

# **997.1**

## **The Definitive Buyers Guide**

**Draft v.5**

# Intro

The 997 is the most commercially successful 911 of all time, having sold 100,000 units in the first phase alone between its introduction in 2005 and July 2007. It marked the return to the classic 911 styling after the 996's "fried egg" look. Today many consider it the quintessential 911 design and the last of the pure 911 sports cars, before Porsche moved to the large body style for the 991. We believe it will continue to hold its value because of this.



## Model Specs

The model lineup includes:

- 3.6 Carrera
  - Engine -M96/05
  - Horsepower -325 @ 6800 Rpm
  - Torque -273 Lb-ft @ 4250 Rpm
  - Curb Weight -3,075 Lbs. Manual / 3,164 Lbs. Tiptronic
  - Width -71.18 In
  - 0 To 60 Mph -4.8 Seconds Manual / 5.2 Seconds Tiptronic
  - Wheels -18" Standard, 19" Optional
- 3.6 Carrera 4

- Engine -M96/05
- Horsepower -325 @ 6800 Rpm
- Torque -273 Lb-ft @ 4250 Rpm
- Curb Weight -3,197 Lbs. Manual / 3,285 Lbs. Tiptronic
- Width -72.91 In
- 0 To 60 Mph -4.9 Seconds Manual / 5.3 Seconds Tiptronic
- Wheels -18" Standard, 19" Optional
- 3.8 Carrera S
  - Engine -M97/01
  - Horsepower -355 @ 6600 Rpm
  - Torque -295 Lb-ft @ 4600 Rpm
  - Curb Weight -3,131 Lbs. Manual / 3,219 Lbs. Tiptronic
  - Width -71.18 In
  - 0 To 60 Mph -4.6 Seconds Manual / 5.0 Seconds Tiptronic
  - Wheels -19" Standard
- 3.8 Carrera 4S
  - Engine - M97/01
  - Horsepower -355 @ 6600 Rpm
  - Torque -295 Lb-ft @ 4600 Rpm
  - Curb Weight -3,252 Lbs. Manual / 3,340 Lbs. Tiptronic
  - Width -72.91 In
  - 0 To 60 Mph -4.6 Seconds Manual / 5.0 Seconds Tiptronic
  - Wheels -19" Standard
- 3.8 Carrera S "Launch Edition" - 2005 MY Black on Black with Yellow PCCBs
- Cabriolet (S, 4S)
- Targa (4, 4S)
- Turbo
- GT3/GT2

## Options

### S vs Non-S

One of the first questions prospective owners have when buying their first P-Car is whether to spend the additional money for an S model. S models were very popular in the 997, reportedly outselling the base models by a wide margin. However, the base Carrera is no slouch. They

represent a tremendous value to get into your first P-car, particularly if they are optioned with the 19" wheels. One of the biggest drawbacks of the base model is the ride height but this can be easily remedied with aftermarket lowering springs (Eibach, H&R) or coil-overs.

The S models increased displacement from 3.6L to 3.8L and added 30 more HP. In addition they have the larger Big Red brakes - larger diameter rotors for a larger heat sink (brake fade occurs later). PASM suspension standard. This is the electronic adjustable suspension option (button with a picture of a shock in the center console). In standard OEM form PASM is just OK - sport mode is usually too harsh to be used anywhere but on a track, and regular mode is a little too soft with less than ideal rebound dampening (this is actually a shock characteristic more than a fault of the PASM), HOWEVER, having PASM as a necessary building block to be able to replace the OEM Porsche PASM controller with the TPC DSC (Dynamic Suspension Control) controller is huge. This takes the electronically adjustable PASM suspension and makes it fully dynamic based on g-loads and other attributes. You can't add the DSC box unless you have PASM.

### Full Leather Option

Hardly what it sounds like, but a must have feature for many. It makes the dash top and the tops of the doors real leather instead of molded plastic, and also makes the backs of the Comfort seats leather too.

### Seat Options

5 types (3 more common & 2 special)

- Standard Power Comfort Seats - these are the normal power seats that from the bottom of the back get narrower all the way up to the headrest. If you're of larger stature, these will not likely be very comfortable seats for you in spite of the name as where the backrest gets narrow it hits just inside the shoulder blades. Options 2 and 3 below are better, and why they're more expensive.
- Manual Adaptive Sport Seats - these are hardback sport seats that still have tiltable seat backs. They are easily identifiable by the winged shoulder supports in the shoulder area. The manual version have a release lever in front and a height adjustment lever on the side. Seatback recline is power. There is an alcantara option for these that makes the center section of the top portion and bottom portion alcantara instead of leather.
- Adaptive Sport Seat Plus Seats - these are the full power versions of the Manual Adaptive Sport Seats. In addition, they have two additional switches on the outside front corners that are for the pneumatic air adjustable side bolsters - one for the seat bottom side bolsters and one for the seat back side bolsters. These are the best all around seats for a 997. There is an alcantara option for these that makes the center section of the top portion and bottom portion alcantara instead of leather.
- Carbon Buckets - these are full carbon fiber shell seats with leather seating surfaces (also available in some type of nomex material). They are beautiful and still have a tiltable back-rest for access to the rear seats but only a fore/aft manual adjustment (no recline and no height adjustment). They are both narrow and deep so not the easiest

thing to get in and out of, but are also compatible with a harness bar for track days. A great choice for a car with other CF trim and for someone that does a fair number of track days, but a compromise for more regular use cars in the lack of adjustability and hardness of the seating surfaces.

- GT2 Carbon Buckets - these are the raciest and least comfortable seats. They only adjust fore and aft, the seatbacks do not tilt forward, they have very little padding, and are very deep and narrow. Really only a good choice for frequent track days

### Brake Options (PCCBs)

If the car is equipped with PCCBs (Porsche Carbon Ceramic Brakes), these need to be inspected very carefully.

- PCCBs have yellow calipers and the fronts are a 6-piston vs the normal 4-piston usually found on the Carrera models. This means both sides of the rotor especially around the circumference. You're looking for any dark areas on the rotor surface that is delamination of the carbon ceramic material and on the circumference for any chips where someone may have accidentally dropped a wheel on it during removal if they weren't using the proper dual guide pin technique.
- The PCCB brakes are extremely durable in regular street use, even if used in a spirited manner - rotors will likely last the life of the car into the couple hundred thousand mile range. Pads should last anywhere from 75k-100k miles. However, it's a different story on track cars as the brakes can wear fairly quickly - not a problem if you're sponsored by a professional race team, but if you're not, new replacement rotors are about \$5,000 EACH.
- They are fantastic though - significant reduction in unsprung weight which makes a perceptible difference when driving, and essentially zero, I mean no brake dust, and unbelievable stopping power, especially when warm.
- If you have your service work done by outside shops (dealers, indy's, etc) it's a risk that they could damage a rotor and not accept responsibility for it, but if you do your own work 90% of the time, the other 10% just take photos of the rotors at all 4 corners before dropping off the car for the service work, and inspect them again when picking it up.

### Lighting Options

There are two headlight options for these cars the lower end Halogen and the upgraded Bi-Xenon. The Bi-Xenon headlights are excellent with a very bright and good color temperature beam and are also self-leveling. All other lighting on these cars is regular incandescent bulbs, but many owners have updated the looks with LED front and rear taillights, interior lights, side marker lights, etc. Most of those are plug & play so easily reversible back to stock if so desired. There are quite a few different styles of LED exterior lights available for these cars now.

### PSE Exhaust

PSE exhaust is identifiable by the rear tailpipes - two circles on each side with one smaller than the other. On cars that don't have Sport Chrono, they will have a PSE exhaust button in the

center console (graphic of exhaust tips). Cars with Sport Chrono do not have this button, just the SPORT button and PSE can only be activated in Sport mode.

### X51 Powerkit

A \$10k factory option that boosted S and 4S models from 350bhp to 376bhp and torque from 295lb ft to 306lb ft. It includes a cast aluminum GT3 intake manifold, larger headers, different cam shafts, modified cylinder heads, a third radiator and a re-programmed DME.

### Wheel Options

- 18" Carrera Classics
- 19" Carrera Classics
- 19" Carrera S "Lobster Forks"
- 19" Carrera Sports
- 19" Sport Designs
- 19" Turbo

### Tiptronic Transmission

997.1s have the older "Tip" transmission. The 997.2 moved to the new PDK, which is a masterpiece of German engineering. However the Tip gets somewhat of a bad wrap in the 997 community for being slow to shift. As a result they typically trade at a 10-15% discount to 6sp.

## Driving Impressions



<https://youtu.be/NTYq0FkCkNg>

The 997 is a true driver's car. If you have never driven a 911 before its really hard to describe. It corners like no other car. The best description is its like slalom skiing. It takes corners at speeds you think are physically impossible. Its light coming into the corner and slingshots coming out. The Porsche Stability Management (PSM) has eliminated the oversteer of earlier generations. In 30k miles of ownership I've never once felt unsafe or had the tires let go unexpectedly. It's perfectly predictable.

Its also the most practical sports car on the market. The back seats are perfect for hauling young kids and it will put a smile on your face every morning if you use it as your daily.

## **997.1 vs 997.2**

The 997.2 came out in 2009 as a mid cycle refresh. To the untrained eye it looks the same. However any 997 owner can immediately spot the subtle differences in the fog lights, front bumper and brake lights. Beyond the exterior differences the 997.2 also introduced a new PCM and climate control stack. Its more modern than the 997.1, but both are still ancient by today's standards.

The biggest difference was the engine. The 997.2 introduced the new DFI 9A1 engine and PDK transmission which added 30 additional HP, better fuel economy, and shaved .1 second off the 0-60 time with the 6sp and .3 seconds with the new PDK.

It is an excellent car with what's proven to be a robust engine. However, due to the financial crisis roughly half as many 997.2s were made as 997.1s so they command a \$15-20k premium over equivalent mile 997.1s.



## Reliability

The vast majority of 997.1 owners will tell you it's the most reliable car they've ever driven - but there are weaknesses you need to be aware of. If you do your homework, get a thorough PPI and ensure the car is up to date on all its maintenance the likelihood of any serious mechanical issue is extremely low, but failures can occur in all cars.

The M96 engine from the 1999-2004 996 and Boxster was the first water cooled motor for the 911 and got a bad wrap on reliability. The much talked about "IMS" was the primary point of failure, but it also suffered from cracked cylinders, timing chain issues and bore scoring.

The 997.1 uses the next generation M96/05 engine for the base C2/C4 and M97/01 for the S and 4S engines. These engines have been improved substantially over the earlier M96/01-04 to eliminate many of the weak points, but they still have a stigma from the 996. As a result the 997.1 trades at a significant discount to the 997.2.

The two primary issues you hear about on the 997.1 are IMS and Bore Scoring. These are real issues and they need to be understood by all owners, however the prevalence of these issues is low, and can be lowered even more by understanding the risk factors.



### IMS (Intermediate Shaft Bearing)

The earlier generation 996 and Boxster had a pretty serious failure rate with the IMS bearing. In the resulting class action lawsuit Porsche itself estimated the failure rate at close to 10%.

**All 2005 launch year 997.1s, including both the 3.6 M96/05 and 3.8 M9/01, use the same small bearing from the 996 and MUST BE REPLACED.** As a result you will typically see these cars trade at a ~10% discount over newer models. However many pros will tell you they prefer the 2005 for the serviceability of the IMS. You need to remove the transmission to replace the IMS so most people club it with the clutch job. A clutch + IMS replacement will run your about \$2500 at an indy.

**All 2006-2008 model year 997.1's, including both the 3.6L M96/05 and 3.8L M97/01, use the new "large bearing" IMS which effectively solved the problem. These can't be replaced and don't need to be. The failure rate is negligible.**

The change to the newer bearing happened mid-2005 so all 2006+ are confirmed to have the new large bearing. Some 2005 model years also have the large bearing which you can estimate by checking your engine number. But Jake Raby has pointed out this isn't exact so the only guaranteed way to confirm whether you have a large or small bearing in a 2005 model year is by visual inspection, which means taking off the transmission.

How to check your engine number?

- For 3.8L motors, up to M97/01 68509790 has the smaller IMS bearing and Engine number from M97/01 68509791 has the larger revised IMS. For 3.6L motors, if the engine s/n is M96/05 69507476 and up it has the larger bearing.
- There are three different serial number types for the three engine variants in M96/M97 cars - base model M96.05 3.6L engines, S-model M97.01 3.8L engines, and the X51 power kit M97.01S 3.8L engines. All three have slightly different engine serial number formats.
- For S-model non-X51 M97.01 engines the serial number is of the format M97/0168YXXXXX. The last 8 digits matter and are the following format:
  - 685XXXXX = M97 for MY05
  - 686XXXXX = M97 for MY06
  - 687XXXXX = M97 for MY07
- So the first two digits are 68, followed by the year digit, followed by a five digit serial number. But the full serial is M97/0168YXXXXX.
- For X51 engines I believe the format is M97/01S68YXXXXX (added 'S' between 01 and 68).
- 3.6L base engines have a similar format M96/0569YXXXXX (not positive on the 05, can someone check?).

- With replacement engines there is an 'AT' in front of the final eight digits. So a S-model 3.8L factory replacement engine the format would look like M97/01AT68YXXXXX.

<https://youtu.be/i14LKvAW-So>

### Bore Scoring

Bore scoring is rare but it can happen to all 997.1 model years. It's now even cropped up in the 9A1 motors in a few 997.2 and 991.1s. The issue has largely been isolated to cold weather cars from the midwest and Canada. On this forum we've only heard of one warm weather 997.1 its ever happened to. Armed with the Carfax history, a proper PPI and good information you should be able to mitigate your risks.

There are actually two different issues that are being lumped under the Bore Scoring umbrella - one is actually bore scoring and the other is bore seizing. Both of these are becoming better understood but still seem to be caused by not any one thing, but when a few things align and happen at the same time.

- Bore scoring happens when the piston rocks in the cylinder and then scores or scratches the cylinder walls but sometimes doesn't really damage the piston.
- Bore seizing occurs when the piston becomes larger than the cylinder bore and essentially gets stuck or bound inside of it, which then scores or scratches the cylinder walls and the piston.

It's a small distinction and doesn't really matter either way, because once the cylinder walls are scored, the score lines provide an avenue for oil to sneak past the piston rings and for compression to leak out of the cylinder. There is not a way to remedy bore scoring other than a teardown and rebuild.

It usually occurs in cylinder # 4 or 5 of the motor, and manifests in

- increased oil consumption (as the oil sneaks past the rings and is burned during combustion),
- a sootier left exhaust tip. The reason it's the left exhaust tip even though the scored cylinders are on the other side of the motor is because the OEM catalytic converters cross over each other so combustion byproducts from Bank 2 comes out the left tip and from Bank 1 out the right tip. If the car you're looking at has aftermarket cats that either don't criss-cross or have a joining piece in them (called an X-pipe), you won't see the same level of difference between the left and right tips.
- Note: a sooty exhaust tip doesn't necessarily mean scored bores as these cars tend to use a little oil, especially when driven in a spirited manner, and oil consumption can also be a sign of a failing AOS (Air Oil Separator) which is just a part replacement and not an engine rebuild scenario.
- Bore scoring seems to occur more in the larger 3.8L motors of the S cars than in the base 3.6L engines of the non-S cars.

- It also seems to occur more in cars that are from colder weather climates. This could be because
  - people are warming up these cars at idle in the driveway which when first started enter an enrichment mode to supply additional fuel that doesn't fully burn until it enters the catalytic converters in an effort to make the cats warm up faster, which reduces emission pollutants. It's also believe that the extra fuel during enrichment can dilute or wash the motor oil from the cylinder walls, contributing to the piston scoring the cylinder wall. For these reasons, it's recommended that the car be driven off very soon after it's initially started as putting some light load on the engine helps to consume the extra fuel being supplied during the enrichment mode.
  - Another contributor could be because when the engine starts at a colder base temperature, the piston heats up faster than the block since it's a lower mass item, causing it to expand faster than the block does, since it's a larger mass item so the piston seizes in the cylinder bore creating the scoring. It is believed that using the low temperature thermostat helps to alleviate this problem by allowing the engine to come up to temperature in a more gradual fashion so that both the piston and cylinder bore expand at a more similar rate, preventing the cylinder from constricting the piston during movement
- If scoring has become significant enough where it results in a loss of compression, the cylinder with the scoring might start logging misfires, so on the DME readout that's part of the PPI, pay particular attention to the misfire count in cylinders 4 & 5 to see if it's higher than others.

There are two ways to inspect the motor and look at the cylinder bores:

- the first is to pull the spark plugs and put a borescope camera into the cylinder, looking at the condition of the walls for any lines parallel to the direction of travel of the piston. This method also gives you an opportunity to inspect the tip of the spark plugs for any oil deposits or fouling. If a cylinder loses compression and starts misfiring, the unburned fuel will foul the tip of the plug or if oil is getting past the piston rings and burning with the fuel, that too can foul the plug
- the second is to remove the oil pan. This will give you a view up into the cylinder bores from the bottom. Since scoring usually starts at the bottom, this is the more complete test as the piston even in it's lowest position can still mask the portion of the cylinder wall where scoring begins. This test also gives you the opportunity to look for any debris in the oil pan. What you're looking for in ferrous (magnetic) metal that would be from the IMS bearing, other non-ferrous metal that could be from the cylinder walls, or any bits of black or brown plastic which would be from the chain tensioner paddle guides.
- If you have the time to take an oil sample and send it for analysis, you want to look for higher ppm counts of certain metals, especially aluminum as this can be an indicator of scoring as the piston scrapes the aluminum from the block and it get trapped in the oil. Any metal ppm numbers greater than single digits deserves further consideration.

Unfortunately, it usually takes about a week to receive results from the UOA places (Blackstone, Driven, etc) so when shopping for a used car, this may be impractical.

- In the cars service history (if you have one) you're looking for oil changes around every 5,000 miles. Unfortunately, this is well below the recommended interval from Porsche for the 997 motor and those owners that followed the OEM recommendation were running oil too long in these motors, which can also be a contributor to scoring or seizing as the additive package in the oil breaks down, reducing it's viscosity and protection capabilities. Mobil 1 is the factory fill and recommendation, but Motul xcess 8100 5W/40 or Driven DT40 5W/40 are both better choices. The Motul carries Porsche A40 approval if you're worried about that, but has lower ZDDP (Zinc & Phosphorous) levels than the DT40 and both of those help to provide protection for different parts of your engine

<https://youtu.be/Cul6J5PP1KE>

### Oil Starvation

Due to the hybrid wet/dry sump used in the M96/M97, there have been issues of oil starvation but this is typically linked to cars being tracked in high G force situations. Anyone planning to track the car regularly should install a deep sump kit and ensure your oil is topped up.

### Conclusion

With proper maintenance and education you should have a long and happy life with your 997.1. However failures can occur, just like any other car. We believe these have largely been overblown by the semi-educated. The upside of this is the 997.1 represents a tremendous value for an educated buyer.

To put the worst case scenario in context, you can buy a 997.1 and rebuild the engine into a 4.0L monster for roughly the same price you can buy the equivalent 997.2. To each his own.

## **Typical Repairs**

None of these are deal breakers. They are all cheap parts but the labor can add up given their positioning in the engine:

### RMS (Rear Main Seal)

This is often confused with the IMS. Its not serious issue. It just causes the car to weep oil out of the transmission bell. Its only a \$50 seal but you need to remove the transmission and flywheel to get to it. Most people fix it during a clutch job, so if your clutch has been replaced this would likely have already been addressed. Its typically found on earlier 997.1s and garage queens.

Starter/Alternator Cable - 997.1s have an issue where the starter cable can build up resistance due to a bad crimp. it leads to a "slow/sluggish start" when the engine is up to temp (over 200F).

its a cheap part (\$100) but a pain to install. to test for it get the car over 200F oil temp then turn it off and immediately restart it. If its sluggish the cable is bad. They can also sometimes see the cable boot melted near the starter. Others have solved the issue by replacing the starter and cleaning B+ bolt.

Suspension - Most last 80-100k miles, but some go at 50k miles if the car is a garage queen and the seals dry up. Inspect the struts closely. Look for fluid leaking out. It will cause dust to accumulate on the strut itself.

Inner Tie Rod - If your steering wheel shakes over 70mph, don't assume it is alignment, balancing, or tires. In some cases it's the inner tie rod. Easy fix if you buy the tool at Harbor Freight for \$40. People think you can feel a bad tie rod by jacking up and wiggling wheel side to side, I have found that not to be true. I bet a large % of folks have a shot tie rod and don't even know it.

Rear Lower Control arms - Hard to tell without looking really close, many low mileage garage queens will have the bushing crack because everything dries out.

Expansion Tank Cracks - the expansion tank cracks on most 997s as they get older. You need to inspect closely for hairline cracks. Another cheap part but pain to install as you need to drop the engine down a bit to get it out.

Air Oil Separator -

Water Pump - these should be treated as consumable items on all 997s. They need to be replaced every 4-5 years. Try to find the history on yours or budget a replacement.

Strut Mounts - these can go at 60-80k miles, particularly if the car is lowered with Eibach or H&R springs. Typically the fronts go first. To inspect the fronts go over some low speed bumps and listen for clunks. The rears you need to go around a bumpy corner at 30mph or so to load up the suspension and listen for rattles coming from the rear seat area. Again, cheap parts (about \$100 per strut) but you need to pull the struts off to replace. If you are replacing the springs or putting on coilovers you should replace these at the same time.

Bump Stops - the yellow bump stops on most 997s degrade/disintegrate over time. Not a big issue but they cant be replaced unless you take the struts off. They are \$20 a piece.

Frunk Switch - usually goes at some point. \$100 replacement.

Frunk Struts - these get soft and dont hold up the hood. \$80 replacement.

Ignition Switch - these can go. If you have any delay between turning the key and the starter kicking over, its the switch. \$100 part, simple fix.

Passenger Mirror - the motors on these sometimes can go. They aren't used much so most people don't realize until after they bought the car.

Gas Caps - the seals can go bad leading to the engine stuttering during acceleration, or a CEL. ~\$50.

Expansion Tank Caps - The seals on these can go too. They have an updated part # for these which fixes it. ~\$20.

## Interior

The 997 has a timeless interior design and very comfortable seats, even for the tallest drivers. It does take a little practice getting in and out of without scuffing the kick strip.

The biggest interior flaw for 997.1s is the rubberized "soft-touch" paint can peel on the center console and climate control buttons. It happens to Ferraris and Porsches of this vintage. Both are easy fixes.

- *Climate Control Switches* - unfortunately Porsche does not sell replacements but [MAcarbon](#) sells refurbished buttons for \$185 with a core exchange. They are very high quality and look OEM. It's a relatively easy DIY job. Do NOT buy from Climarepair.com. You will find a huge thread on RL with owners complaining about the terrible quality and customer service.
- *Center Console* - you can remove this and respray it as a \$15 DIY job, buy a new one for \$650, or a few companies offer a leather wrapped option.

## PCM Stereo

A big complaint on the 997.1 vs .2 is the old PCM. Check if it has an aftermarket Denon or Moberge unit that enables hands free calling and bluetooth stereo. This is a HUGE plus as not having these makes the car feel dated. There is also a new bluetooth module that came out in 2018 called "LaPower" that only costs \$150. It offers full hands free calling and bluetooth streaming via the stock radio controls. It's one of the best investments you will make on the car.



## Squeaks and rattles

These cars have them but you can track them down and solve most of them, including:

- Dashboard Thermostat Squeak - this sits in the center of the dashboard and can squeak against the windshield if
- Seatback Latch Rattle - these can rattle. The typical solution is to spray WD40 in the track.
- Headliner Rattle -
- Rear Seat Rattle - typically the rear strut mounts
- "Clunks" - typically the front strut mounts

## Maintenance Costs

The 997 is a very reliable car. I've put 30k miles on mine as a daily driver and my maintenance and repair costs average \$0.21 a mile, or \$5800 over 2.5yrs. That included 1.5 sets of tires, a clutch, brakes, a starter cable, a new expansion tank, oil changes, air filters, alignments, bits and pieces, etc. However I do most all the work myself. If I had taken it to a dealer that bill could have been 3X that. The simple math is this: the parts for your avg repair costs \$100, the avg indy will charge you 5-10x that, and the avg dealer will charge you 10-15x that.

To have a long and happy relationship with your 997 you need to find a good local mechanic or get comfortable working on the car yourself. They are very easy to work on, well documented and you can always find guys on RL to walk you through it. The community is half the joy of owning these cars.

Below is a breakdown of my maintenance and repair costs over 30k as a daily driver.

Date	Miles	Description	Location	Category	Cost
2/22/17		Replace Ignition Switch	S-Car-Go	Repair	\$ 250
2/22/17		Replace Wiper Blades	S-Car-Go	Maintenance	\$ 45
6/29/17	46,056	Oil Change: Motul 8100	Me	Maintenance	\$ 75
7/13/17	46,056	Front/Rear Michellin PS4S	Cains	Maintenance	\$ 1,250
7/15/17	46,913	Oil Change: Motul 8100	Me	Maintenance	\$ 75
7/15/17	46,913	Oil Pan Sealant: Loctite	Me	Maintenance	\$ 35
7/31/17		Cabin Air Filter	Me	Maintenance	\$ 35
7/31/17		Engine Air Filter	Me	Maintenance	\$ 35
9/28/17	49,137	Oil Change: Motul 8100	Me	Maintenance	\$ 75
11/17/17		Brake Bulb	Me	Repair	\$ 3
11/17/17		Hood struts	Me	Repair	\$ 20
12/12/17		Clean B+ Bolt	Me	Repair	\$ -
1/11/18		Charge AC Refrigerant	Me	Repair	\$ 25
1/12/18	52,500	Replace Clutch Slave Cylinder	S-Car-Go	Repair	\$ 500
1/15/18	52,500	Sachs Clutch Kit	Vertex	Repair	\$ 600
1/17/18	52,500	Clutch Install	S-Car-Go	Repair	\$ 500
3/10/18	54,500	Oil Change: Motul 8100	Me	Maintenance	\$ 75
5/17/18		Replace Expansion Tank	Me	Repair	\$ 131
5/20/18		Replace Starter/Alt Cable	Me	Repair	\$ 93
6/1/18	59,170	Oil Change: Swepeco	Me	Maintenance	\$ 150
11/5/18	64,656	Oil Change: Motul 8100	Me	Maintenance	\$ 75
11/9/18		Right Rear Strut Mount	Me	Repair	\$ 100
11/15/18		Michellin PS4 - Rears	Cains	Maintenance	\$ 750
11/19/18		Alignment	S-Car-Go	Maintenance	\$ 100
1/1/19		Replace Water Pump	Me	Repair	\$ 343
1/1/19		Change Transmission Fluid (PTX)	Me	Maintenance	\$ 100
3/30/19		Hawk Ceramic Brake Pads	Me	Maintenance	\$ 240
5/18/19	69,851	Replace Front Fender Liner	Me	Repair	\$ 120
5/18/19	69,851	Oil Change: Motul 8100	Me	Maintenance	\$ 75
<b>Total</b>	<b>28,422</b>			<b>Total Cost</b>	<b>\$ 5,875</b>
				<b>Cost / Mile</b>	<b>\$ 0.21</b>

## Maintenance Schedules

- Oil Change - Every 5k miles
- Spark Plugs - Every 40k miles, or 4yrs
- Drive Belt - Every 40k miles
- Brake Fluid Flush - Every 2yrs
- Cabin Air Filter - Every 2yrs



- [Engine Air Filter](#) - Every 2yrs
- [Radiator & Air Intakes](#) - inspect and clean every 1yr
- [Manual Transmission Fluid](#) - Every 50k Miles (the manual says 100k)
- [Coolant](#) - Lifetime
- [Fuel filter](#) - Lifetime
- [Brakes](#) - Pads should be good for 30-50k miles. Dealers will recommend replacing your rotors with pads but they can last up until the wear limit.
- [Tires](#) - Fronts will last 30-40k miles. Rears 15-20k miles depending on your alignment.

## DIY Guides

A selection of maintenance guides from the community:

- [How to Safely Jack Up a 997](#) - By Edgy01

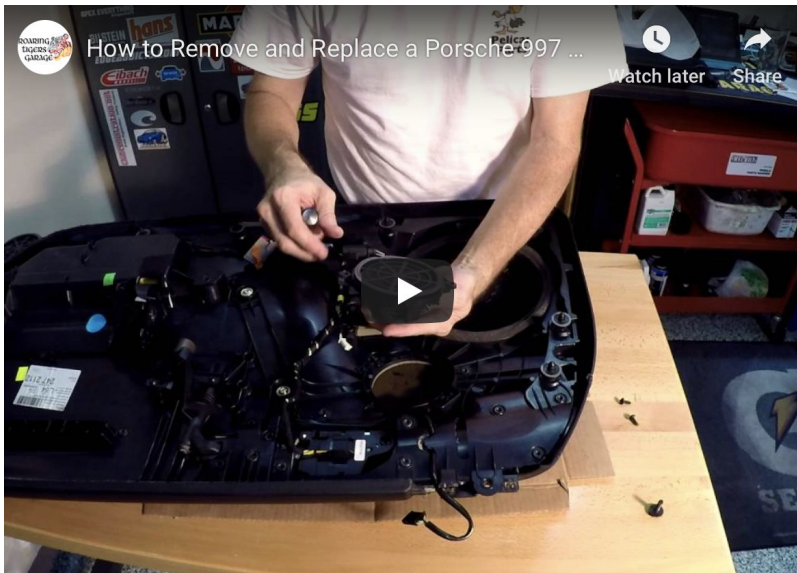


- Oil Change Guide -
- Brake Flush -
- [Serpentine Belt Replacement](#) - By USMC\_DS1
- [Cabin Air Filter Replacement](#) - By USMC\_DS1
- Engine Air Filter Replacement -
- [Brakes & Rotor Replacement](#) - By yvesvidal
- [Expansion Tank Replacement](#) - By TheBruce

- [Starter/Alternator Cable Replacement](#) - By TheBruce



- [Starter Replacement](#) - By Devil Boy
- [Water Pump Replacement](#) - By TheBruce
- [Clutch & Flywheel Replacement](#) - By yvesvidal
- [Installing Lowering Springs, Struts & Coilovers](#) - By TheBruce
- [Strut Mount Replacement](#) - By TheBruce
- [Center Console Respray](#) - By TheBruce
- [Door Panel Removal](#) - By Clifton



- AC Switch Replacement -
- Installing a Hands Free Bluetooth Module -
- Plastic Kick Strip -

## Popular Mods



## PPI Checklist

### Provenance

Does it have all its maintenance records, has it been a warm weather car all its life, private sale or dealer (you're buying the previous owner as much as the car). Some people are particular about the number of owners however i would take a well maintained 5 owner car over a poorly maintained 2 owner car.

### DME

Look at the total hours and compare those to the odometer reading to calculate an average speed over the life of the car. I think normal ones work out to around 30 MPH give or take. If you get a number that's way off from this, like excessively high hours to mileage or vice versa, it's possible the DME in the car has been swapped, that it has a tune with a piggyback DME that is counting operating hours multiple times, or that the mileage has somehow been lowered to a false value.



### Oil

Whats the oil change schedule (should be every 5k miles), and what oil have they been using? My top recommendation is to pay an extra hundred bucks during the PPI to have the oil filter removed and cut open to inspect for debris. This will give you piece of mind vs waiting until your first oil change after you bought the car. I know from experience.

### Clutch

It should feel very smooth. The pedal shouldn't feel stiff or heavy. These can last 50-100k miles. Clutches that go earlier are either city driven or had a failed pressure plate, which is a weak point in 997.1s.

### Tires

With low mile cars you may have tires that look new but are timed-out at 5-7 yrs old. Old tires can dry rot and get rock hard. The manufacturing year is written on the sidewall.

### Exterior

Any accidents on the carfax? How's the paint? Check for rock chips. These cars get a LOT. Check if the bumper or hood has been resprayed. Check the windshield for chips. If it was replaced make sure it has the proper factory seal. If the rock guards are yellowed those can be replaced for \$100. If the headlights are yellowed those can be polished out. However if the fog lights are crazed they will need to be replaced. Thats \$700 for OEMs or \$300-400 for LED aftermarket.

## Mods

Any aftermarket exhaust, suspension? A Fister exhaust bypass is almost a required mod for the 997. They sound amazing and FD Motorsports is in the east bay so convenient.

## 10 Reasons to Buy a 997

