

I just bought a used Miata, what should I service?

As the Tech Talk articles appear on our PACE web page, we sometimes get questions asking for help or thoughts. Here is a Question we recently received, and how I answered. Note these are just my opinions based on my experiences and what I learned reading on Miata.net, not that of the club.

Question: *I just bought a 1999 Miata with 96,000 miles on it. I have no maintenance data on it, and I want to establish a baseline. I heard it needs the TIMING BELT AND IDLER PULLEYS, OIL SEALS, WATER PUMP AND ACCESSORY BELTS DONE . I don't trust myself on my own. I would consider doing my self with some assistance. I want to get this done as I have visions of being broken down beside the road.*

My reply: First let me say I do not personally know anyone who had a Miata Timing Belt break. Next I want to point out that I am told every car sold in the state of CA must have a timing belt guaranteed to last 90,000 miles and you have the same belt. So I don't think you are in any immanent danger. Also the motor is not an "interference" motor, so if the belt does break, nothing inside the motor will be damaged. I don't know how much mechanical knowledge you have, so I will approach this as if you are just learning.

The first decision you need to make, in my opinion, is how long you intend to keep this Miata. I know a few people who have bought their first Miata, and after owning it a short while and doing things with the club, have then traded up for a model they liked better. For example, your 99 has a single bulb headlight. The 2001 to 2005 has a double bulb headlight for better night driving. The 1999 and 2000 do not have a clear coat paint job, the 2001 and newer has the clear coat paint. Starting in 2001, the motor puts out more power due to different cams and exhaust header. The longer you plan on keeping it, the more you may want to spend. This is your first decision – "How long will I keep it"?

Leaking oil seals or water pump won't get you broke down along the road. The Timing belt and accessory belt can if they break.

Worn Timing Belt Idler Pulleys normally get noisy when worn, but not always. But, if the idler pulleys freeze, this will cause the belt to break. So this can cause you to break down.

Something else you didn't ask about is the Valve Lifters. Starting in 1999, the Miata has a Solid Lifter Camshaft. The Lifter to Cam clearance needs to be checked with the engine cold. If the clearance gets too loose, you can lose a little power. If for some reason the valve or valve seat itself gets worn, you could burn the valve and the engine will miss. Then the head needs to be taken off to replace the valve. If the valve shims wear, the valve train gets louder. If the valve or valve seat wears, it gets quiet and you could burn the valve. You really can not know until it is checked.

At that mileage, it would probably help to change the Manual Transmission fluid (if yours is manual) and change the rear Differential fluid. The 1999 to 2005 Manual Transmissions shift like butter using the "Redline Brand" Synthetic Manual Transmission fluid "Redline MT-90". This is a 75w-90 "weight" fluid designed just for manual transmissions. The Redline 75w-90 Gear Oil is great for the rear differential. Do not interchange these. The Redline MT-90 has additives for a transmission, the Redline 75w-90 Gear Oil has additives for the differential. If you put the Differential gear oil in the tranny it will shift like a truck transmission.

This is what I would do:

If I was keeping it short term, I would replace the timing belt, and ask them to check the idler pulleys and water pump shaft for looseness. If the idler pulleys and water pump shaft feel solid, I would just replace the timing belt and the accessory belt. I would also have the valve clearance checked and adjusted if needed since it is at 96.000 miles. This can help you avoid future problem.

If I were planning to keep it a long time, I would do it all, as you just cannot tell if something is worn enough to soon break. I would change the timing belt, idler pulleys, water pump, plus check and adjust the valves if needed. I would also change the accessory belt, and change the fluids in the transmission and rear differential. The crank seals and cam seals would also be considered. Most of the cost of doing all of this to the motor is the labor, so once the mechanic is at the timing belt, there is not much more labor involved to do the rest.

OK, so where to have it done you ask? Sorry, I don't know the area where you live area at all. If you were in the Lancaster Area, I would suggest either the Lancaster Toyota/Mazda service department (717-569-7373), as they did my 2002 when I had it. Or we have Brady's High Performance Shop In Willow Street, Pa (717-283-0056) Tell either of them I sent you, as I deal with them both. I have personally had good luck dealing with them both. I have heard some good things About Giambalvo Mazda on the west side of the Susquehanna River, but I have never personally dealt with them.

Or here is another choice for you. Have you ever heard of a web page named "Miata.net". You could enter a post in the forum section for your area asking fellow enthusiasts where to take it. Here is a link to the forum section where you live: <http://forum.miata.net/vb/forumdisplay.php?f=88>. Click on the "New Thread" button upper left, and enter your question. I am on there a lot.

I hope I helped you, and feel free to ask if you have more questions.
Zoom-Zoom! Bill Latsha