

Do you have all maintenance records? Go through them carefully.

-If you do not own internal and external Torx bits and sockets, buy a full set (and I mean a full set). I also found that Mercedes installed standard metric hex-head bolts in sizes not normally used by Oriental car makers; i.e. 15mm, 18mm, 19mm.

-Purchase a quality diagnostic system. Star equivalent. Do **not** cheap out on this.

-If your car has more than 60,000 miles, you'd better have evidence the fuel pumps/filters/relay were replaced via a service or the Mercedes repair (many posts on this subject). If no proof, cough up the \$1000 for the parts (labor not included!) and replace immediately.

-Remove the belts; spin all pulleys and ensure smooth operation. Any roughness or noise, ruthlessly replace them. Rebuild the supercharger idler pulley for \$27 or buy a new one for \$540. Remember I said, "full set of Torx bits"? The tensioner pulley on the bottom of the engine uses an odd-size Torx bit that is usually not included in the standard sets. Very easy to strip the Torx bolt and it is in a **bad** location to remove if stripped. (No need to ask me how I learned this one.)

-Inspect the supercharger clutch springs for cracks. If cracked, replace immediately!!! If one of the springs lets go, it will buzz saw right through the oil line next to it. Purchase and install a supercharger clutch scatter shield from LM21 here on the forum. Beautifully made and worth every penny.

-If you are near 100,000 miles, spark plugs and wires. You'll need the Mercedes spark plug boot removal tool to make this easy. The wires are multiple part numbers and sizes so remove and place in order on the floor so you can match the new ones to the old.

-Inspect the motor mounts and transmission mount. The motor mounts take some maneuvering; I believe AeroBoosted (or was it Seanol?) created a great DIY that explains how to slide the driver's side mount across the front of the car to fit the mount into place. Yes, the motor is crammed into the engine bay; it is that tight in there. (If not attributed correctly, please let me know!)

-Inspect the flex discs on the driveshaft and the center support bracket and bearing. Any cracks in the flex discs you should replace. As long as the driveshaft is out, replace the support bracket (it has a rubber support in it that sags over time) and the bearing.

-Take a look at how the tires are wearing; if both inside and outside of a tire are "chunking" or "peeling", it is a good bet you need bushings and ball joints. Don't let a static alignment fool you into thinking all is well. With the car on the rack it will align into spec but once you get it on the road the dynamics of the suspension will have the wheels and tires moving back and forth (thus the undue wear on both inside and outside simultaneously on the tires). By 90K to 100K miles, you can bet your lower ball joints are bad. Another clue to bad ball joints is the car will be very unstable in the rain; if you get apprehensive in the rain anytime you drive over 55 mph, your suspension needs a rebuild.

-You can only easily adjust the toe on these cars. Front camber can be adjusted in a single +0.3 or -0.3 degree using slotted bolts. Otherwise, to adjust camber you need to raise/lower your car by calibrating the suspension. Front camber aftermarket option is KMac bushings. I'm happy with mine. Rear camber adjustments, I have not found anything that I like and have no recommendations. YMMV.

-Keep an eye on the SBC brake actuation count using Star. Plan on the expense of replacing the SBC rather than just resetting the counter. i.e. don't be a "Cheap Charlie". I personally appreciate the fact the airlines pull engines and rebuild at a set interval rather than running

them until they quit in the air with me on board.

-The Sensotronic Brake Control (SBC) can crush your fingers if you work on the brake system without following the proper procedures. It activates automatically whether or not you have the key in the ignition. Disable it with Star before endangering yourself.

-Purchase a Solar BA-5 battery tester and monitor the health of your batteries. When down to 50% of capacity, replace. Again, don't wait for failure! Preventive maintenance. If the main electrical system fails, all you have is that little tiny motorcycle battery under the hood providing the power to your brake system. It won't last long so be prepared to hit the parking brake with your foot while standing on the brake pedal.

-Do NOT confuse the relay/fuse diagrams of the non-AMG W211 with your AMG W211! Non-AMG fuel pump fuse/relay are actually the AMG heat exchanger coolant pump fuse/relay. The non-AMG air pump fuse/relay are actually the AMG oil cooler radiator fan fuse/relay. In all model years E55, the fuel pump relay(s) is hidden behind the paneling on the passenger side of the trunk. E55s built on or after 1 June 2005 have two fuel pump relays in the trunk. There is no access port so you have to pull the whole panel. This \$4 part will put you on the side of the road and it throws no error codes! NOTE: this is one of the more problematic areas of the E55s.

- You will find a model year 2003 and 2004 air pump relay over the auxiliary battery under the hood; in a 2005/06 the air pump relay is next to the fuel pump relay in the trunk.

-Be prepared to buy the tools and test equipment if you are going to work on it yourself. If not, have deep pockets. FWIW, I went over my car front to rear between 90,000 and 100,000 miles to rebuild major systems and spent approximately \$6000 just in parts. Yes, you can replace one bad piece at a time but that just means you are going to go back into that same sub-system in a few months or so to replace another worn part. If you are in there, just do it all in one shot.

-If an air spring fails, just do the entire set at one time. Arnott makes a great replacement set. And yes, there is a specific procedure to follow when re-inflating the air springs. Use Star (notice how many times I've mentioned this diagnostic system? It is also invaluable in monitoring the health of your transmission.)

-Nice to add items are the UPD heat exchanger in the front and a set of UPD toe arms in the rear; allowing for the time to drop the exhaust to reach the adjustment bolts, the UPD toe arms turn a one-hour job into a 10-minute job. Both are available from Shardul here on the forum.

-Get the car into tip-top shape and then begin adding power. Remember, when this car first came out, it was the quickest 4-door sedan in the world. It is still impressive.

-The Chrysler 300 shares many parts with the W211 (transmission, rear suspension, some of the front suspension, differential, electronic modules). You can sometimes buy a Chrysler part cheaper than the Mercedes part and they are exactly the same.