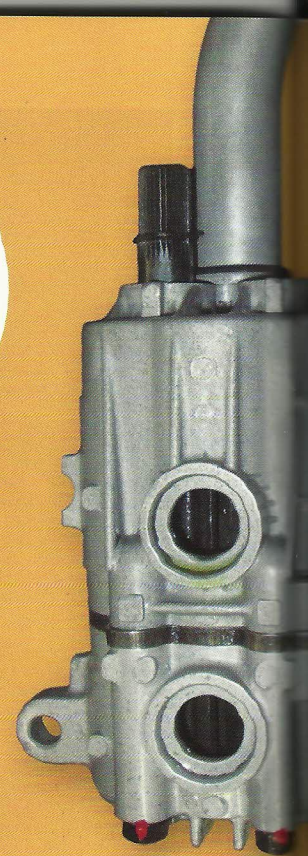
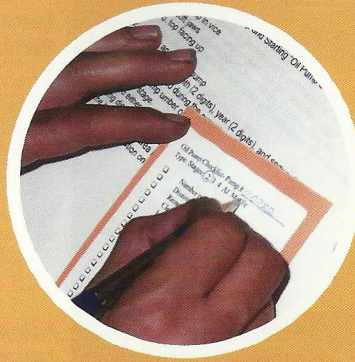
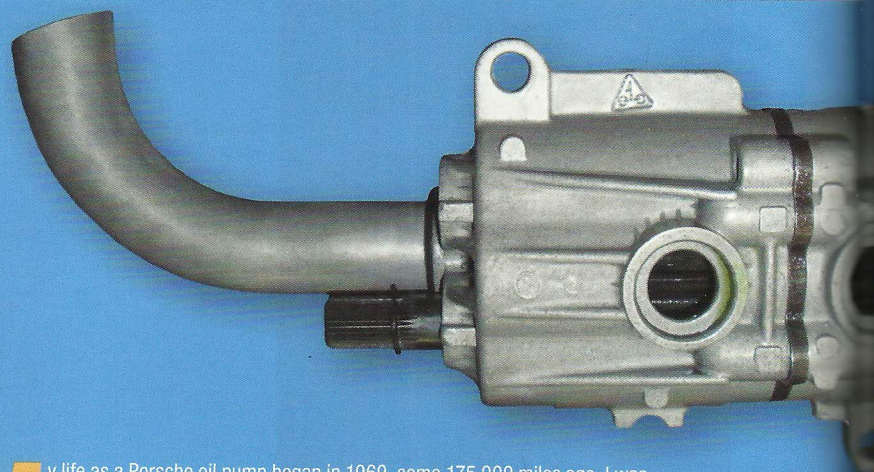


My journey as a PORSCHE OIL PUMP



**A rebirth to
a GT series 1
high performance,
ported and polished
super pump**

ARTICLE AND PHOTOS BY GLENN YEE



My life as a Porsche oil pump began in 1969, some 175,000 miles ago. I was put together with countless other pumps on an assembly line. Although I had led a mostly healthy life, I just didn't feel the same vigor, my co-working components started to suffer; but I was just a regular type of pump designed to do a specific job. Cost was a consideration in my design and development, but after all, I just needed to be adequate, which I was.

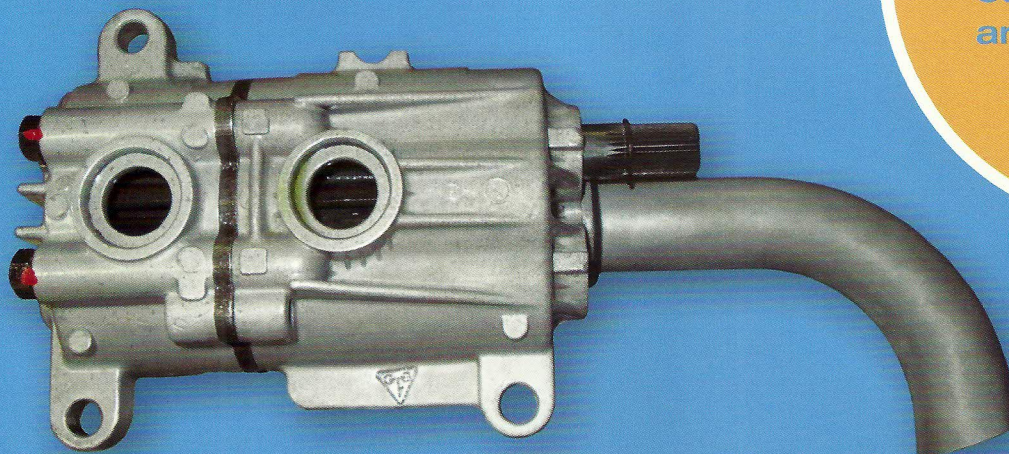
My life began by being installed in a bright new engine in Germany. I went down another assembly line nicely packaged in an engine and finally I got put into a shiny new 911. I along with my co-workers, all worked together motoring the highways and giving our new owner miles and years of driving pleasure, mostly uneventful. Well, after all those years and miles, I was still working, but some of the components that I worked with were definitely showing their wear, in part due to me and the poor job I was doing. So, it was time to start anew. My owner was a particular (peculiar) type of human that wanted to be sure everything in the engine was looked at, machined, manicured, and massaged, and that included me.

MY ADVENTURE BEGINS

My fate was being planned. I was packaged with other components that I had been working with and shipped off to parts unknown. In a few days we all arrived at a place with all kinds of big machinery. I realized that we had all arrived at a machine shop where I was evaluated and discussed. Shortly, I'm back in a box all alone, top closed and in the dark, being shipped off again to start my adventure. My friends were staying but my journey would continue.



I was put together
with countless
other pumps on
an assembly line



MY ARRIVAL

A few days later, the top opens and there's light. I'm out of the box and being handled, and there is a discussion about me and my needs. Hmm, doesn't sound like I am in too bad shape and not terminal. I soon notice that I am not alone but with a whole group of other pumps. Some of them look just like me (all grey dirty and oily), but some of them have all kinds of accessories and things hanging off of them. Farther down the line, I notice that there are some real shiny ones lined up. I gather that that is the end of the rejuvenation line and I should look like that soon. Let's hope, I'm not sure of my fate yet.

So as my journey continues, I get clamped in a soft jaw vice (not too tight please), and feel these long little square things hitting on me in several spots! What's happening? Is this acupuncture? Oh, I get it, I'm getting a new serial number stamped into me and they are writing it down to keep track of me. How catchy, I now have my own unique identity!

After that, all my nuts, washers, and studs are removed and I go into a basket. Another process is occurring on my oil pickup tube. It's being removed! Hey, don't lose that, I think I'll need that!

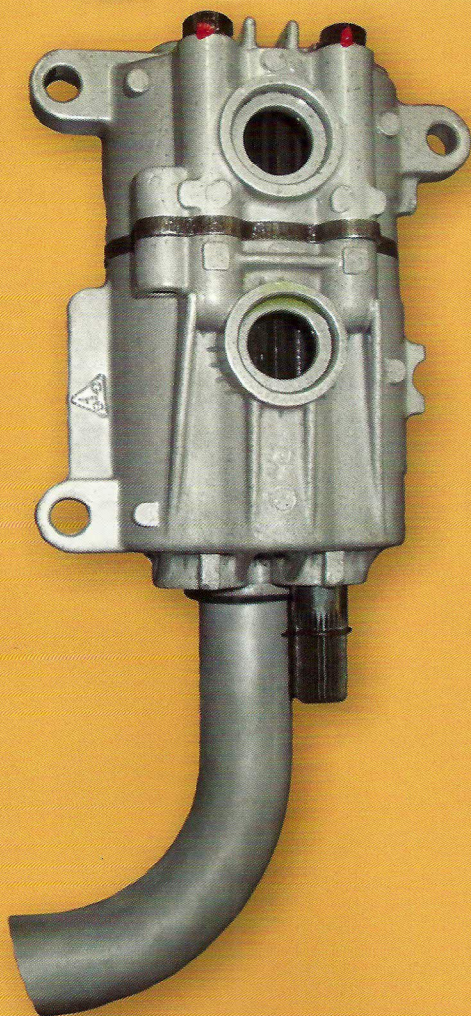
THE JOURNEY AND PROCESS

What occurred next was the unpleasant part. These people tried to cook me, well sort of! I had all my pieces put into this contraption that spun around with hot soapy water to clean all the oil, mung, and grease off me. It must have been a thousand degrees in there! I have to admit, it sure did feel good when I came out all clean. A nice blow dry made me think I was at a spa. Hey, perhaps this IS the oil pump spa for Porsche pumps! I thought it was only a myth.

After that I went all different directions, no really! My housing went to this big contraption with cutters—that was scary. (I heard someone say it was a mill?) My gears and shafts went a different direction for disassembly.

When I was on the mill thing, cutters came down and smoothed me out; trimming and nipping away at the excesses and bumps, etc. Some I came with and some I picked up along the way. Hmm, I heard talk that the treatment would make a big difference in my future performance. Well, the millwork was fairly painless and now I have some shiny parts.

So, on to my gears and shaft saga, I was pressed apart (Ouch!) and then back to the hot cleaning contraption (Eek). From there, my shafts were polished and another process



DISTRIBUTOR/DEALER LIST:

Ollies Machining, Lake Havasu, AZ (Distributor)
www.olliesmachine.com • (928) 855-6101

Scott's Independent, Anaheim, CA (Distributor)
(714) 235-4981

PartsKlassic, Flagstaff, Arizona (Distributor)
www.partsklassic.com • (928) 255-2824

Orbit Racing, Riviera Beach, FL (Dealer)
www.orbitracing.com • (561) 840-2109

Patrick Motorsports, Phoenix, AZ (Dealer)
www.Patrickmotorsports.com • (602) 244-0911

EBS Racing, Reno, Nevada
www.ebsracing.com

Automobile Associates of Canton (Canton, Conn)
www.ebsracing.com

Kindersport (Fremont, Calif)

Rennsport (Metairie, LA)
(504) 738-9499

CarpardUSA LLC (Costa Mesa, Calif)

Kolk Racing (Holland, Mi)

was done to my gears that they wouldn't tell me about. I know that it involved being submerged in some special hot treatment that made me better at retaining oil during break-in. Just like a Jacuzzi. Hmmm, I did notice that now my gears were a blackish grey with a little more texture. Ohhhh, that's how I am going to retain more oil! That part took a while but, I was enjoying the spa treatment. After all that, I was measured and my gears and shafts were reunited. Mmmmm, I'm starting to feel whole again....

I guess I spoke too soon; my thoughts of being reunited with all my pieces were premature. My housings were subjected to all sorts of cutting, grinding, and sanding. I overheard talk about something called porting that could increase the amount of oil I could flow by 20% plus. No way! I already did an adequate job, or so I thought.

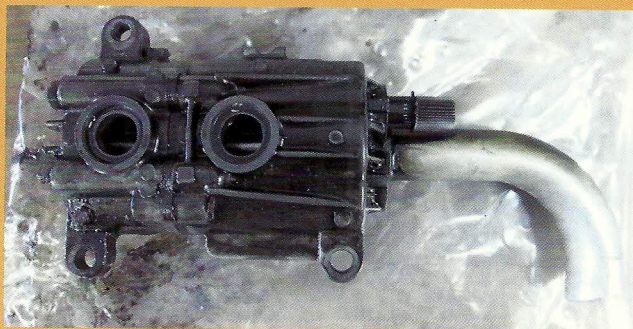
So after all this I thought, "Surely, I must be done." Well, not so. After the cutting, grinding, and sanding, I got put into this other thing that blew rough stuff all over me. (I saw that I had lots of company in there; all sorts of other pump housings getting the same treatment as me; that made me more comfortable.) I noticed that years of work in that engine had left me soiled and stained with sealant, glue, and other unmentionables stuck to me. Well, I came out of this portion of the treatment looking and feeling completely different! WOW, done? Well, NO! Next, along with several other housings, I'm placed into this other contraption that has water and these hard round things massaging me. After an hour or so, I come out and boy, am I shiny and clean now! But I'm STILL NOT DONE. This spa is really working me over.

I'm put into a new fixture that holds me so they can do something called polishing. Ooooh. This one goes into my ports and makes them really smooth and shiny. I overhear them saying something about reducing surface friction for increased oil flow. They do the all over inside my housings. So now I hear them say that I am getting close to the final fitting of my gears, shafts, and intermediate plate before assembly.

Whew! They have polished my shafts, treated my gears, ported and polished my housings (inside and out) and put me back together. Well, I'm back together, but I think they forgot something. ... Nope, I find I am still "in process." Now I get fitted with a shiny pickup tube (I thought they'd forgot it), and all my hardware gets torqued and painted.

They put me next to something they call a pump card where they verify all the steps have been done. Unbeknownst to me, they had been doing that the whole

Me arriving as a dirty pump.



A "groupie" of myself and my new friends at arrival.)

time! That's how they keep track of all my new pump friends and keep our pieces matched up. Ok, I get the serial number thing. Group pump selfie!! I'm in the third column, fifth from the bottom!

So now these spa people are going overboard; they squirt some sticky stuff inside me and run me with a motor to verify I work properly. From there, they spray stuff all over my outside (Is it suntan lotion, am I heading for somewhere sunny?), then seal me in a bag with some instructions for my care and use.

Surely, I must be done. Yes, I'm done and ready to go back to work! Yaaaay! I am now a rebuilt GT Series 1 ported and polished oil pump for a Porsche.


EXPECTATION

I'm excited to tell the other components in my engine that I can supply 20-30% more oil for their needs. I can help minimize the wear they will experience in everyday life. I can help them to be more reliable. Lastly, I can tell them that with my internal modifications, I can reduce the horsepower loss that I create internally. It's called hydrostatic pressure resistance but, that's my little secret!

HOW I LOOK AND HOW I WORK

Well, to summarize my journey, it was extensive! I came back with new life "pumped" into me; shiny and clean on the outside and inside, ported and polished to improve oil flow and thus pressure. All checked out, measured, fitted, and updated.

MY NEW PERFORMANCE JOB IN THE 21ST CENTURY

I learned that the pump spa was only new to me! My friends have competed on tracks and driven on the streets on a daily basis for over 30 years! GT Series 1 ported and polished pumps have been around since 1980! My friends have been to the 24 Hours of Daytona, Le Mans, and have won the 25 Hours of Thunderhill. I am in good company and I can't wait to see where I go. 



Left: This is where I get my unique number...unlike any other.
Below center: The mill work begins.
Bottom center: Trimming off some of my extra filling.



Above: inside contouring.
Below: The big group graduation picture.

