

ARE YOUR TYRES
UNDER PRESSURE?





MEET YOUR TYRE



"When have you last checked the car tyres?"



"May be its time to check them now"

Your tyres are the only part of your car in contact with the road; each has a contact area or 'foot print' equivalent in size to a gents shoe sole or the area of a post card. Collectively all your tyres contact a patch of road the same size as a magazine... that's all!



A tyre is pumped up with air and takes a particular shape, just like a balloon. If given less air or more air the shape changes, so the tyre manufacturer tells us how much air is needed for a particular tyre to work correctly on each particular vehicle... This is the recommended tyre pressure!

I help your car by providing-

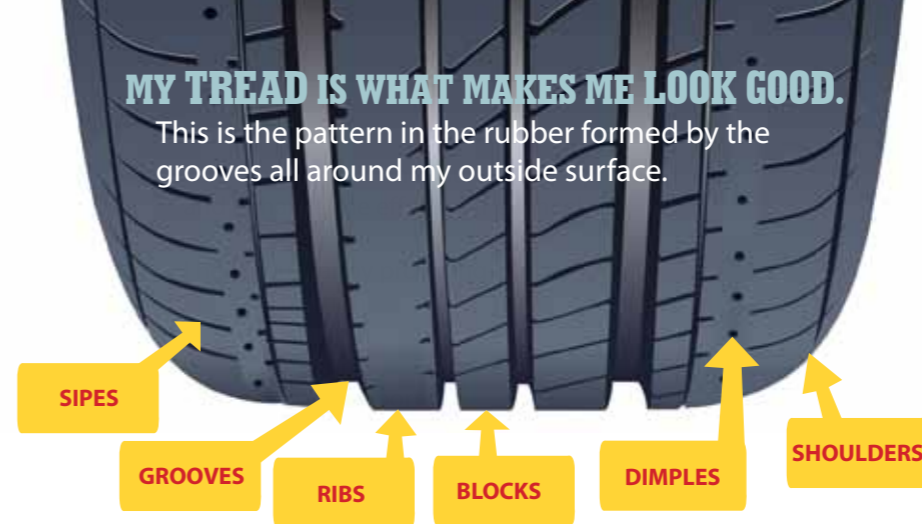
- traction
- braking
- steering
- load support

It is estimated that at least 75% (3 in every 4 cars) of the vehicles in the UAE are running on tyres that are under inflated.



MY TREAD IS WHAT MAKES ME LOOK GOOD.

This is the pattern in the rubber formed by the grooves all around my outside surface.



Let me tell you something about my different parts:

- My tread has **SIPES** or slit like grooves that allow the blocks to flex and increase traction.
- **GROOVES** create voids for better water channeling on wet road surfaces.
- **BLOCKS** are the segments that make up the majority of the tread, and provide traction.
- My **RIBS** are the straight lines row of blocks that create a circumferential contact band.
- My **DIMPLES** are the indentations of the tread, normally towards the outer edge. They improve cooling.
- My **SHOULDERS** provide continuous contact with the road while manoeuvring.

Tread Wear Indicators (TWI)

TWIs are smaller blocks in the bottom of my grooves that indicate whether the tyre has worn down to the legal limit.

WHY DO I NEED A TREAD?

On wet roads the grooves in my tread channel water from underneath, allowing me to keep in good contact with the road surface and continue to grip. Without good grooves, the water would not be able to clear from below quickly enough ... steering and speed control would then be lost!

WHAT IF THE TREAD GETS TOO LOW?

The deeper my tread, the more grip you have on the wet road... it is as simple as that.

When I am new I have a tread depth (groove) of about 8mm and at 80kph I can remove 5 gallons of water per second from under me. The soft rubber material wears away with use and as the tread depth reduces, so too does its ability to remove the water.

The minimum legal requirement for tread for motor cars is just 1.6mm, but please, please change my tread before that level to be on the safer side!...3mm is a sensible minimum for safety.



HOW IS TYRE PRESSURE MEASURED?

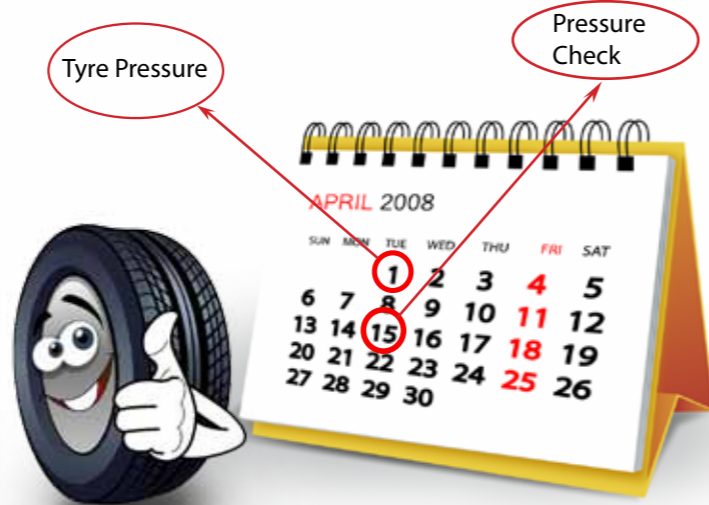
Pressure is measured by calculating the amount of air that has been pumped into the inner lining of your tyre in pounds per square inch (PSI) or barametric pressure (BAR).

TYRE PRESSURE MEASUREMENT CONVERTER

BAR	PSI	BAR	PSI	BAR	PSI	BAR	PSI	BAR	PSI
1.30	17	1.90	27	2.60	37	3.25	47	3.95	57
1.35	18	1.95	28	2.65	38	3.30	48	4.00	58
1.40	19	2.00	29	2.70	39	3.40	49	4.10	59
1.45	20	2.10	30	2.75	40	3.50	50	4.15	60
1.50	21	2.15	31	2.80	41	3.55	51	4.50	65
1.55	22	2.20	32	2.90	42	3.60	52	4.80	70
1.60	23	2.25	33	3.00	43	3.70	53	5.20	75
1.70	24	2.30	34	3.05	44	3.75	54	5.50	80
1.75	25	2.40	35	3.10	45	3.80	55	5.85	85
1.80	26	2.50	36	3.20	46	3.90	56	6.20	90

Check the tyre placard for recommended inflation pressure (See page 9)

The manufacturer of your vehicle specifies the suitable pressure, and it is your responsibility to make sure that the pressure is checked and corrected on a regular basis, preferably every fortnight.



Avoid adjusting air pressure when tyres are hot from driving because it is normal for pressures to increase by 3 to 4 psi while tyres are hot.



It is normal for pressure to increase while tyres are used as the friction of gripping generates heat in the tyre.



If you are using your vehicle to carry additional load or weight, always consult your vehicle handbook for the correct loaded tyre pressure; they will vary according to use.



The air pressure in the tyre drops naturally at the rate of up to two pounds of air every month.

HOW TO CHECK THE TYRE PRESSURE



A DROP IN PRESSURE CAN BE CAUSED BY:



The natural leakage of air through the walls of a tyre,



Drops in temperature...



Small perforations that may lead to deflation over time, (a slow leak!), and can lead to irreversible damage to the tyre.



PRESSURES SHOULD BE CHECKED WITH A TYRE PRESSURE GAUGE WHEN TYRES ARE COLD OR HAVE NOT BEEN USED FOR AT LEAST ONE HOUR.

FIT THE AIR GAUGE TO THE VALVE AND CHECK THE AIR PRESSURE. BE SURE TO RE-CHECK THE PRESSURE AFTER EACH ADJUSTMENT MADE.



AFTER CHECKING PRESSURES, ENSURE THAT VALVE CAPS ARE REPLACED AS THESE ARE THE PRIMARY SEAL FOR KEEPING DIRT AND GRIT OUT OF THE VALVE.



Imagine what a nerve rattling ride you would have if it weren't for me!



WHY SHOULD WE MAINTAIN THE CORRECT PRESSURE?



Uninflated tyres get heated up

- Give poor control
- Take longer to stop
- Use more fuel
- Damage easily
- Wear out quickly



The AIR in your tyres provides a flexible cushion between the vehicle and the road that smoothes out shock and provides for a comfortable ride.



optimally inflated tyres for smooth and safe drive with maximum control and efficiency.



Over inflated tyres cause bumpy ride poor handling excessive wear.



- If YOUR tyres are under inflated ...
- Tyre Life can be reduced by over 50%!
- Fuel Economy can be reduced by as much as 10%!
- Braking Performance can be reduced by around 20%!

How much money are you THROWING AWAY by not having your tyres checked regularly?

OVER AND UNDER INFLATION



SAFETY:

Tyres that are under inflated can overheat; and over inflated tyres can lead to poor vehicle handling on the road.

ECONOMY:

Over or under inflated tyres get DAMAGED more easily. Vehicles with under-inflated tyres use more FUEL.

ENVIRONMENT:

Correct tyre pressures result in lower carbon dioxide emissions from your vehicle which is good for the ENVIRONMENT.



I have filled the tank just this morning

I am running on under inflated tyres



TYRE PRESSURE?

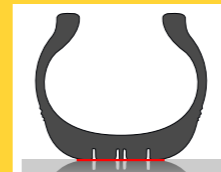


UNDER INFLATION

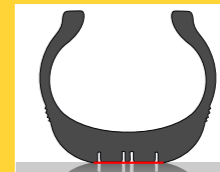


- Gives poor traction.
- Uses more fuel.
- Causes tyre damage.
- Builds up internal heat and may eventually weaken the casing.
- Will cause rapid shoulder and irregular tread wear.

CORRECT INFLATION



OVER INFLATION



- Reduces the ability of the tyre to absorb road shocks resulting in a BUMPY ride!
- May lead to impact fracture, or other casing failures.
- Causes excessive WEAR of the centre of the tyre, necessitating replacement.



More Air is Usually lost during warm weather, so check more often when temperatures are on the rise.

TIP

A tyre can be as much as 50% under inflated before you see a difference!



FACTS ABOUT TYRE DAMAGE AND FUEL CONSUMPTION



- Tyre wear increases by 5% every 0.2 bar (2.9 psi) the tyre is under pressure
- Tyres lose pressure 'naturally' at a rate of 0.2 bar (2.9psi) every 3 months
- 85% of all the significant losses of pressure are represented by "small" leakages covering periods of hours, days or months and thus cannot be easily and immediately identified
- Fuel consumption increases by 1% every 0.2 bar (2.9 psi) the tyre is under pressure

Look for the tyre pressure recommended for your vehicle in your vehicle hand book or within the technical information usually found on the inside of your vehicle's front right hand door or fuel tank flap.



Don't forget to check the spare tyre also. It should always be in good condition!



Always make sure there is a back up in case something goes wrong with me...

the spare tyre should always be in good condition! Check the pressure, and the tyre treads periodically. Checking these once a fortnight would be a good idea. It is better to discover any problems in a safe and comfortable environment, rather than on a cold and rainy day by the roadside!

Spare tyres more than six years old should be reserved for genuine emergencies.



TAKE CARE OF YOUR TYRES... SO THEY CAN TAKE CARE OF YOU!

- Check the pressure frequently as well as the wear of the tread pattern and the side walls for splits, tears, blisters, or gouges. If in doubt, have an expert check it for you.
- Avoid accelerating with wheel spin or stopping by skidding as either can do permanent damage to the structure of the tyre; one substantial skid can cause a raised area of tread which will subsequently wear quicker than the surrounding surface and eventually burst.
- Avoid striking potholes, kerbs or speed humps at any speed; a tyre may appear undamaged from the outside but may have sustained serious damage to the inner-wall.
- Avoid any debris in the road; things are not always what they first appear to be and even a small object can do damage to your tyre if struck at speed.
- If in doubt.. check it out!

And, yes... When I am more than 10 years old... it's time for me to retire!

Please do not use tyres that are more than 10 years old for normal driving unless they have been used regularly in normal conditions. Failing this, they should be replaced.





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