

Jim's Automotive Inc.

General Automotive repair for your foreign
or domestic car or light truck.

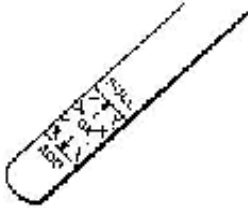
(505) 256-1531

**4401 Lead Ave SE
Albuquerque, NM 87108**

“Understanding your Car 101”

Tell me and I will forget, Involve me and I will understand!

Engine oil – service intervals have been changing. 3,000 or 3 months used to be the standard. Now with synthetic lubricants this has become a controversial subject with mounting evidence that more frequent changes are needed than the Manufacturer's recommended higher mileage intervals.



* When checking oil on the dipstick, make certain the car is level and then allow the engine sit a few minutes after running before checking the level. The level should be between 2 marks on the stick, try not to overfill. (To learn more: Google search “engine oil sludge problems”)

Cooling system – Antifreeze mixed 50/50 with clean water. Antifreeze keeps the engine from freezing in the winter, overheating in the summer and protects internal parts from corrosion. Radiator caps are important to keep the system under pressure. The boiling point will be raised when liquids are under pressure. Radiator hoses should be soft and pliable, not hard and crackly, give them a squeeze and look for obvious leaks. There are 4 or more coolant hoses.

Brake fluid is used in brake systems and it is hygroscopic (absorbs moisture from the air) and should be exchanged (flushed) periodically.

Power steering fluid is used in the power steering system and needs to be exchanged (flushed) periodically. Check your owner's manual for fluid type needed.

Transmission fluid – Nearly every make and model of car uses a different type of fluid and needs to be exchanged (flushed) periodically. Check fluid types for your vehicle before adding and avoid overfilling! Check your manual for type needed.

Differentials or Final Drives have fluids that need to be changed, check your manual for type needed.

Air Conditioning systems should be checked annually, the refrigerant that makes it work may slowly leak out.

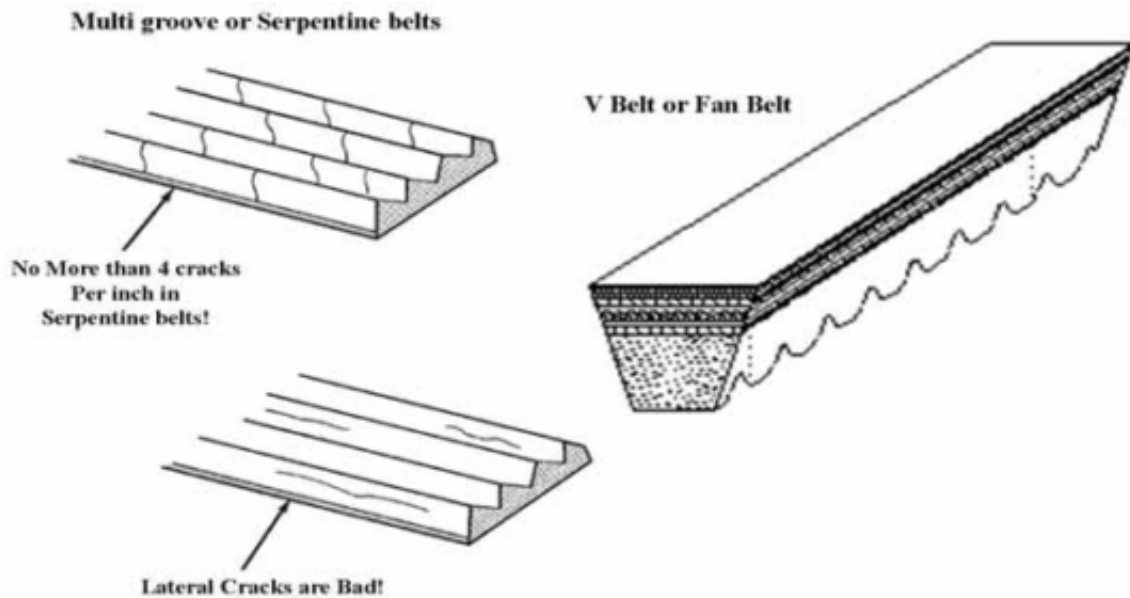
Spare tires should be checked before a trip, they are often hidden and the air slowly leaks out.

Air filters can be difficult to get to but should be checked every 3,000 miles. Gas mileage and engine life can be affected. They should always be discarded and not cleaned if they are found with lots of dirt in them.

Cabin air filters are inside the car in the duct work and again not easy to get to. They filter the air for you and your passengers. They get **very** dirty and are filled with pollen, dust and debris and can prevent your fan from working well.

Fuel filters are disappearing from the serviceable item list. Now they are being built onto the fuel pump, inside the fuel tank. This is, in part, due to fuel handling techniques changing over the last few decades. However if your car has one it should be replaced every 30 to 60,000 miles. Fuel system cleaning with chemicals keeps varnish and carbon build up under control.

Fan belts can be easily checked with a keen eye and a flashlight. Look for cracks, fraying or a weathered look. The rule of thumb is no more than 4 cracks per inch on serpentine belts, and no cracks on V belts.



*

Batteries contain acid and should be handled with care. The water levels in today's lead acid batteries hardly ever need to be adjusted. Some batteries don't even have fill caps that can be removed. Cleaning the top of the battery with an old tooth brush and a quart of water with 2 heaping tablespoons of baking soda mixed in, will clean the acid vapor off and corrosion build up around the terminal ends and posts. Corrosion comes from the battery "breathing" acid vapor through the vent caps as it charges and discharges.

Wiper blades – Clean the blades with warm soapy water and a soft cloth this will remove organic material that can cause streaking. If the rubber is torn or hard or making chattering noises, it's time to replace the blades. It appears simple enough to do but can prove difficult.

Tire Tread Wear - How to check a tire for maximum wear. Stand a penny on Lincoln's head, down in the tread. If you can see the top of his forehead or higher it's time to replace the tire. Wear bars are set at 3/32" of tread remaining and are in regular intervals around the tire for a visual indication. Cracks and weather checks are also an indication that its time to replace them due to UV damage or age.

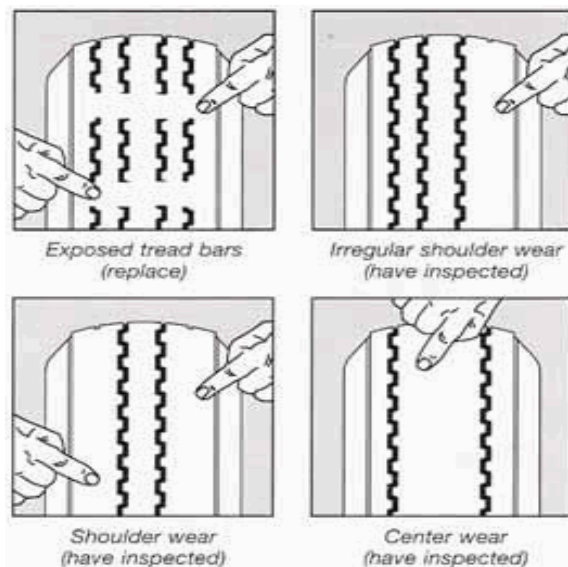


All tires have date stamps on them, example is above on the right, after the year 2000 they are 4 digit numbers. They are next to a number that should have a D.O.T. code. The first 2 are the weeks of the year and the last 2 are the year. Ie: 5107 was made around the Christmas holiday in 2007. They can be on either side of the tire but only on one side. They are made when the tire is still hot with a branding iron type stamp.

Tire air pressure – Set to vehicle manufacture specs found in the owners manual or placard on the door post. If you follow the tire manufactures recommendation found on the side wall of the tire reduce that number by roughly 10% and monitor the tire wear for over or under inflation wear patterns.

Alignment and balance—makes the ride smoother, more comfortable and tires will last longer.

Alignment Problem Over Inflated Under Inflated Failed Strut or Shock



Changing a flat tire – probably the most dreaded occurrence for any driver. Get out the owners manual and familiarize yourself with the section dealing with jack, tools and spare locations. It is not uncommon to have the jack and tools in one location and the spare tire in another. Make sure you are parked on a level, firm surface. Avoid gravel, sand or loose dirt and follow the instructions in your owners manual.

Alternative: Use your cell phone and call AAA (if you are a member), husband, boyfriend or significant other for assistance.

Internet sites that might be useful for learning more are;

www.autocarenm.com Scroll down the opening page on the left side to AutoNet TV studio. Click on the images of the people and another window will open up with many different topics to choose from. Scroll down the left side and each one is a 3-5 minute informational video.

<http://www.filmbaby.com/films/224>

<http://www.diamond.co.uk/bestFriend/motoring/maintenance/maintenance.php>

<http://www.wheelscene.com/car-repair/car-maintenance-for-women.aspx>

<http://www.spidercanyon.com/backiss/bicmt9a.html>

http://askpatty.typepad.com/ask_patty_/2008/05/basic-car-care.html

Google search;

“Basic Auto Maintenance for Women”

“Toyota engine oil sludge” Almost every make of engine is having problems with sludge due to extended oil change intervals, substitute “Toyota” with your make of car and see what comes up.

RECOMMENDED BOOK: **“Vehicle Maintenance for Women”**

Graphics and clipart in this article were borrowed from the internet and were found in clipart collections that I believe to be public domain.