Car Safety Checks
12 Basic Vehicle Maintenance Checks
Údarás Um Shábháileacht Ar Bhóithre / Road Safety Authority
Introduction

It is the responsibility of the owner and/or driver of a vehicle to make sure it’s in a roadworthy condition at all times when used in a public place. All parts and equipment of a vehicle must be in good and efficient working order.

It is not enough that your car has a valid NCT disc on the windscreen. A vehicle needs to be serviced in line with manufacturer’s recommendations in between roadworthiness tests as well. It’s your legal obligation to do so. Unfortunately, some motorists continue to think that once their car passes the NCT it doesn’t need to be serviced until the next test or until a warning light comes on.

The following table provides general maintenance guidelines. Factors such as age, mileage and driving conditions will affect timelines and every vehicle is different so please consult your owner’s manual or contact the original manufacturer or authorised distributor for recommended service intervals.

The owner’s manual, and in the case of many modern vehicles the car itself, will tell you when a service is next due and what will be required. Always keep your owner’s manual in your glove compartment. It contains valuable instructions, information and warnings specific to your vehicle.

Many drivers consider servicing an expense, but it ensures your safety and the safety of other road users and significantly reduces the chances of your vehicle breaking down. Keeping your car in a good condition can also save you money. A valid service history and regular maintenance will not only increase a vehicle’s resale value, it helps to ensure that a car runs more efficiently and safely, minimising problems and expensive repairs in the future.

The RSA has prepared this booklet to offer 12 practical safety checks which you can carry out on your vehicle in between services.

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Timing*</th>
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<tbody>
<tr>
<td>Full Service</td>
<td>Every 10,000km to 15,000km</td>
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<tr>
<td>Walk Around Checks</td>
<td>At least once a week and before any long journey</td>
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* These are general guidelines only, please refer to your manual or contact the manufacturer for time lines specific to your vehicle.

Video demonstrations for these checks are available at: www.youtube.com/RSAIreland
12 Car Safety Checks

1. Tyres
2. Battery
3. Lights
4. Engine oil
5. Coolant & Antifreeze
6. Power steering fluid
7. Brake fluid
8. Windscreen wash
9. Windscreen & wipers
10. Safety kit
11. Tool kit
12. Warning lights
Your tyres are the only point of contact between you and the road so it is vital that they are maintained correctly. Complete the following checks before taking to the road:

Check tyres for correct inflation pressure.
The pressurised air inside your tyre has to support the weight of your vehicle and its load. So it is important to complete regular checks using an accurate pressure gauge. Watch our step by step guide on how to inflate your tyres correctly at www.youtube.com/RSAIreland.

Tread depth – the minimum legal permitted tread depth is 1.6mm but the RSA recommends changing all tyres at 3mm. You can use a €1 coin, as shown opposite, to ensure your tyre’s tread depth is above 1.6mm.

Examine the condition of all tyres – look for defects such as sidewall tear, exposed plies, penetration damage, bulges etc.

If you have any doubt or concerns over your tyres have them checked today at a local garage or reputable tyre dealer.

Where to find your tyre pressure:

- Inside the car user manual
- In your glove compartment
- The pressure warning light on your dashboard
- Inside the fuel cover
- Inside your door
Worn out and flat batteries are reported as one of the most common causes of breakdowns in Ireland.

During harsh conditions a battery’s capacity is reduced, as is its ability to accept charge, the results of which can be difficulty or failure to start your vehicle. Ensure your battery is checked at it’s next due service.

View our guide to tyre safety booklet which contains further useful information.
It might seem obvious but lighting is extremely important to ensure that you can see and be seen by other motorists. Check all lighting regularly and replace bulbs as necessary.

An exterior lighting check should examine the following:

- Side and head lamps and Daytime Running Lights (DRLs)
- Direction indicators
- Fog lamps
- Rear lamps
- Stop lamps
- Number plate lighting
- Reverse lamps

It is also important to keep all lights clean and to replace any damaged lenses.
Engine oil lubricates, cleans, protects and cools the car’s engine. It is very important that the oil and oil filter are both changed in accordance with the manufacturer’s guidelines. Failure to maintain the correct oil level and carry out the necessary oil or filter changes can result in extensive and costly engine damage.

Don’t wait for the red oil pressure warning light to come on – check the engine oil dipstick level today. The oil level should be checked on a regular basis and especially before setting off on long journeys. For further information and guidance on how to complete oil checks on your vehicle, refer to your owner’s manual.

If your vehicle doesn’t have a dipstick (as pictured on the right), a dashboard display will appear to tell you that the oil level is low. The Owner’s Manual will specify the correct oil to use.
A car engine produces a lot of heat when operating and so must be cooled constantly. Check the coolant level in your car is correct as a low coolant level can result in your engine overheating. The coolant tank is usually located under the bonnet. In the majority of modern cars it’s made of a transparent material and has a maximum and minimum mark on the exterior. If in doubt, please refer to the owners manual.

When the engine is **cold** the coolant level should read between the maximum and minimum marks. If the coolant level requires topping up this should only be carried out in accordance with the manufacturer’s guidelines which will also specify the correct coolant or antifreeze and concentration to use.

**WARNING!**

DO NOT OPEN THE CAP WHEN THE ENGINE IS HOT AS IT MAY CAUSE INJURY
Ensure that the level of power steering fluid (located under the bonnet) is checked regularly between services. The power steering fluid tank is also made of a transparent material. There are usually readings for hot and cold conditions as illustrated opposite.

The level of the fluid in the tank should read between the maximum and minimum markings. Please refer to the owner’s manual for further information. This will also tell you the correct power steering fluid to use for your vehicle. This is important, as using the incorrect fluid can contaminate the power steering system and cause damage.
Check the brake fluid level in your vehicle. This is usually a transparent plastic container located under the bonnet (please refer to the owner’s manual for more information). This allows you to inspect the fluid level inside the container without the need to remove the filler cap.

Opening the cap to check the fluid level is not recommended as this can result in contamination. A thorough inspection of the brakes cannot be carried out unless the wheels are removed from the vehicle. Therefore it is very important that your vehicle is serviced in accordance with the manufacturer’s guidelines.

Between servicing intervals look out for tell tale signs of worn brakes such as:

- The brake pedal requiring the application of more pressure to stop the vehicle.
- Noises in the form of scraping, and squealing when the brakes are applied.
- The vehicle pulling to the left or right when the brakes are applied.
- If Brake Fluid level is at or below minimum level contact your garage immediately.

If you notice any of these tell tale signs or are unsure of the condition of the vehicle’s brakes, take action immediately. In most cars worn brake pads will not illuminate a malfunction indicator.
Check the level of windscreen wash (pictured below) regularly and top up as necessary.

This is located under the bonnet. Where topping up is required, we recommend using a clean funnel to prevent water spilling on other engine components. An additive containing an antifreeze agent (in accordance with manufacturer’s guidelines) is necessary to prevent the system becoming frozen. Please note that Engine Coolant or Anti-freeze should not be added to Windscreen Wash.

Check all window cleaning and demisting equipment is fully operational. The windscreen demister, windscreen washer pump and rear window heater are essential in maintaining good visibility. Examine wiper blades for wear and replace as necessary.

On average a set of wiper blades last around 1-2 years, however this can vary depending on usage and operating conditions. Indications that wiper blades require replacement include; lines or streaks, noise, judder and wind lift.
Safety Kit

Be prepared for all eventualities when taking to the road. The RSA strongly recommends that motorists carry a number of essentials in the boot of their car including:

- High visibility vest
- A working torch
- A hazard warning triangle
- De-icing equipment (for glass and door locks)
- First aid kit
Most modern cars come equipped with a small tool kit, especially those with a spare wheel. Check that all necessary parts such as the car jack, axle stands, wheel brace etc. are in the kit.

The kit must be stored in a safe and secure place where it cannot cause injury. Also check that the spare wheel is correctly inflated. In some cases a puncture repair kit or a space saving wheel may be provided instead of a spare wheel. Owners should familiarise themselves with how these are operated.

Examine the vehicle dashboard for warning lights. If a warning is present, as a general rule, yellow lights mean ‘check as soon as possible’, red means ‘stop vehicle as soon as it is safe to do so’.

Some common examples are outlined below:

- Engine
- Glow Plug/Engine Management Lamp
- Oil Level
- Anti-lock Brake System
- Electronic Stability Control
- Tyre Pressure
- Airbag and Seat Belt System
- Light Bulbs
- Windscreen Wash Level
- Fog Lights
- Fuel Level
- Park Assist
- Battery
- Brakes
- Engine Cooling System

If you are unsure about any symbol appearing on your dashboard, please refer to your Owner’s Manual or contact the original manufacturer.
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“Safer roads... Only you can get us there”