***How* many miles do you have on that KLR?**

Last update: May 30, 2016

A red-letter day for my KLR back in 2013.
The addition of the "1" and the comma seemed like a requirement.

As the miles pile on my bike, this question comes up a lot. And people want to know details of what oil I use, or life-increasing modifications, or how long various components lasted. This article captures all three issues with respect to my 2004 KLR650.

There's a bit of overlap with a separate article at this site titled "Modifications to my KLR" which addresses the changes made to my bike to make it last longer, safer to ride, or easier to live with. That might be of interest to you as well. The link is **http://watt-man.com/uploads/KLR_Mods.pdf** .

But in this article, let's address the longevity-related questions.

Today's Date: May 30, 2016
Current Mileage: Just over 137,000 miles

I believe that there are four main reasons that the bike is still doing so well with all these miles:

- **Proper maintenance**
- **Ride it like you own it**
- **Eagle Doohickey and Torsion Spring**
- **Thermo-Bob cooling system modification**

The first two items on that list are pretty self-explanatory. The last two items are expounded on in the other article whose URL is listed above in blue.

Just to be clear up front for the people who will skim this write-up: the only things replaced so far are the typical consumables: drive chains and sprockets, spark plugs, tires and brakes. Yes, it still has the stock engine internals: piston, rings, valves, guides, cam chain, balancer chain, all bearings and

so on. The engine has never been apart except to install the doohickey and torsion spring when the bike was new, and the bike is still not burning any appreciable oil at all. That is documented at **http://watt-man.com/uploads/KLR_Oil_Burn_Rate_100.pdf .**

Common Questions Answered:

This bike gets Mobil 1 car oil in its crankcase, usually the 15W-50 but in the dead of winter I have been known to pour in Mobil 1 0W-40. It gets changed every 3,000 miles because I live in a warm climate, have a Thermo-Bob and have a 40-mile-per-day ride. All of those items extend the service life of oil. I pour in 80 fluid ounces (2.5 quarts) every time, and yes, this fills it slightly above the top of the oil inspection window. As documented above, the burn rate is still small enough that I don't add any oil for 3,000 miles, when the next change is due.

The oil filter is changed every 9,000 miles... I can hear the gasps already. The filter that is removed is always visually inspected and it always looks good (no appreciable debris in the filtering media). Yes, the bike is still using the stock oil filter cover o-ring!

Valve checks / adjustments (rounded to the nearest thousand miles) were done at 1K miles, 16K, 44K, 74K and 92K miles. That's it. The KLR valves settle in quickly so my interval between checks has grown. I do believe that keeping the revs down really helps here. I've kept a log of the gaps and shims as well, which is why I'm comfortable to have ridden 45,000 miles since the last check. They'll get checked again before 150,000 miles. Backing up that "keeping the revs down is easy on valves" statement, the intake valve gaps at the last check (92,000 miles) are the ***same*** as when the bike was new! The exhaust valve gaps are constantly closing though, by about 0.001 inch every 15,000 miles. At this rate I'll have to do something by 300,000 miles as I'll be down to the thinnest shims on the exhaust.

I'm still using the stock clutch. I'll hear occasional bellyaching from forum members that my 17-tooth front sprocket is hard on the clutch... well, it's still doing fine.

I'm also still using the stock rear shock. There is a longevity comment in the 'modifications' article about this, found at **http://watt-man.com/uploads/KLR_Mods.pdf**.

The stock CDI unit, ignition coil and regulator/rectifier are still doing their thing just fine but I do carry a spare of each on longer trips.

Component Life:

I'm not going to get into the life of tires, brake pads, spark plugs or chains and sprockets. That's covered everywhere on the net. Let's get to the items that you know won't last forever, but there isn't any standard replacement interval out there.

The stock clutch **cable** lasted **64,000** miles, and I use the clutch a lot. The Kawasaki replacement cable only went 17,000 miles... interesting. I'm currently on the third clutch cable, another replacement from Kawasaki, and it has 56,000 miles on it, still going strong. Yes, I do carry a spare Kawasaki clutch cable in the bottom of my tank bag all the time... it's one of those things that you know will eventually go out.

The stock fork seals made it to **92,000** miles. I then replaced them with new Kawasaki seals. I didn't have the best fork seal life in past motorcycles using ATF (automatic transmission fluid), so I am now

a "only Use Fork Oil in the forks" kind of guy now. My KLR gets fresh Bel-Ray Fork Oil every 15,000 miles since new.

The four seals on the four valve cover hold-down bolts were getting leaky, and thus were replaced, at **94,000** miles.

The stock speedometer cable made it to **96,000** miles. Since the A-models clamp their factory speedo cable to the right fork tube (causing a kink that reduces life in my opinion), I modified the bike (thank you, Jeff Saline!) with an E-model speedo cable guide.

I don't ride through deep water, so I continued to use the factory wheel bearings for years. At **96,000** miles, I felt they didn't owe my anything, and since this bike gets big annual rides, I swapped them out to have a clear conscience for the upcoming summer ride. I'll do them again at 200,000 miles.

I have **100,000** miles on the current water pump seals, and they are still doing leak-free...(I replaced them at 37,000 because I was doing the famous 'right side cleanout' (oil pickup screen cleaning) so this is the first real test of their lifespan.

As soon as you feel any looseness in the front end over bumps (sort of a clunking), keep those steering head bearings snug. They're not the easiest to replace. I was able to make it to **104,000** miles on the stockers before it was time to replace them and their races.

The seal under the countershaft sprocket did fine until **118,000** miles, then started leaking. One new Kawasaki seal went in its place.

Brake rotor life is dependent on how aggressive you are with the brakes of course, but also the pad compound. My rear rotor (disc) thickness was 0.197 inches when new. The minimum thickness spec stamped in the disc is 0.177 inch... which my rear disc was down to at 65,000 miles. But that's a lawyer-ese kind of number... I felt comfortable running mine down to 0.150" before replacing it at **131,000** miles. I've seen used discs on eBay that were 0.103 inch...

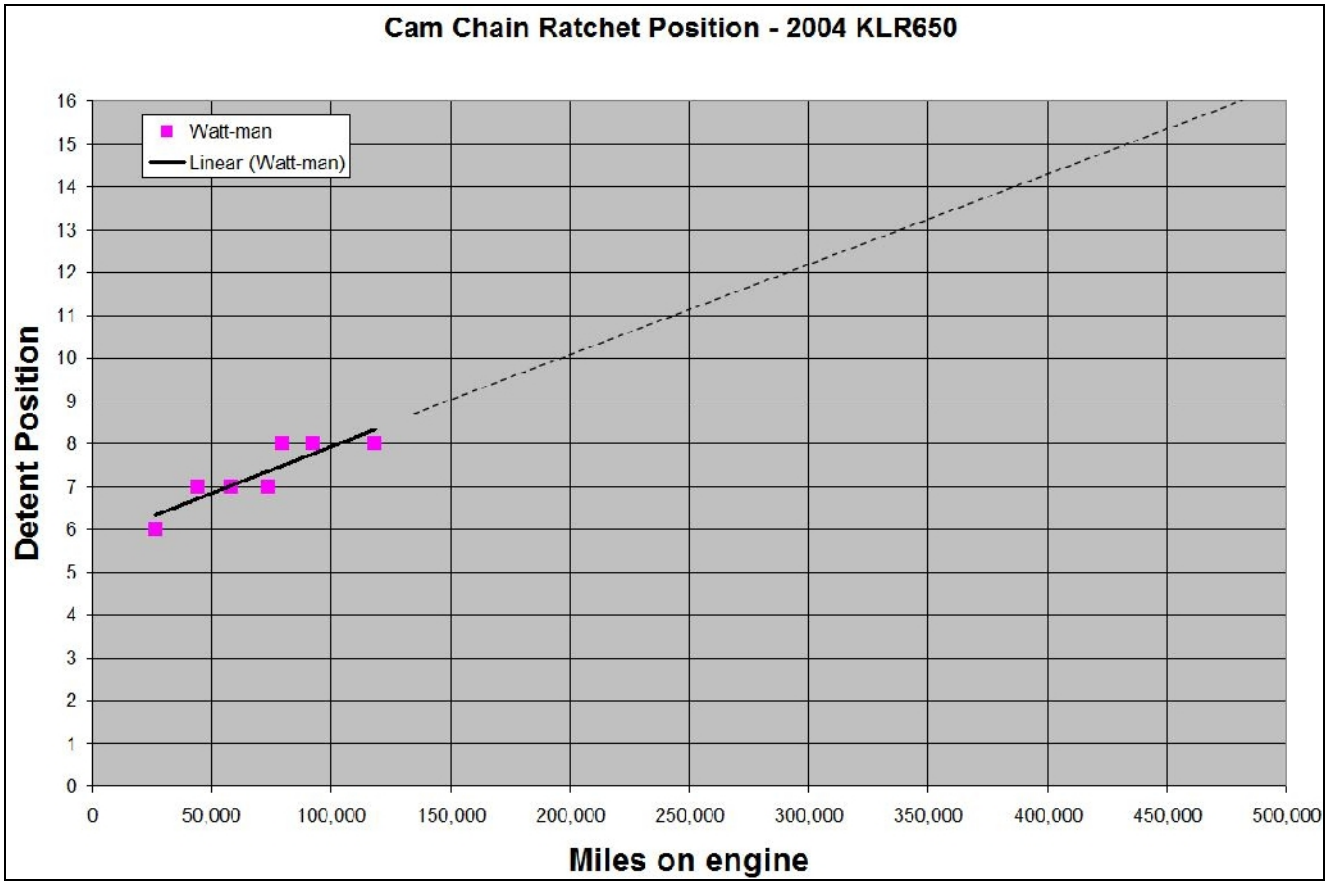
Since we're talking brake discs, I'll talk about the front one here. I'm easy on the front as it tends to cup tires so it doesn't get heavy use unless I NEED it. That said, I have an aftermarket 320mm EBC rotor and the wear rate with EBC FA130X pads is so slow that it won't hit the minimum thickness spec until 400,000 miles. I have 90,000 miles on this current set of pads and they still have some life left in them!

The stock valve cover gasket is finally starting to get weepy, so I'll toss in a new one at the **150,000** mile valve clearance check.

Finally, there are two chains inside the KLR650 engine that at some point, will need to be replaced. Fortunately, they're both inspectable for wear without an engine teardown:

> The ***balancer chain*** system wear is indicated by how far the doohickey has to rotate to keep the system tensioned. According to Eagle Mike, (the doohickey guy) after 25° of doo rotation, it's time to at least measure the internal components... and if you're at that stage, you know that you'll just replace the parts. So with 25° as the 'upper limit', I marked my doohickey with dyechem when it was installed and pulled the left cover at 75,000 miles to find that it had rotated 9° since installation. With that wear rate, this implies that at **206,000** miles I'll change the balancer chain. In the meantime, around 150K I'll inspect the doohickey rotation again to see if the wear has slowed down, or sped up to fine-tune that "206K" number.

The ***cam chain*** system wear is indicated by how far the cam chain automatic ratchet system has to move to keep the cam chain tensioned. The system is topped out at the 16th detent. The chart below is a log of my findings over the years. Time will tell but if the system continues on at the wear rate that it has held for the last 100,000 plus miles, I'll be topped out when the engine has **475,000** miles. It looks like the cam chain will not be the part that limits the life of my engine!



I hope you find this information useful. In the meantime, I'll keep riding another 10,000 to 15,000 miles a year and keep watching how this all goes!

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