood during the cold months Jan - March starting at 8am and dinner meetings will begin again in February on the 2nd Tuesday of each month. Please come out and enjoy the camaraderie and getting to know other club members.

See you at our next meeting,

Mike Moody

Monthly Membership Update

Melissa Schmittou, Membership Director



Primary Members	Affiliate Members	Total Members
410	232	642

Transfer In

Gregory Boyvin from Great Plains
2008 Cayman S

Doug Garven from Inland Northwest
1974 911

Sina Iranmanesh from Alabama
2005 Boxster

Jason Putnam from Maverick
2005 911 Carrera S

Welcome New Members!

Patrick Bahan - Nashville
2001 911 Carrera 4

Marc Rowland - Nashville
2016 Cayman

Janet Shaw - Franklin
2005 911 Carrera

Member Anniversaries

David and Heather Risser - 10 Years

Upcoming Events and Activities

Musik-Stadt Events:

- December 13, 2016 Club Meeting, Brewhouse South, Franklin
- January 7, 2017 Breakfast Meeting, Puffy Muffin, Brentwood (next to Fresh Mkt)
Meeting Time is 8 AM
- January 28, 2017 Annual Member Awards Banquet, Brentwood Country Club
- February 4, 2017 Breakfast Meeting, Puffy Muffin, Brentwood (next to Fresh Mkt)
Meeting Time is 8 AM
- February 14, 2017 Club Meeting, TBA
- March 4, 2017 Breakfast Meeting, Puffy Muffin, Brentwood (next to Fresh Mkt)
Meeting Time is 8 AM
- March 14, 2017 Club Meeting, TBA

Other PCA And Gear Head Events:

- January 14 - 15, 2017 HPDE Barber MSP, Just Track It
- February 11 - 12, 2017 HPDE Barber MSP, Chin
- February 25 - 26, 2017 HPDE Road Atlanta, Chin
- March 4 -5, 2017 HPDE VIR, Chin
- March 10 - 12, 2017 Amelia Island: Werks Reunion, Cars & Coffee,
Concours d' Elegance
- April 15, 2017 Kars4Kids, Brentwood
- April 21 - 23, 2017 Indy Cars at Barber MSP

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Don't Forget!

Cars & Coffee happens every Saturday, weather permitting, at Carmike Theater parking lot on Frazier Drive (behind McDonald's on Cool Springs Blvd). Cars typically begin to show around 8AM.

Porsche M96/M97 Engine Family

By: PCA Members, With Technical Expertise From Matt Shaw and Internet Sources

One of the greatest concerns for many with a Porsche that has the M96/M97 flat 6 is Intermediate Shaft (IMS) bearing failure (this is often reflected in resale value as well, at least to one degree or another). With that in mind, and as we recently received an e-mail from Jim Cambron with a fair framework for a discussion of various items to consider on these engines, we thought it may be of interest to our readership to run this article. Please keep in mind this is a listing put together mainly by enthusiasts, with expertise from private technicians (thank you Matt Shaw!). None of what is below can be based upon solid figures released by the Porsche, as this information is not available to the public. Finally, if you are considering a Porsche with a motor from this engine family, this brief discussion should not take the place of a good Pre-Purchase Inspection or other due diligence on behalf of the purchaser.

As with any Porsche, the M96/M97 equipped cars, such as the Boxster/Cayman (986/987.1) and 996/997.1 generation 911 are not immune to mechanical issues. However, much hype has been made of the IMS bearing failure, and while this is a legitimate concern, it seems to have taken on a life of it's own in recent years. With that in mind, we hope the following list of concerns and possible failure points is of value, whether you work on your own car or take it to a shop.

Water Pump

PCNA recommends (and many other source agrees) that the water pumps

should be replaced for all 986 and 987 (Cayman and Boxsters) at 50,000 miles, or as early as 40,000 miles and no later than 50,000 miles. Additionally, PCNA advises to replace the water pump with an OEM unit with plastic impellers and not switch to the metal impeller after-market units. If the plastic impeller blades fail, they may stop-up the water passages (if large enough chunks break off to do so), but if the bearing on a metal blade impeller water pump fails, it's possible that the blades could contact the water pump housing and essentially begin to machine the housing.

If you choose not to replace the pump on this schedule, close monitoring for leaks or wear is key. Leaks would appear at the lowest, forward most part of the engine and would look like a white or pink residue (basically dried antifreeze) at the bottom of the water pump. Also, if you loosen the belt, you can feel for play in the water pump shaft and rotate the pulley to ensure it spins smoothly. Always use a new (not rebuilt) water pump and the Porsche approved (pink) antifreeze.

Air Oil Separator

The Air Oil Separator (AOS) is a relatively common component to replace in these motors. When this item fails it's pretty obvious, as you will see a large oil smoke cloud from the tailpipe. This failure is not catastrophic for the motor, though it can be rather dramatic. Obviously you should not drive the car in this state too far, however, as oil will contaminate the intake and can cause other components to fail, and of

course as oil is burned off, the oil level in the motor will drop. To prolong the life of the AOS, do not over fill the oil level.

Rear Main Seal (RMS)

A rear main seal (RMS) is an easy issue to diagnose, though is not as easily fixed. If it starts leaking you will find the oil residue and you can have the seal replaced. This is typically a high milage wear item, and it goes far more smoothly if you have the appropriate special tools from Porsche. The key to a proper fix here is having the correct seal and using the correct installation procedure. This job is in essence a clutch job, as you must gain access to the output shaft, and while parts cost here is nominal, labor cost is not. However, as special tools, experience and technique are critical here, this is a job that is best left to the professionals.

IMS Bearing

The IMS bearing failure, while real, is the most over-advertised and often misunderstood issue with these cars. Often times a catastrophic failure of an M96/M97 engine will be written off as an IMS bearing failure without a proper tear down and inspection to determine the actual cause. There were three iterations of the IMS bearing. The first is in the M96 and was used roughly from model year 1997 through model year 1999. This was a dual row bearing, and this bearing can be replaced without splitting the engine case (i.e. transmission removal is required to gain access, but the bearing can be removed at that point). The second iteration of this bearing ran from model year 2000 through 2005. This was a single row bearing which had a lower load capacity than the earlier dual row version. However, like the first iteration of the

bearing, it to can be replaced without splitting the engine case (again, transmission removal is required). The final version of this bearing was a larger single row, used from 2006 through 2008, and is a higher load bearing than the previous single row bearing that preceded it. It is considered to be the equivalent of the previous dual row bearing in terms of load capacity. Unfortunately this bearing cannot be replaced without splitting the engine case. Porsche has never released figures in terms of the failure rates of these bearings, but most anecdotal evidence suggests that the initial dual row and the latest, larger single row bearing fail at a roughly equal rate, while the smaller single row bearing suffers the highest failure rate. It is important to note that any version of the bearing can fail, however there does seem to be a differing risk involved depending upon the bearing design. Also please be advised that the above years are model years, however there seems to have been a gradual change over to the new bearing designs, so these should not be viewed in the absolute.

One way to mitigate the chance of a catastrophic engine failure due to an IMS bearing failure is frequent oil changes with a good inspection of the oil and oil filter. Rather than using a very long drain interval, consider shortening the oil change interval to 3,000 to 5,000 miles or at least once a year. You or your mechanic should closely inspect the oil filter (splay it open/cut it apart, etc.) to look for magnetic metal flakes, especially numerous flakes. Another good idea is to use an oil drain plug that is magnetic (LN Engineering offers these as well as others). The bearings have a chromium plating which is magnetic, and is one of the few magnetic metals in the M96/M97.

The use of a magnetic drain plug will assist in determining if any of the bearing material is present in the oil. Also keep in mind that this should still be monitored even if you replace the bearing with an aftermarket unit, as some aftermarket ones may still fail at some point.

Bore Scoring

Engine bore scoring is also a potential problem. This issue seems to affect to the M97 in 987s and 997s more so than the M96 in 986s and 996s. The larger displacement, more powerful motors seem to be affected more often (i.e. the 2.7 liter in Boxsters and Caymans of this era seem to only rarely have this issue, while it appears more common on the 3.4 liter and up). Also, cars that see extreme environments (such as track conditions) are more often affected, as opposed to cars that are only street driven. Clues to this failure are excessive smoke on start-up, not a little smoke which is normal, but a lot of smoke every time you start the engine. The condition is definitively diagnosed by bore scoping and leak testing of the cylinders themselves, however the cause of this condition is a mystery, and is likely to be multi-factorial. Some potential causes are oil contamination, oil starvation, excess engine case heat, cylinder warping, etc. If this problem occurs, the solution is to have the affected cylinders sleeved, which may be costly, depending on the number of cylinders sleeved and if you replace other items at the same time.

In the end, the best strategy for monitoring the life of these engines as well as prolonging their longevity is the same as that of any other Porsche. Keep up with routine maintenance, make sure you have

the proper oil level, you are using an appropriate, Porsche-approved synthetic oil of the proper viscosity, the oil is free of contaminants, and that engine temp runs within the normal range. In the end, these motors are much like any other - they have their quirks as all do, but proper maintenance is key, and by no means should you they be automatically written off if you have or are drawn to any of the Porsche range with these motors.

If you would like more info on these topics, some good resources to visit are LN Engineering as well as Hartech Engineering. Don't let the internet ruin your enjoyment of these Porsches!



Editors Note: Much of the information used in the framework of this article came from Jim Cambron, with additions from resources available from: Excellence Magazine, LN Engineering, and Hartech Engineering. A special thanks to Musik-Stadt PCA Member Matt Shaw for his technical expertise and input to the finer points of each topic presented above.

Recent Musik-Stadt Event Pictures



FOR SALE



- 2005 Porsche 911 S Cabriolet
- 49,000 miles/Always Garaged/Non-Smoker
- All new tires (305 on rear)/Turbo style wheels/LED taillight and turn signals
- 6 spd/Sport Chrono Plus
- Adaptive sport heated seats/Bose with CD changer
- Leather dash/Many options
- Porsche CPO then extended warranty
- Maintenance records maintained/Dealership serviced
- No paintwork/No accident/No snow/Clean Carfax
- Original lobster claw wheels and turn signals available
- Asking \$37,000 OBO
- Call Chris at 615-202-9825

For Sale

Porsches For Sale!

1980 911SC Targa with 132k miles. Runs great. Call Mike (931) 247-4651.

2013 Cayenne GTS with 48k miles. Local one owner; well kept and under factory warranty. Asking \$51,000. Contact Mark (615) 504-3540.

1989 Carrera Cabriolet. Black/Linen with black piping with 96,000 miles. Great driver, well maintained, all original except for radio. Original tool kit and compressor included. Many options and upgrades. Call Bob (615) 417-9063.

2008 911 Carrera 2. Arctic Silver with black interior. Certified pre-owned with warranty through December 2020 (including wheels/tires). New engine (Porsche factory), belts, plugs, coils, alternator cable, battery and tires (all work done by dealership). Tinted windows, sport chrono package, heated memory seats, moon roof, cd changer, rain sensing wipers and more. Great driver with warranty coverage. Contact atgilbert2@gmail.com for more info (pics available at cars.com).

1972 914 1.7. Great car, but no room to store. Call Tom at (615) 730-5944 or email tommclard@comcast.net



For Sale

Set of 4 997.2 19" Carrera Classic III wheels. One does have some curb rash ; good TPMS. \$700 OBO. Contact Rob at robccase@gmail.com

981 Cayman/ Boxster (2014 - present) exhaust for sale. 8,000 miles on exhaust, in excellent condition, includes tip. \$300. Contact Joe Questel (joe@questel.net)

Do you have Porsche items for sale? Let us know and we can run your ad in our newsletter.

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NAME TAGS FOR PICK-UP
 Many members have paid for name tags, but have not been to a meeting lately to pick it up. Please come and pick up your name tags



To all Musik-Stadt PCA members that renew year after year, thank you!



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