




**GET TO
GRIPS
WITH YOUR
TYRES**



As the only parts of your car that actually come into contact with the road, your tyres are without a doubt essential pieces of kit. They play a vital role in keeping you and other road users safe, and in ensuring a smooth ride. To find out how up-to-speed motorists are when it comes to their car tyres, we commissioned a survey of 1,000 people across the UK looking into everything from how much drivers know

about the law to whether they can change a tyre when they get a flat.

Keep reading to find out what they said, and for some key facts and top tips to help you stay safe behind the wheel.

If you've got your own tyre safety stories or information you'd like to share, join the conversation using the hashtag **#TyreKnowledge**

Tyre safety: do you know the law?



To ensure you stay on the right side of the law, your tyres must be up-to-scratch. Here are some of the key points to be aware of.

Fit for purpose

By law, tyres must be:

- Fit for purpose and free from defects that could damage the road or cause danger to people
- Correctly inflated according to the vehicle manufacturer's and tyre manufacturer's recommended pressure

Fit for purpose means tyres are compatible with the types of tyres fitted to the vehicle's other wheels. It also means free from bulges, tears or lumps caused by partial failure of the structure. In addition, tyres must not have tears or cuts larger than 25mm

or 10% of the sectional tyre width (whichever is greater) or deep enough to reach the cord or ply. They must also not have any part of the cord or ply exposed.

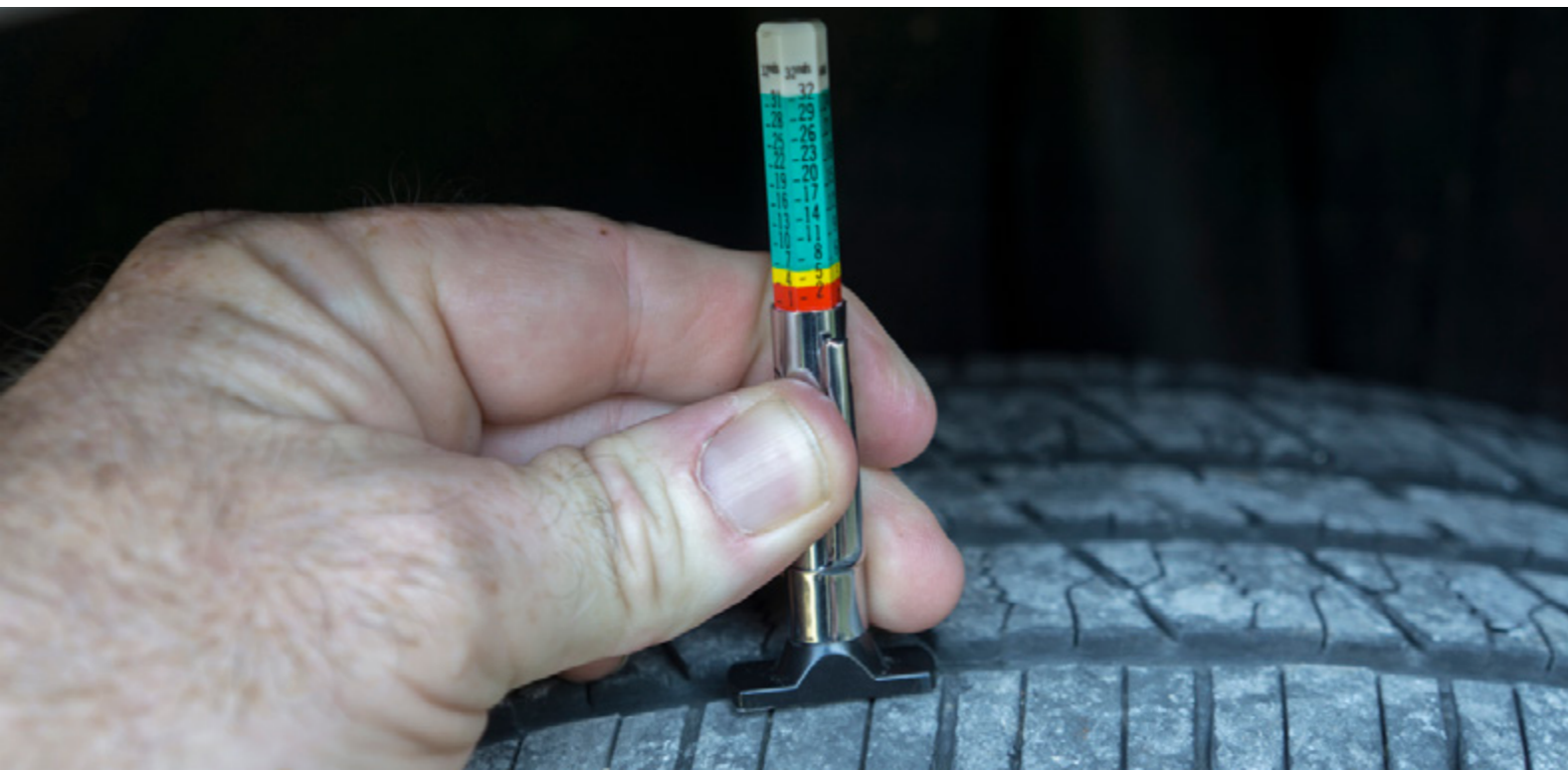
If your car doesn't meet these requirements, it will fail its MOT.

- 81% of the people we polled correctly said that a vehicle would fail an MOT if it had any of the following three problems:
 - Damaged tyres
 - Tread depths below the legal requirements
 - Multiple tyre sizes
- 72% of people knew that when they are bought new, cars need their first MOT after three years.
- 5% risk getting into trouble with the law, mistakenly believing they can wait five years before booking an MOT test.

Sufficient tread depth

The legal minimum tread depth in the UK is 1.6mm - and this applies across the central three-quarters of the tread and around the entire circumference of the tyre.

Although the minimum tread depth by law is 1.6mm, many safety experts recommend changing your tyres when the tread gets below 3mm.



Did you know?

If one of your tyres doesn't meet the legal minimum tread depth, you could be hit with three penalty points on your licence, as well as a fine of £2,500. This is per tyre too, so if all four of your tyres fail to make the grade, you could be facing a fine of £10,000.

- Only half of people (51%) knew the legal minimum tread depth for car tyres is 1.6mm.
- 36% of people erred on the side of caution and thought it was more than 1.6mm, but 13% of respondents believed it was just 1.4mm.

Tyre safety: do you know the law?

Making sure your tyres are in good condition isn't just about jumping through legal hoops. It's also about keeping you and other road users safe. Whenever you press the brake pedal or turn the wheel, your tyres play a crucial role in changing your speed or direction. So, if they're unsuitable or in poor condition, there's a much higher chance of accidents.

- 6% of those polled said the benefits of regularly checking the quality of a vehicle's tyres included all of the following:
 - Better fuel efficiency
 - Reduced risk of blowouts
 - Reduced risk of collisions
- However, nearly one in ten respondents (9%) revealed they had either driven or knowingly got into a vehicle with tyres that didn't meet the legal requirements.



Worn tyres: what's the risk?

When the tread on tyres is worn too low, the rubber is much less effective at displacing water and gripping the road. This means grip even in dry conditions is compromised, and in wet conditions it's significantly reduced. When tyres are ineffective at moving standing water out of the way, a film of liquid builds up between the road and the rubber, meaning the tyre isn't in full contact with the tarmac or concrete.

This results in a phenomenon called aquaplaning - and if you attempt to brake, steer or accelerate, you might find your car is unresponsive until grip is regained.

From failing to stop in time and shunting a vehicle or another object ahead, to spinning off the road, a lack of grip can lead to a range of accidents.



Braking distances

A study commissioned by the British Rubber Manufacturers Association and conducted by technical organisation MIRA found that the difference in wet braking distances between a tyre worn to 3mm of tread and one worn to 1.6mm can be as much as 36.8% on hot rolled asphalt and 44.6% on smooth concrete.



- 78% of respondents said they had reduced speed when driving in bad weather conditions, while 70% had increased stopping distances, 28% had used their full beams and 11% had been forced to brake harshly.



Under pressure

Under or over-inflated tyres can also be dangerous, and they can be bad for your bank balance.

Under-inflation:

- Causes tyres to flex more, meaning they are hotter and therefore at an increased risk of blowouts
- Puts excess strain on the tyre walls, increasing wear and tear
- Means tyres don't hold their intended shape, which can have a negative impact on cornering and braking
- Increases wear around the edges of the rubber
- Raises rolling resistance, leading to higher fuel consumption

Over-inflation:

- Decreases the amount of tread that comes into contact with the road, making braking and handling more difficult
- Causes tyres to wear out more quickly across the centre of the tread
- Leads to a bumpier, more uncomfortable ride

Worrying figures

Despite the importance of tyre pressure, a study carried out by Michelin suggested that 62% of cars on the UK's roads have incorrectly inflated tyres, while 37% are so underinflated that they can be classified as either 'dangerous' or 'very dangerous'.

Tyre maintenance hacks you need to know

To help you stay safe and keep your tyres in good condition, it's well worth paying attention to these handy maintenance hacks:

Try the 20p test

You can use a special gauge to check the depth of your tyre tread, but if you don't have one of these pieces of kit, you can reach for a 20p coin instead. Simply take the coin and insert it into the grooves on your tyre. If you can see the outer band on the coin, the tread is below the legal minimum and you'll need to get a replacement tyre.

It's a good idea to check your tyre tread every couple of weeks and before long journeys.

Keep an eye out for foreign objects

All sorts of objects can become embedded in your tyres when you're out on the roads, so it's important to check the treads on a regular basis. A visual inspection is usually good enough. Because you won't be able to see the section of tyre that's in contact with the ground, you'll need to roll your car forward or backward slightly to get a good view of the entire tread.

If you spot anything suspect, get a technician to take a look at the tyre. You may need to repair or replace it.

- Just over half of people (52%) had changed a car tyre themselves.
- 56% of respondents said they have had to replace their vehicle's tyres within the last year.
- Only 15% of respondents said they would be prepared to pay £100 or more for a single new tyre. In contrast, 48% said they would pay between £50 and £100, while 20% said they would pay between £30 and £50.

Only check the pressure when tyres are cold

The correct pressures as specified by manufacturers are for cold tyres. This means there's no point in checking the pressure when you've been driving. As your tyres rotate and come into contact with the road, the friction causes them to heat up, naturally increasing the pressure within them.

So, to get an accurate reading, you should only measure pressure when your car's been stationary for at least a couple of hours.


Your vehicle's handbook will tell you what the pressure should be, and many cars also have this information displayed on either the drivers' door edge or inside the fuel filler flap.

Look out of the tell-tale signs of ageing

Keep a look out for any signs of cracking on the side walls of your tyres. This is caused by the flexing of the rubber and it's a tell-tale sign of ageing. You may need to replace your tyres if you see evidence of cracking. A specialist tyre technician will be able to advise you on this.

Keep an eye on the valves

Tyre valves are often overlooked when it comes to car maintenance, but they play an important role in helping to keep pressure at the correct level. This means it's a good idea to check valves on a regular basis, ensuring they are securely in place and there's no sign of damage or cracking to their stems.

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- 63% of people revealed they would turn to their vehicle's handbooks to find information on tyre pressure.
 - 28% said they would look on the tyres themselves, while 9% said they would check the logbook.

Getting your car ready for a summer road trip

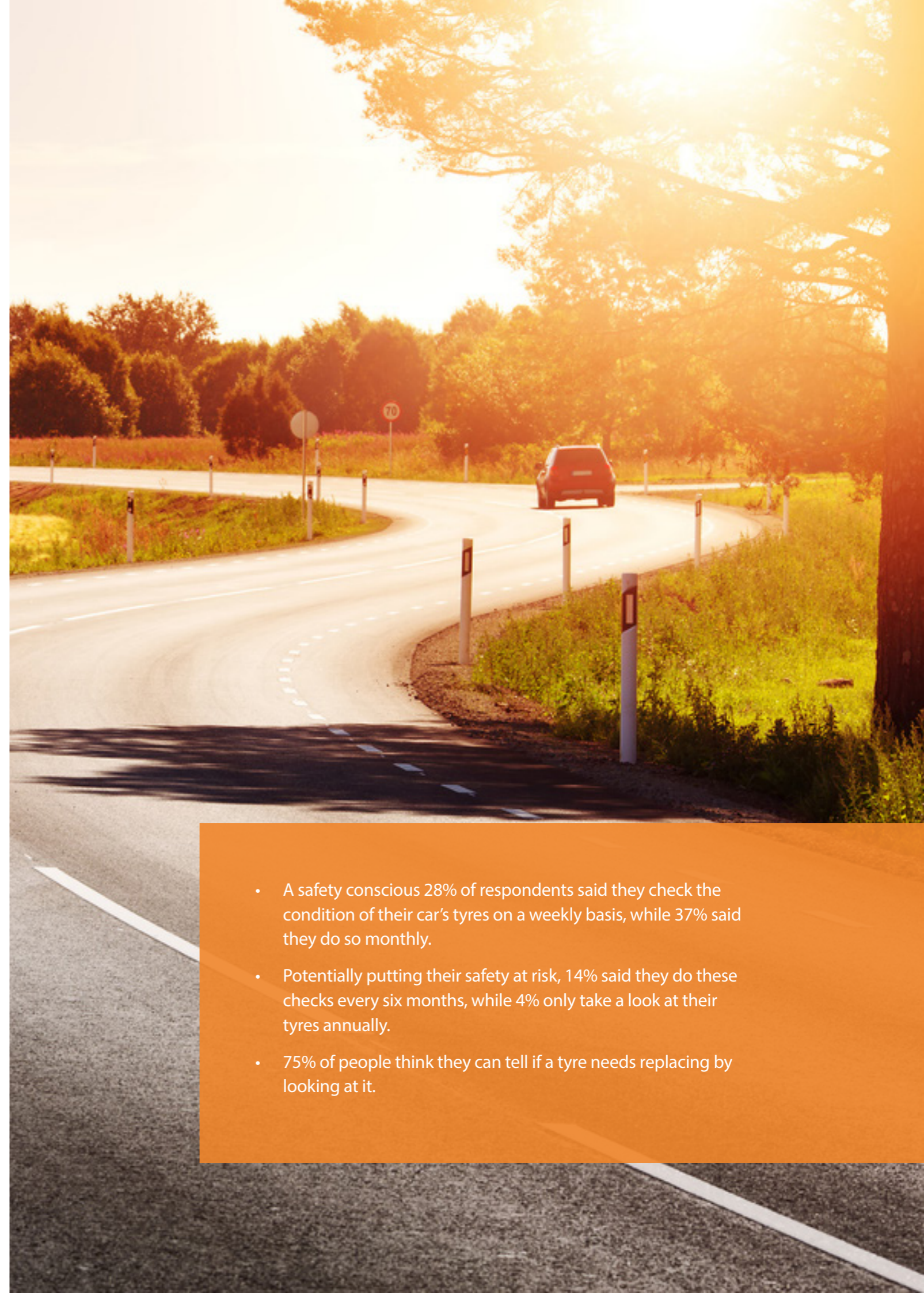
If you're gearing up for a road trip this sunny season, it's important to ensure you're well prepared. From giving your car a once-over before you set off to stocking up on essential provisions, some careful planning can help you to make the most of your time on the open road.

To give you a head start, take a look at this road trip checklist:

Take a close look at your car

To minimise the risk of accidents or breakdowns, it pays to spend a little time checking your car over. For example:

- Ensure your tyres are correctly inflated (and if your vehicle's packed with people and luggage, check your handbook for the fully laden pressure).
- Test your tyres' tread depth (if it's getting close to the legal minimum, now's the time to get replacements).
- Check your car's oil and coolant levels, and top up if necessary.
- Ensure your windscreen washer fluid levels are topped up and your windscreen wipers are working properly.
- If you have a spare wheel, ensure that it's in place and in good condition.
- Make sure all of your indicators and lights are working (it's quicker and easier if you get someone to help with this).



- A safety conscious 28% of respondents said they check the condition of their car's tyres on a weekly basis, while 37% said they do so monthly.
- Potentially putting their safety at risk, 14% said they do these checks every six months, while 4% only take a look at their tyres annually.
- 75% of people think they can tell if a tyre needs replacing by looking at it.

Pack an emergency kit

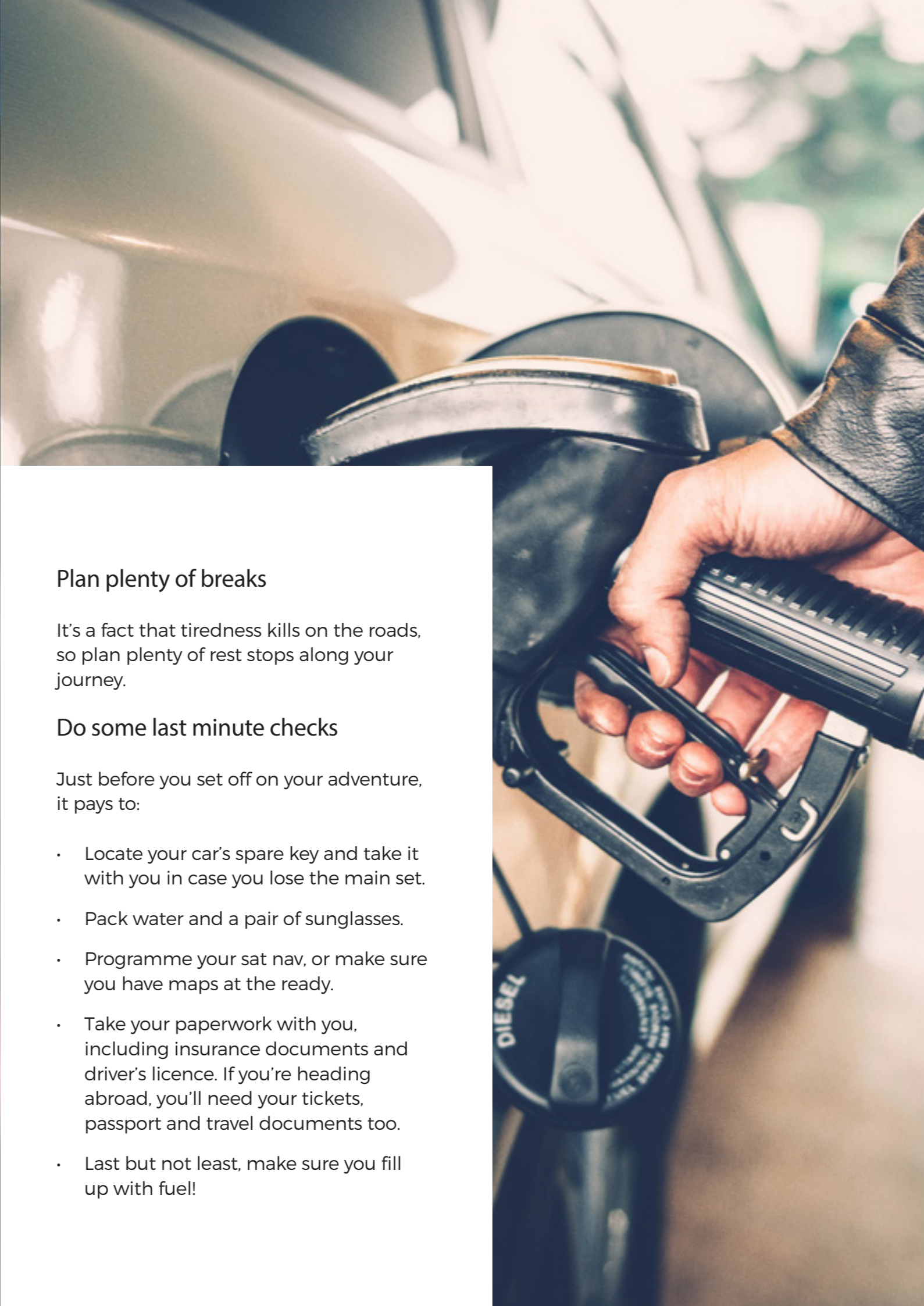
No matter how well prepared you are for your trip, there's always a chance that your car will break down. In case this happens, it's a good idea to have supplies such as a first aid kit, jump leads, a warning triangle, a torch and a high-vis vest with you.

Research the rules of the road if you're travelling abroad

If you're going overseas for your road trip, it's important to read up on the rules of the road in your destination before you set off. Some countries have regulations that may seem obscure. For example, if you're driving in Switzerland or Spain and you wear prescription glasses, you're required to carry a spare set, while in France you must have one reflective jacket per occupant in your vehicle in case of an emergency.

Ensure you have suitable roadside assistance cover

So that you're not left stranded in the event of a breakdown, check that you have the correct level of roadside assistance cover.



Plan plenty of breaks

It's a fact that tiredness kills on the roads, so plan plenty of rest stops along your journey.

Do some last minute checks

Just before you set off on your adventure, it pays to:

- Locate your car's spare key and take it with you in case you lose the main set.
- Pack water and a pair of sunglasses.
- Programme your sat nav, or make sure you have maps at the ready.
- Take your paperwork with you, including insurance documents and driver's licence. If you're heading abroad, you'll need your tickets, passport and travel documents too.
- Last but not least, make sure you fill up with fuel!



We hope this eBook's been useful. For more information about tyre and driving safety, you can visit the TyrePlus website.