



# Mercedes W123 Diesel Pre-Purchase Inspection

As is the case with any car that is 30 years old or older you will want to thoroughly inspect it before purchasing a W123.

Written By: Nicolas Siemsen



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## INTRODUCTION

From fluid leaks, to aged suspension components, to rust there are many items, big and little, to check when you are considering buying a W123 Diesel. You're very unlikely to find one without any maintenance or repair items to address so don't let this deter you. Simply understand that knowledge is power when it comes to buying an older used car. You'll better know what you're getting in to and you may have some better wiggle room when negotiating price.

Please note that the vehicle used as an example in this guide is a non-turbo diesel engine. The majority of this guide will apply to turbo diesel and gas engine cars as well. However, be sure to do some research about the key differences before going shopping!

## Step 1 — Mercedes W123 Diesel Pre-Purchase Inspection



- This guide will be separated in to five sections:
  - Vehicle walkaround, exterior check
  - Interior check
  - Under-hood check
  - Under-vehicle check
- This guide does not include the test drive.



## Step 2



- **Vehicle walk-around and exterior check**

- As you walk around the vehicle inspect each body panel for dents, dings, obvious paint blemishes or rust spots, etc.
- Also check for missing or damaged trim pieces and emblems.
- Ask if the vehicle has been repainted, when it was done, and whether the color was changed. If the vehicle was repainted pay special attention for signs of a sub-par paint job such as over-spray on trim or within the wheel wells, excess "orange peel", places where the color looks faded or doesn't match, etc. Examples:
  - Fading paint where it was applied poorly
  - Over spray, the rubber windshield seal was painted over



### Step 3



- Check along the bottom edge of the car for rust; you may need to squat down low to see it.
- Pay special attention to the area around the jack holes; in northern climates salt collects in and around these creating rapid and severe rust.
- Check for rust up under the fender wells especially on the side where the battery resides up front. Battery fumes will speed up rusting there.
- Also check for rust where the fenders meet the doors. Water drains are located there. If they clog water can collect creating rust problems.
- Check for rust at the bottom of the inside of each door, you may need to push the trim out of the way

## Step 4



- Open all of the doors. They should open smoothly and quietly. There should be no squeaks, clunks, or grinding noises. Note that on this door there is a slight "clunk" at about the mid point. This door check strap needs to be cleaned and lubricated.
- Close each door; it should close with a solid "thump".
- You should not have to slam the doors to get them to close.

## Step 5



- The front doors have door check straps that have two stop positions. Check to see that the check strap holds the door open both at the halfway point and the full open point.
- The rear doors only have one stop on the check straps. The check strap should hold the door open at the full open position.

## Step 6



- Open the trunk. If the vehicle has central locking it should be unlocked if the rest of the car is as long as the trunk lock is in horizontal position.
- The trunk should stay locked if the lock is in the vertical position even if the rest of the car is unlocked.
- If the owner will allow, pull up the plastic covers in the wells on either side of the trunk and inspect for rust. Picture shows trunk with plastic cover removed.



## Step 7



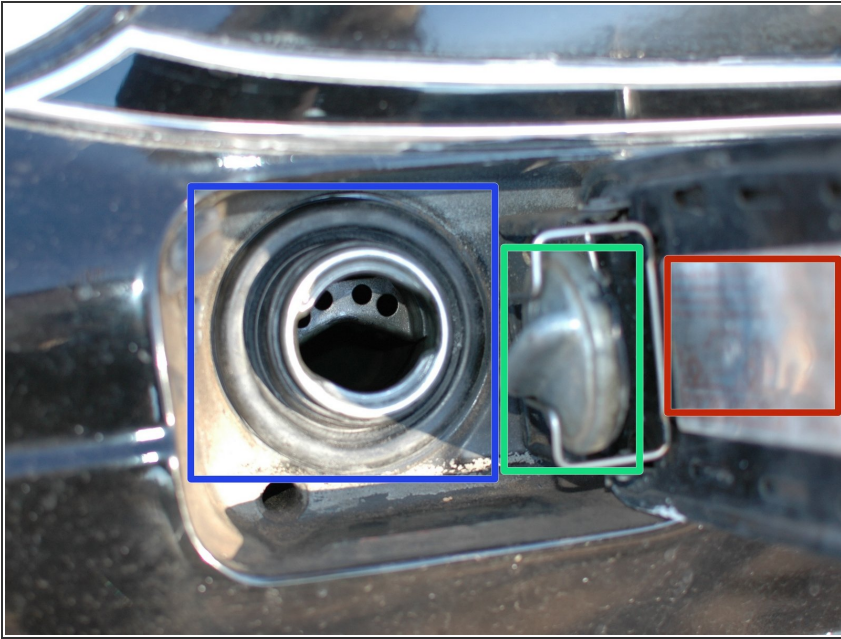
- Inspect the tail lights for any cracks.
- Ask the owner to operate the tail lights, brake lights, turn signals, and reverse lights for you.

## Step 8



- Check the bumpers to see that the rubber trim pieces are secured properly and not hanging off or otherwise loose.
- Check the bumpers and the areas where the bumpers connect to the body of the car for rust or other damage.

## Step 9



- Open the fuel door. There should be a sticker inside noting tire pressure specifications.
- Check the fuel filler neck seal for dry-rot or other damage.
- Take off the fuel cap and check the seal.
- If the car has central locking ask the owner to lock the car while the fuel door is open. A small pin should extend in to the fuel filler opening; this is the gas door lock.

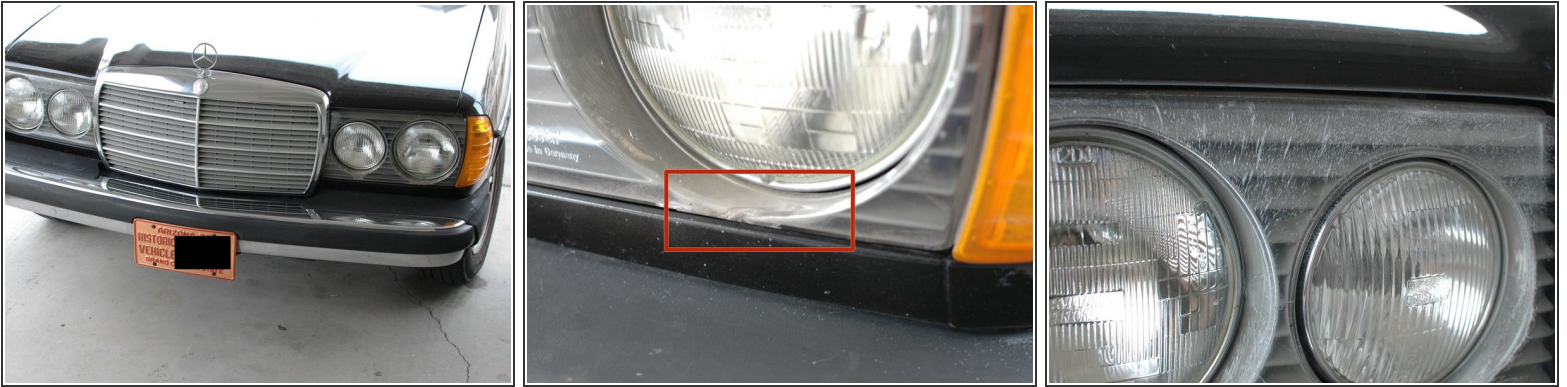
## Step 10



- Ask the owner to operate the power antenna, or do it yourself using the switch inside the car. It should move smoothly and without excess noise.
- Watch and see that it also operates properly during your test drive. It should raise when the car is started, and it should lower when it is turned off.



## Step 11



- At the front of the car check the turn signals and head lights, aks the owner to operate them. Also check that the high-beams work and that the fog lights work.
- It is typical for the old plastic turn signal lights and the plastic surrounds, also known as "doors", around the headlights to be covered in small cracks otherwise known as crazing.
- The headlights on U.S. cars, however, are sealed beams in a glass housing. The fog lights are glass too. These should not be cracked. Small rock chips are typical.



## Step 12



- **Interior check**

- Sit in the driver's seat. This seat gets the most use, and will be the most worn. It should be firm but comfortable. If it sags too much, it likely has one or more broken springs.
- While sitting there take a look at all of the wood trim. Check for areas where it's coming loose, or where it's cracked, the finish is coming off, or it is missing entirely.
- Note that loose trim can be easily re-glued in most cases, while cracked or missing trim can be expensive to replace.

## Step 13



- Look at the dash, checking for cracks. If there is a dash cover lift it up as these are usually there to cover up cracks.

## Step 14



- Check for ease of movement of all of the vent pods in the dash. They should move easily. Turn the knob to see if they open and close properly.
- Move the combination switch up and down, for right and left turn signals respectively, and then push it away from you for high-beams. It should firmly move in to each position and stay there without any slop. Then pull it towards you for high-beam flash; it should spring back to the center position when you let it go.
- Press the center pad on the steering wheel to test the horn.

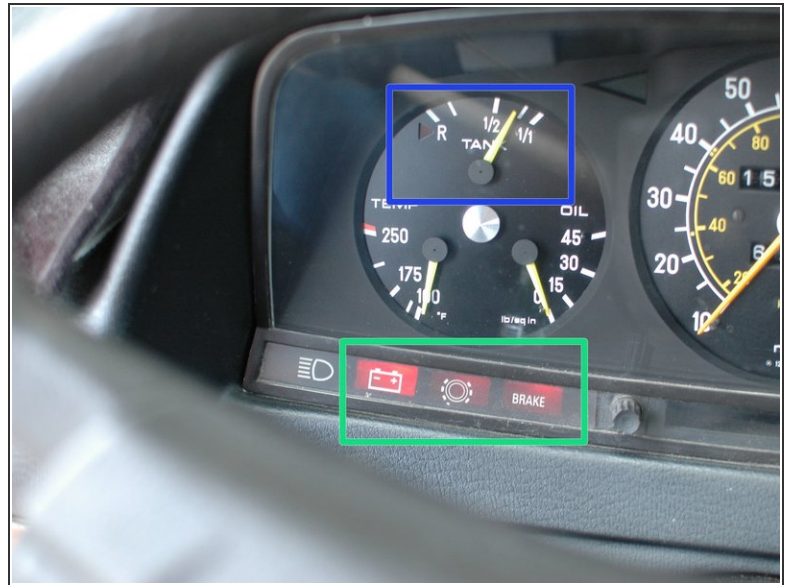
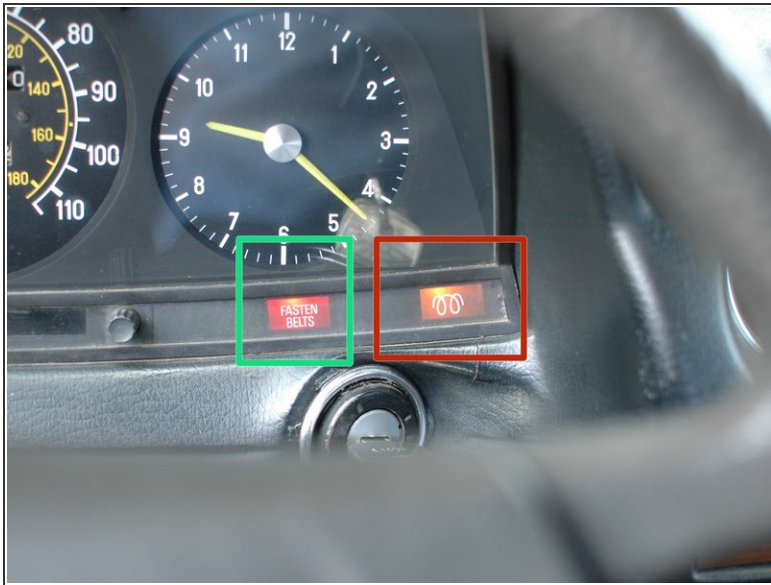


## Step 15



- Close the driver's door if it's not already and push down on the lock knob. If the car has central locking then in short order all of the other doors should lock.
- Pull the knob back up and watch for all of the other doors to unlock.

## Step 16



- At this point, ask to start the car.
- If the vehicle is a diesel don't forget you'll have to let the glow plugs cycle before starting the engine.
- Turn the key to the run/glow position, just left of the start position, and let the glow plugs cycle. The glow plug light should turn on. Depending on the type of plugs as well as the outside temperature the light should stay on anywhere from 5 to 30 seconds or so.
- Check that the other warning lights come on at this time.
- Check to see that the gas gauge moves up from Empty to the current level.
- Start the car once the glow light goes out. Unless it's unusually cold the car should start quickly on the first crank.

## Step 17



- Now that the car is running it will be easier to test a number of the car's accessories.
- Begin by turning on the car's climate control. If the car has automatic climate control take some time to run it through the various settings such as Auto Lo, Defrost, etc. Move the temp wheel from cold to hot and back again to see if the vents change from upper to lower vents.

## Step 18



- Test the sunroof. Open it all the way and close it all the way. It should move smoothly in both directions.
- Try and test the sunroof when the car has not been sitting in the sun, if possible, or on a really hot day. Hot temperatures will make it run better by thinning the grease.



## Step 19



- Test the rear window defrost. Leave it on and see that it turns off after the timer period.

## Step 20



- Twist the combination switch away from you to test the wipers. One click away from you is intermittent wipers, two clicks is full speed.
- Push in on the combination switch, towards the steering wheel, to test the windshield washers.

## Step 21



- Test the headlight switch. Move it through all positions, from running lights, to head lights, and then back on the other side of the off setting to test the parking lights.

## Step 22



- Test all four windows. If they are power windows, ensure they move smoothly without excess noise, any skipping, etc.
- Be sure to also test the rear power window switches on the back doors.



## Step 23



- Test the hazard switch.

## Step 24



- With the front door open the courtesy light should turn on. If it does not, try moving the small black switch on it through its various positions to see if the bulb is burnt out or if another issue may exist such as a bad door switch.



## Step 25



- Test all of the door pulls. They should be tight with little to no movement up and down.

## Step 26



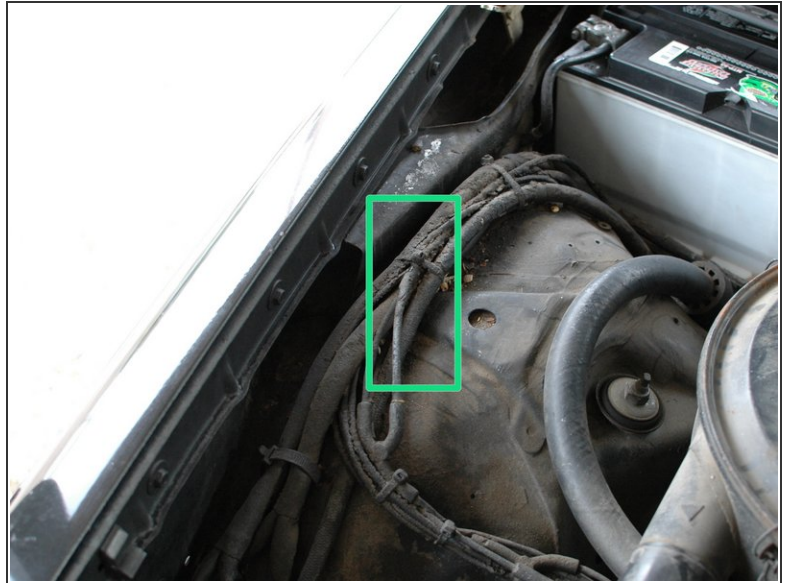
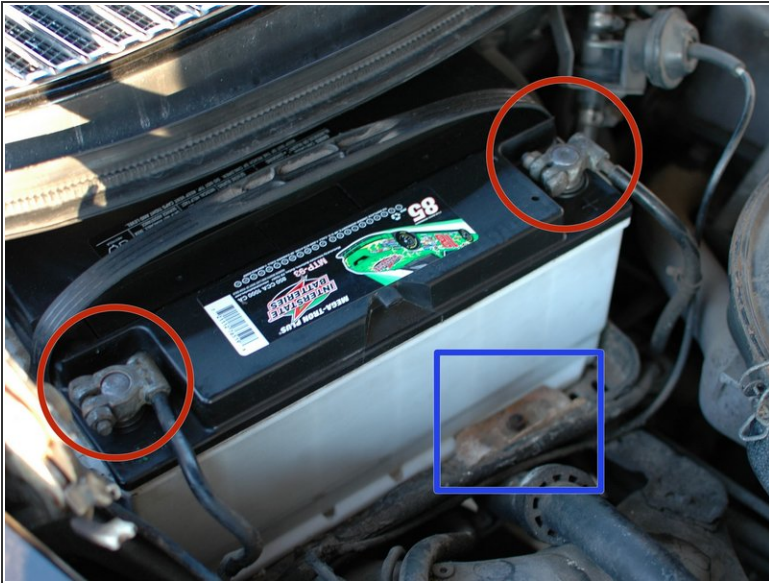
- Check that the clock is working. On later models years than the car used in this guide the clock will be smaller and inset beneath the tachometer.

## Step 27



- Time to open the hood. Begin by pulling the hood release lever up and out from under the dash until the hood pops up and inch or two.
- Then go to the front of the car and find the hood catch pull. Pull it towards you while lifting the hood up.

## Step 28



### ● Under-hood check

- Check the connections on the battery for excess corrosion.
- Check around the battery for obvious rust. If you see any, ask to remove the battery for a better look at the tray. If it's rusty assume the fender is rusty underneath it. We'll check the fender from below during the under-car check.
- Take a look at the wires and vacuum lines next to the battery and look for damage from exposure to battery fumes. On this car, someone sprayed over these lines with some kind of black goop perhaps to try and protect against this.

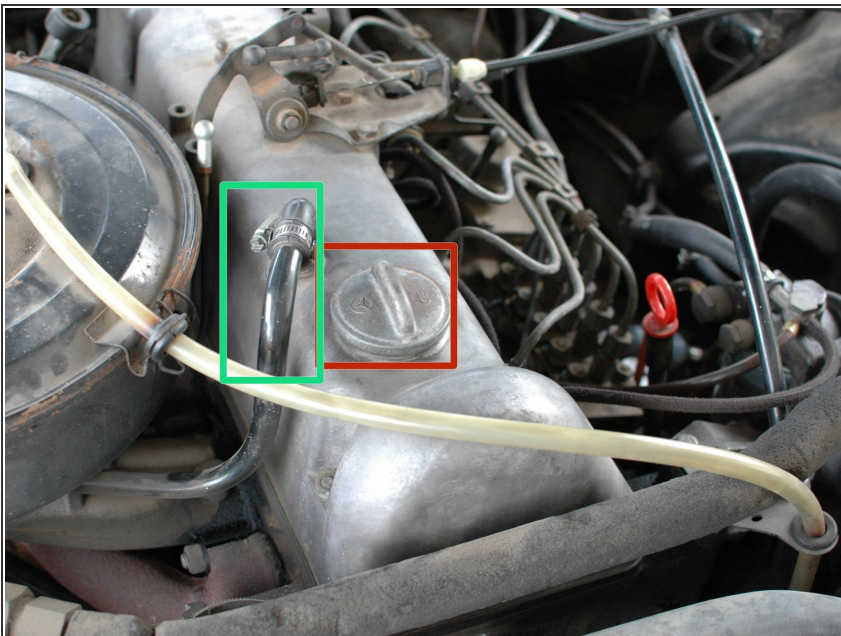


## Step 29



- Consider bringing a multimeter with you to test the battery and alternator, it's very easy to do.
- Review the guide on this process before hand so you are prepared. [Click here to see the battery and alternator test guide.](#)

## Step 30



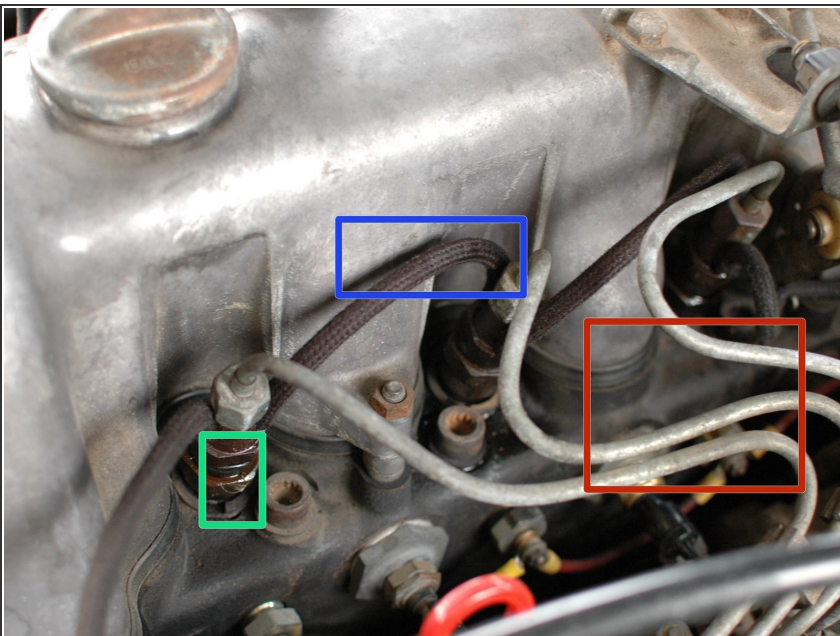
- Inspect the area on the valve cover around the oil cap for oil leaks.
- Inspect the area around the crankcase breather tube for oil leaks and inspect the tube for cracking or other damage.
- Inspect around the lower edge of the valve cover for oil leaks past the seal.

## Step 31



- Remove the oil cap with the engine running and monitor the "blow-by".
- [See the basic blow-by test guide beforehand for help with this.](#)

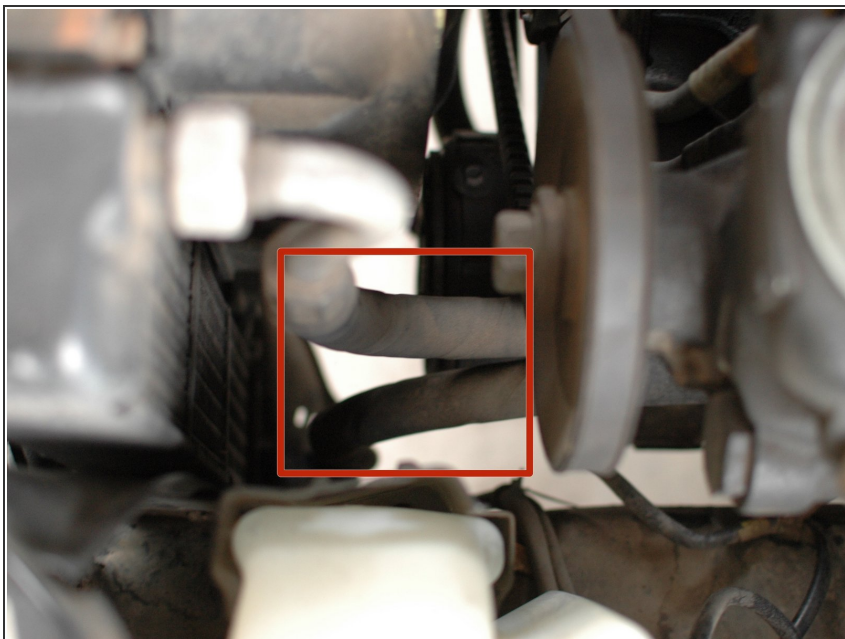
## Step 32



- Inspect the injectors for fuel wetness. Leaks could be coming from:
  - the hard injector lines...
  - the body of the injectors...
  - or the soft injector return lines.
- Inspect the return lines for brittleness, wetness, worn areas, etc.

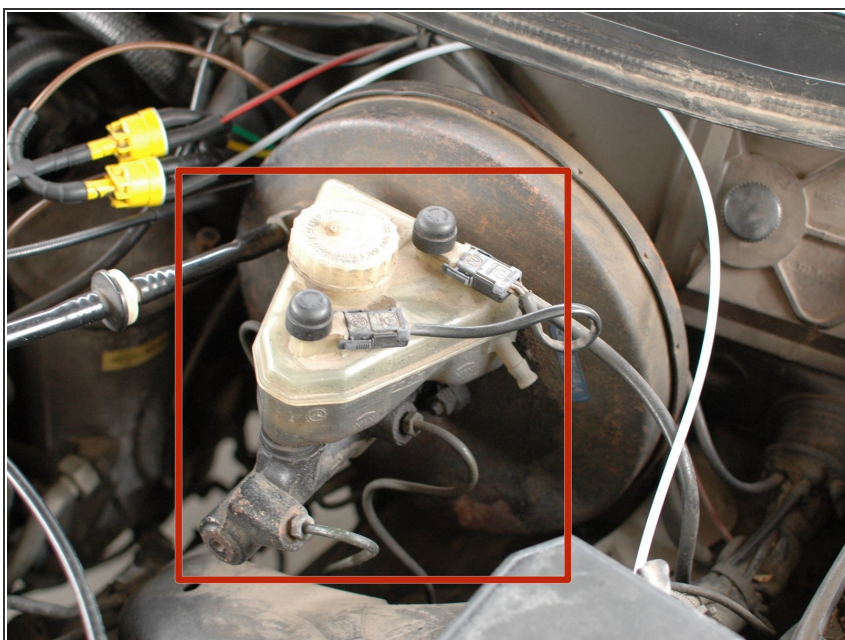


## Step 33



- Inspect the oil cooler lines and fittings for any wetness, and check for damaged areas under the power steering belt, which is directly above the upper line.

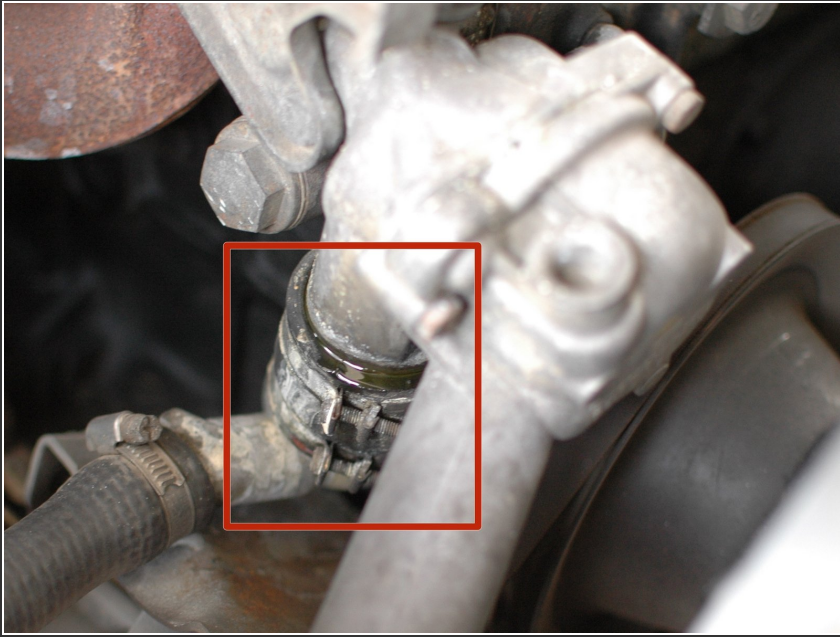
## Step 34



- Inspect the brake fluid reservoir and master cylinder for any wetness from leaks.
- Remove the cap and inspect the condition of the fluid. It should be clear and clean looking, not dark and dingy.



## Step 35



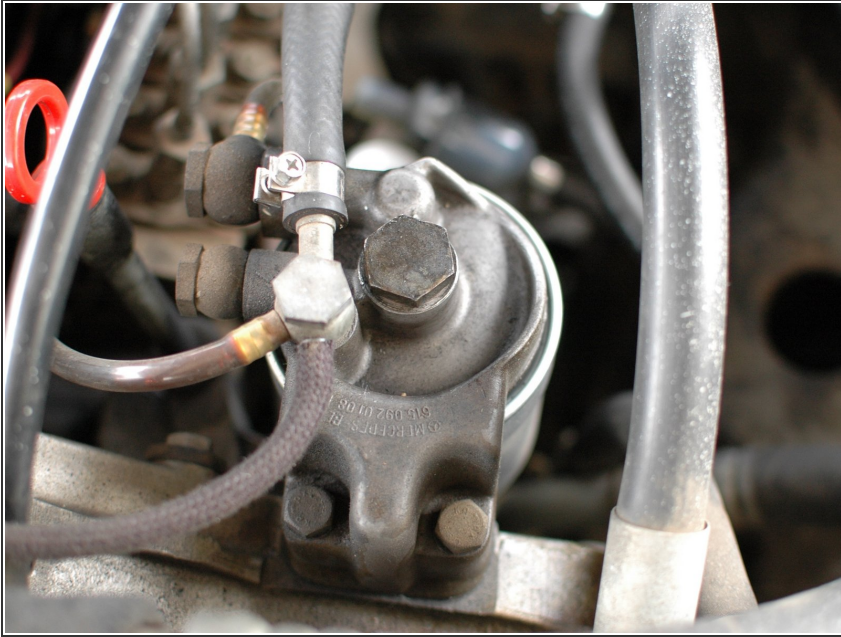
- Inspect the thermostat housing, and the short hose below it, for leaks such as the one shown here.

## Step 36



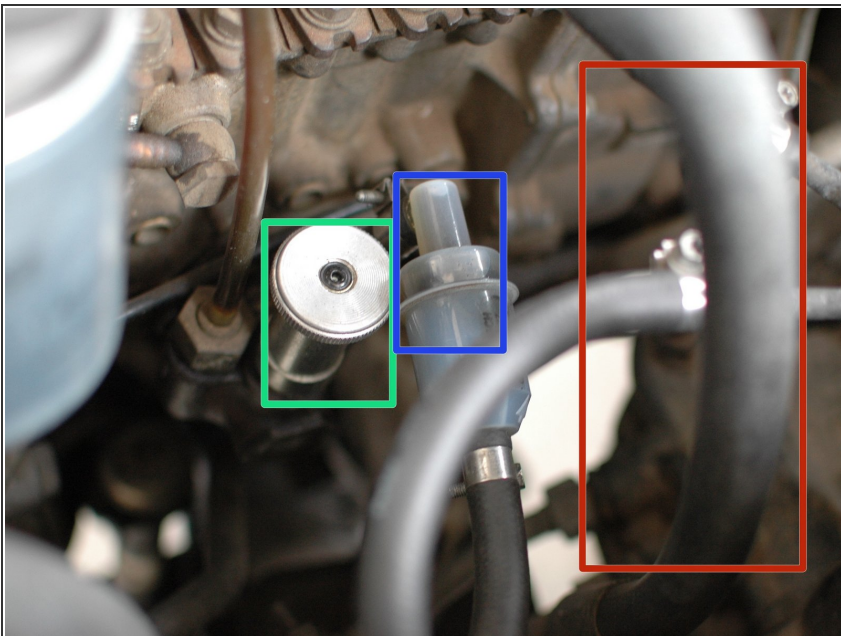
- Check the oil filter housing for leaks at the lid seal, as well as at the oil cooler lines and the seal where it attaches to the engine block.

## Step 37



- Check for fuel leaks at the spin-on fuel filter housing.

## Step 38



- Check for fuel leaks from the various fuel lines that connect to the injector pump and the spin-on fuel filter housing.
- Check for leaks from the primer pump.
- Inspect the condition of the fuel inside the primary clear filter.

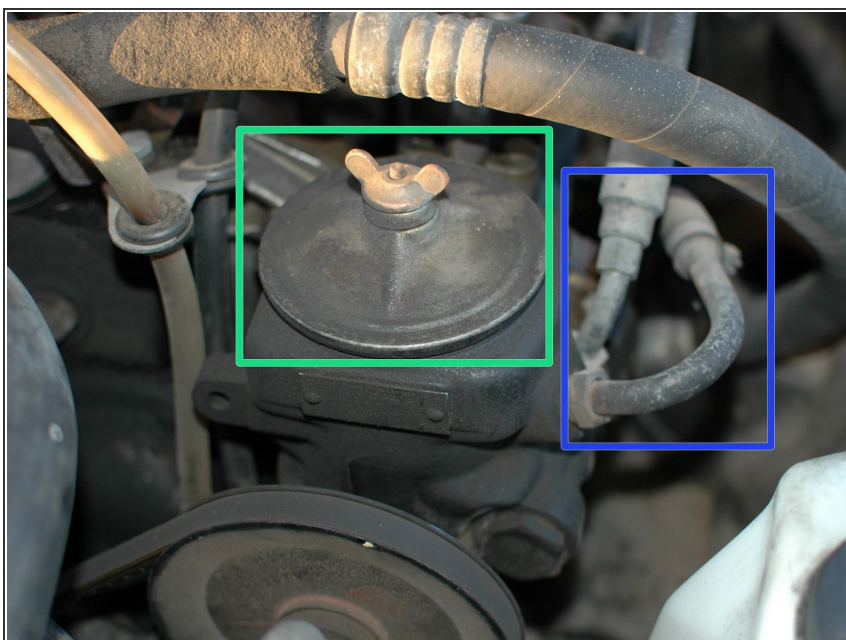


## Step 39



- Inspect the power steering, water pump/alternator, and A/C condenser (if applicable) belts for cracks or other signs of wear, and for looseness.

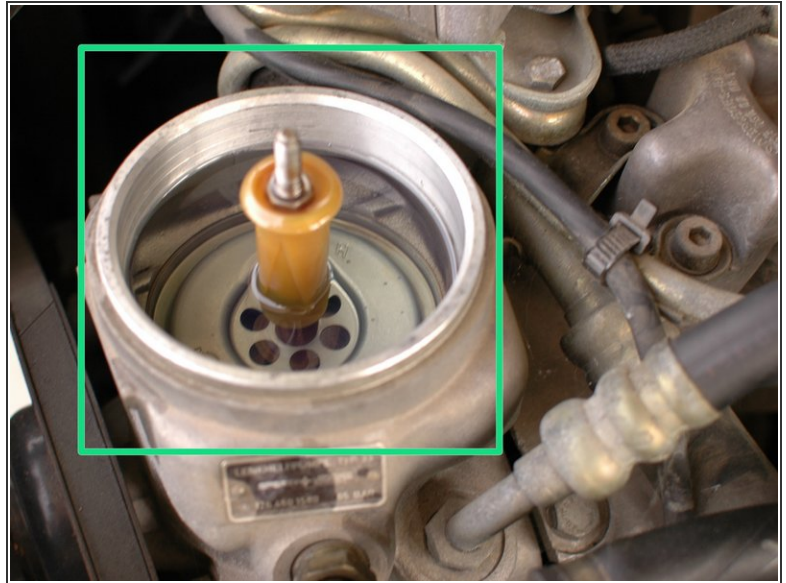
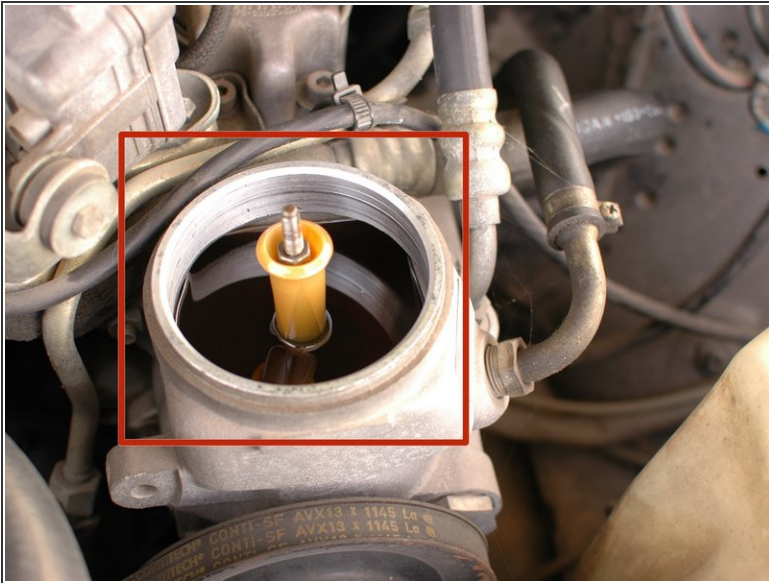
## Step 40



- Inspect the power steering fluid reservoir cover for leaks.
- Inspect the power steering lines for wetness from leaks.
- Follow the lines to the steering box and check for leaks from the box.

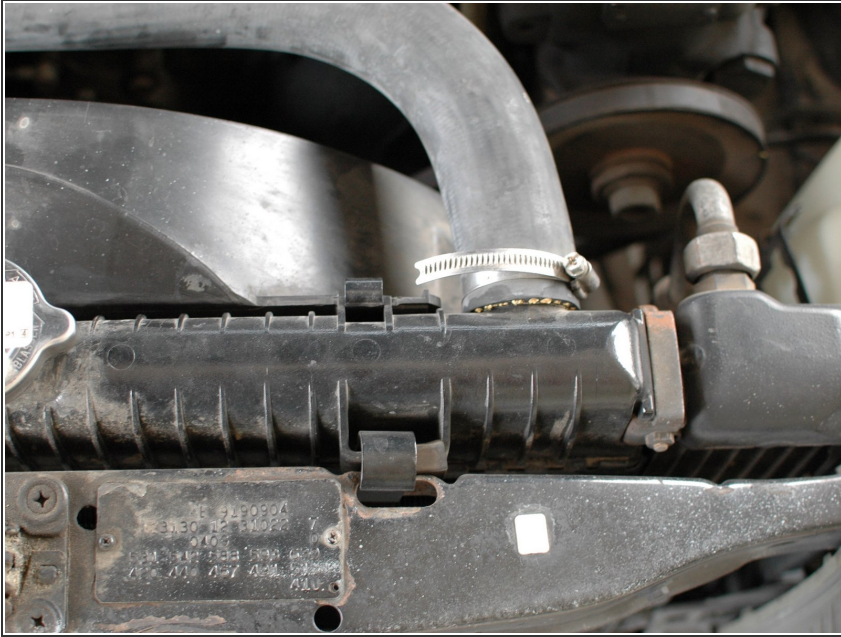


## Step 41



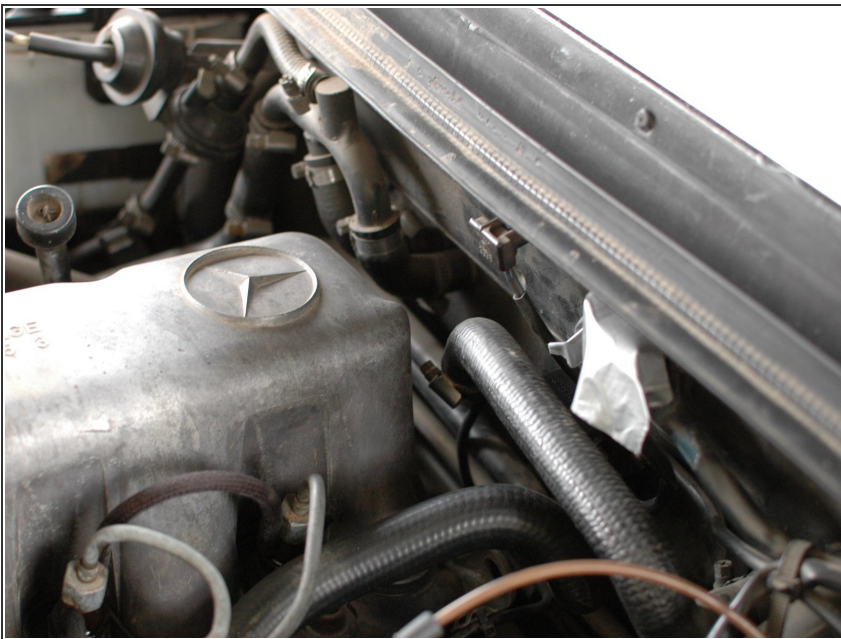
- Open the power steering pump reservoir lid.
- Check the fluid level, and condition of the fluid.
- The fluid may be red, yellow, or clear depending on the kind used but in any case it should be fairly clear and clear looking.
- This pump has very dirty, old red automatic transmission fluid and is also low on fluid. The steering pump groaned and was hard to turn.
- This pump has fresh new clear power steering fluid and was quiet and smooth because of it.

## Step 42



- Inspect the upper radiator hose for leaks at the radiator and at the thermostat housing, as well as for cracks or brittleness of the hose.
- Inspect radiator body for cracking.

## Step 43



- Inspect the various heater hoses for signs of leaking coolant, or for cracks or brittleness in the hoses.

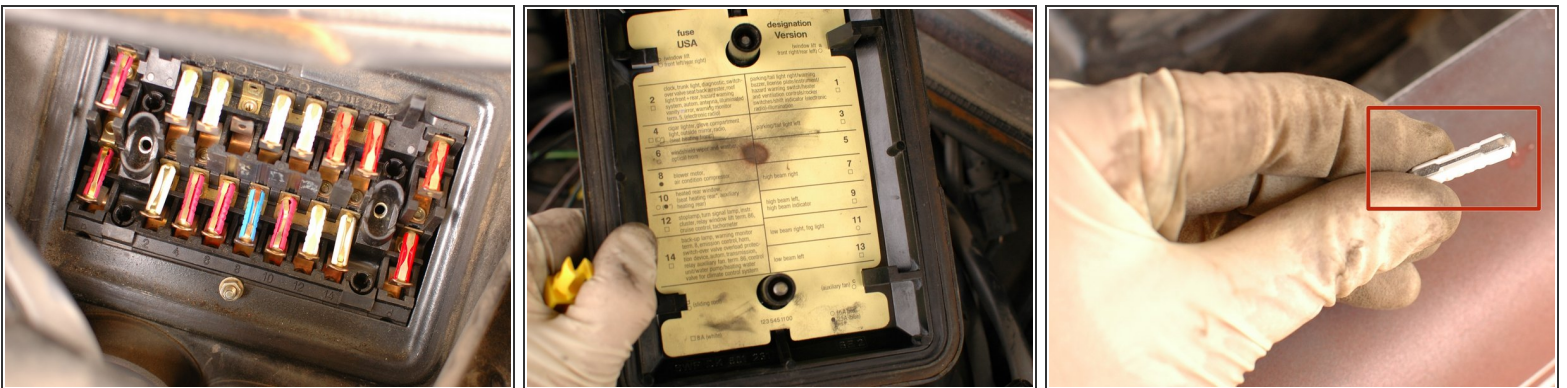


## Step 44



- Find and open the fuse box cover.
- The knobs simply screw open by hand.

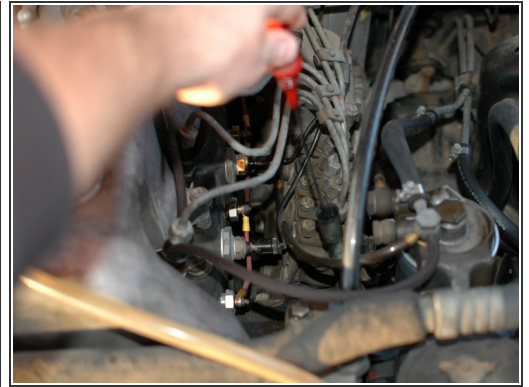
## Step 45



- Remove the fuse box cover and inspect the fuses for excess corrosion or obvious burnt fuses.
- Check to see that the proper size of fuse is installed in each location, using the chart on the back of the cover.
- Look out for any aluminium fuses; only copper fuses should be used on these cars.

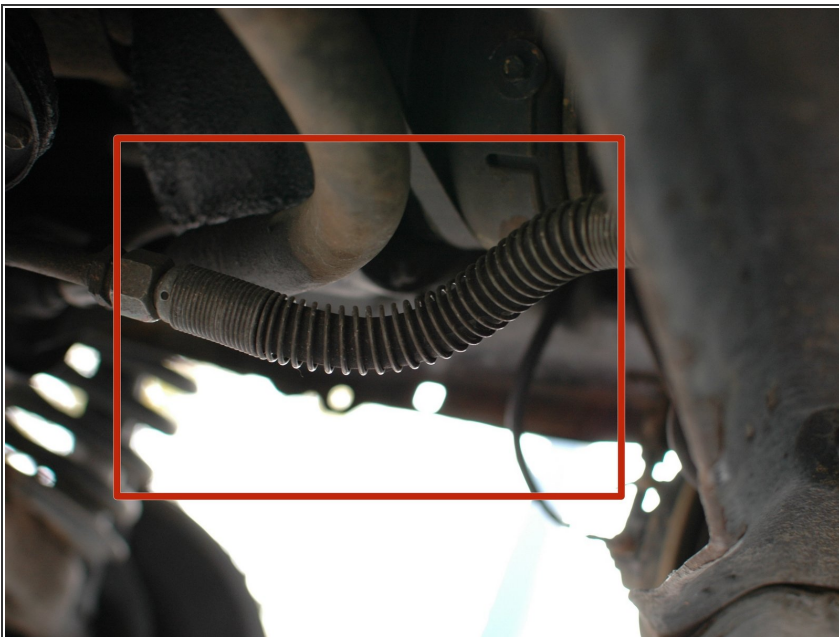


## Step 46



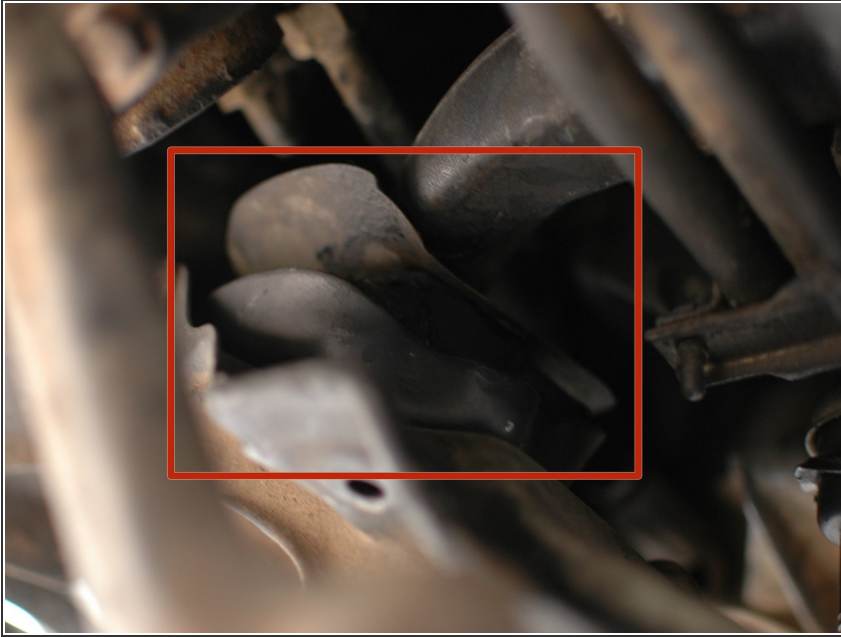
- Now check all of the fluids that you haven't checked yet. Here are some guides to help you:
  - [Checking coolant level in your naturally aspirated diesel Mercedes W123](#)
  - [How to check the coolant level in your Turbo Diesel Mercedes W123](#)
  - [How to check the oil level in your Mercedes W123](#)

## Step 47



- **Under-car check**
- Safely jack up the car as shown [in the jacking guide](#). Of course, get the owner's permission, and even better, get their assistance.
- Starting at the front of the car, just behind and under the radiator, check the two transmission cooling hoses. This is the updated style with protective spring covering. This protects them from road debris and the A/C compressor belt.
- Check the lines for weeping, and if the old style is present, check for cracks, cuts, etc.

## Step 48



- Look up at the end of the engine arms for a second look, from below, at the engine mounts. See that they are still holding the engine well up and away from the sub-frame and also that they do not look dry-rotted or otherwise deteriorated.

## Step 49



- Check all four tie-rod ends for cracked or split boots. Both outer joints shown. Inner joints are at the other end of the tie-rod.

## Step 50



- Check the ball joints for cracks or split boots.

## Step 51



- Check the various other rubber boots, bushings, etc. on the front steering and suspension for cracks, splits, dry-rotting, etc.

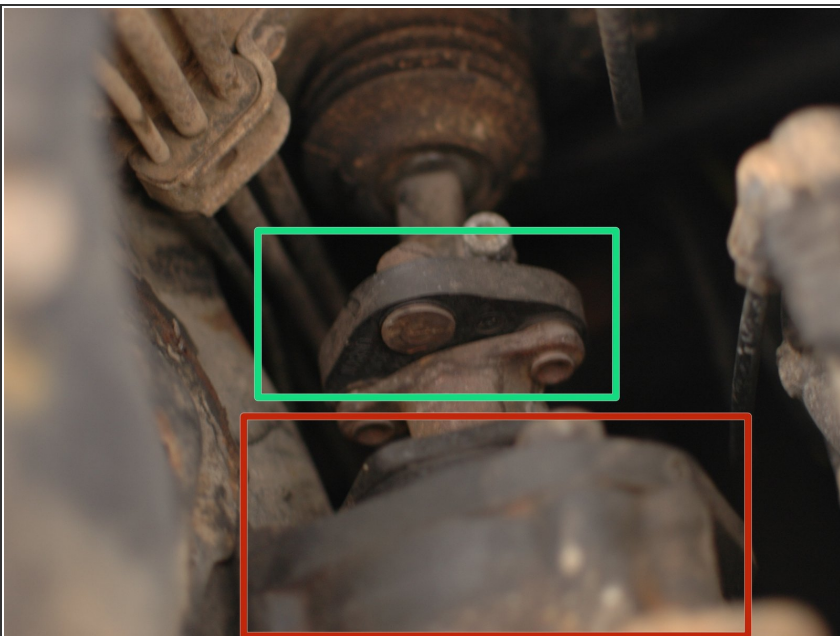


## Step 52



- Check the lower hose at the radiator for cracks, stiffness, etc.

## Step 53



- Check the steering box for leaks.
- Check the steering coupler for damage.

## Step 54



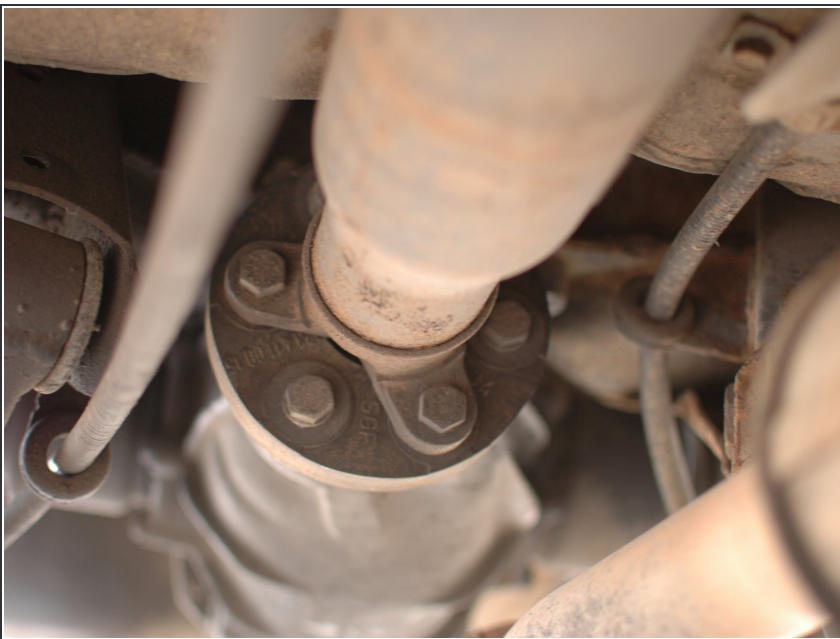
- Check the front flex disc for cracks. Even any small cracks are too big and they would need to be replaced.

## Step 55



- Check the transmission mount for deterioration. It is up inside the cross member just behind the front flex disc. You will have to crane your neck up to see it above the cross member.

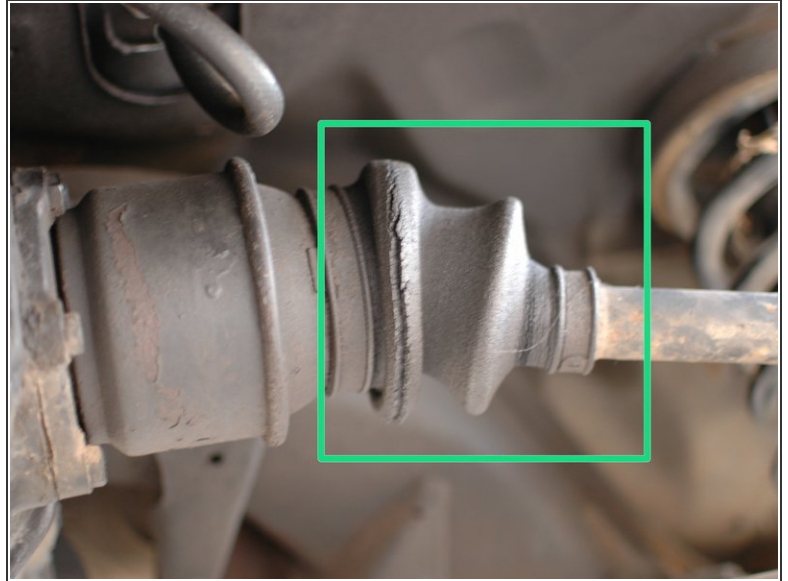
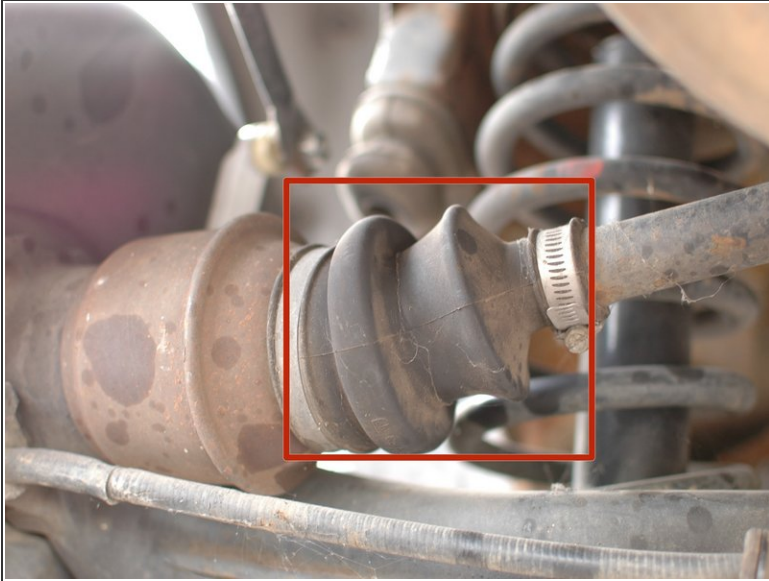
## Step 56



- Check the rear flex disc for cracks or other deterioration.



## Step 57



- Check the inner and outer axle boots. Shown here is:
  - A good boot.
  - A bad boot, ready to split in the near future.

## Step 58



- Check the outlet hose from the gas tank at the rear of the car for leaks.
- Check the two short soft fuel hoses at the rear for leaks.

## Step 59



- Check the rear differential mount for cracks, dry rotting, etc.

## Step 60



- Check the sub-frame mounts for deterioration, this one is collapsed.

## Step 61



- Check under all four fenders for rust. This rust hole is on the front passenger side fender and is



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caused by battery corrosion. Rust can happen in any fender due to salt build up and corrosion.

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When the inspection is complete you will be ready to take a test drive. Watch for any odd handling, unexpected noises, etc. Once you're done with the test drive you'll be prepared to make a decision on your potential new W123, and you can negotiate for a good price.