Things to consider condition / servicing / replacing when owning or purchasing a 993 with over 80K miles on the clock:

Just a few <u>IF</u> items, items with a "*" can be done at home with basic tools:

- Clutch **IF** not done once in the past;
- 1st & 2nd gear synchros <u>IF</u> the gears tend to ding while shifting especially in cool weather when the car is cold. This is not a common occurrence, just an experience I had. If the problem only gets worse with a gear lubricant refresh it is a dead giveaway you have this issue.
- Steering rack rebuild <u>IF</u> leaking inspect with the under body cover off; a little weeping of the fluid at the rack ends is OK as the end boots tend to not seal very well as they age. Wet dripping on the underbody cover suggests an established leak. This seems to be a chronological age related issue to some extent. It is likely accelerated by corrosion on the rack rod ends as the inside tie-rod end boots lose their sealing ability and road moisture & debris can get inside the boots and contaminate the rack.

See Rennlist posting <u>"steering rack replacement notes"</u> also see "<u>How to jack the car up"</u> safely, remember As the French say "to die for love" is a good thing however I think they are speaking of this while under something other than a car!

- (* Send out rack for rebuild, remove & install yourself on jack stands, very messy two session job one day to pull the rack, a week later a day to put the rebuild back in.)
- Replace power steering belt <u>IF</u> not done once in past, a skilled technician can replace this belt without removing the engine;
- Replacement of hydraulic lifter cartridges <u>IF</u> noisy at startup;
- Ignition wires **IF** not done once in the past;
- Plugs IF not done once in past;

 *Strut cartridges & springs <u>IF</u> car bounces on rebound while driving, the suspension sits low or seems harsh on brick or cobblestone roads.

If a car has over 70K miles on it, it likely has replacement struts already that are good-to-go as is. In many cases if needing replacement, some time in the future, they can be rebuilt at a substantial savings over buying new - save \$1500+.

Many cars have had their springs swapped out with aftermarket springs to lower the suspension. Over time these aftermarket springs can sag. Swapping struts and or springs out is a surprisingly easy job done with jack stands and one of these: "MacPherson Strut Spring Compressor Set" transforming the ride of the car. Also see "How to jack the car up" safely. An inexpensive height adjustable option I have had great daily driver results with is the H&R Street Performance Coil-Over kit 29954-1, both springs and matched struts for all four wheel-ends, cost about \$1900 if you shop around. You can reuse the existing rear torsion bar down-links with this kit. Lots of aspiring track guys buy kits with adjustable valving for a considerable premium over this kit.

- *Tie rod ends <u>IF</u> play is present <u>IF</u> end boots are cracked just replace the boots. See: <u>"Energy Suspension Tie Rod End Dust Boots"</u>. Simple tool to do this at home; See <u>"Tie Rod and Pitman Arm Puller"</u>
- Suspension bushings **IF** car does not feel tight after an alignment;
- Distributor belt replacement <u>IF</u> not done once in the past;
- *Odometer gear replacement <u>IF</u> odometer is not working or not done once in past, easy kitchen table project. See "<u>How to repair a broken odometer</u>"
- *Air Flow sensor and idle valve should be cleaned when you get the car. The idle valve should never need replacement, just spray-out cleaning until the valve internals rotate freely when you shake the unit. See "993 Idle Stabilizer Valve (ISV) Cleanout". The air flow sensor rarely needs replacement but will need to be cleaned with a Q-tip as just spraying it out

will not release the grey debris coating on the sensor element, the element when clean looks like a white circuit board. See Rennlist posting: "Mass Air Flow Sensor MAF Cleaning does it work?",

- Door check strap fix <u>IF</u> making a loud "click" or "pop" when the door is opened or closed. You may have no "pop" sound but observe the strap mounting point on the A pillar shifting slightly as you open or close the door, a sign of future failure. This is a very common body part failure and relatively expensive fix but easy to avoid. See Rennlist posting" The dreaded check strap click". There is a DIY to modify the check strap reducing forces and greatly reducing the likelihood of the check strap progressing to failure going forward. I would do this DIY modification as soon as I get the car.
 See: "[Modifying] 993 Door Check-Strap Detent Assembly"
- Check engine light IF Air injector port clogging. I have no experience with
 this however the previous owner of my car did. I have read antidotal notes
 such as it shows up more in cars that have spent most of their life in hot
 climates and that it is related to valve guide wear. There are multiple
 approaches to fix this issue:
 - Remove the exhaust manifold & air supply and clean the passages/ports with a wire snake attached to a hand drill & cleaning solvent and replace the check valve, some do this as a DIY project;
 - Add electronics so engine management thinks the clog does not exist, something that may not be legal as well as a disclosure issue when you sell your car, also a DIY item or;
 - The official Porsche solution, the one only your friendly neighborhood shop will love. Disassemble the engine to clean the ports/passages and replace the valve guides.

My gut tells me this is not as common a problem as one would think and a fullon disassembly & valve guide replacement can be forestalled for a long time if not for the car's entire remaining service life by engaging in one of the less invasive fixes. Also a bad air check valve or air pump can cause the same light.

Other notes:

Be aware that the clutch and transmission can be serviced on a 993 without removing the engine. Some technicians neglect to tell you this and want to charge you for the labor on a full engine out.

Also the 993 has OBDC so if the ignition wires are bad or the rotor or cap are bad or the plugs are fouled the light will likely be on.

Inspecting a car for purchase:

If you are using this list as guidance on a prospective car purchase here are my additional thoughts:

I do not put a lot of faith in Pre-Purchase Inspections by third parties as they will generally only capture gross mechanical issues and miss most cosmetic condition items. You are better off looking at the car yourself with a friendly local PCA member who knows how the car should drive and feel.

A CarFax is only as valuable as the facts they have in their system. Once out of warranty, something that happened a long time ago, these cars are generally serviced and repaired by their owners DIY or small independent technicians or boutique body shops who in many cases do not report on their work. Beyond having a salvage title in its history these reports, I feel are of little value.

I hear lots of discussion about leak-down testing of engines as a validation of engine condition. From reading the comments I have come to believe that the conditions under which such tests are made vary quite a bit making such tests not too reliable as an <u>absolute</u> test of condition. They may be of some very limited value in capturing variances between individual cylinders on a single engine in the presence of other <u>gross</u> operating symptoms.

Seeing the age of these cars paint & body work is present on most examples. For example I am on my third rear bumper cover as cars have scraped and bumped my car while parked in the local shopping center. Cosmetic damage to parts that bolt onto the car are not a big deal as they can be replaced and restored to original condition, things such as hoods, doors, front ½ panels, front & rear bumper covers.

However any car that has seen damage to a door jamb or in the rear quarter panel areas can profoundly impact the integrity of the car and so probably should be avoided. Also any serious front end or rear damage where the unibody was involved signals that you should not be considering the car. Such damage is identifiable by a competent body shop guy.

As you can see above there are really very few unique items that may need attention on a 993 as these cars get older, a testament to the quality of the engineering and build on these cars.

If the car starts easily and runs reliably do not consider any actions that involves internal engine repairs. 993s tend to have a little uneven rumble at idle – this is normal. A slight cycling of the RPM on cold days, a small stumble on acceleration when the engine is cold or in very hot weather, an engine that uses some oil between oil changes, this is normal stuff.

A puff of smoke after sitting a while is OK, think "What would Jerry say?"

And most importantly don't go Neurotic, just enjoy the car!

You know the line, "accept the things I should not fix, have courage to fix the things I must and have the wisdom to know the difference"

Andy